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SECOND BIBLIOGRAPHY AND CATALOGUE  
OF THE  
FOSSIL VERTEBRATA OF NORTH AMERICA

BY  
OLIVER PERRY HAY

Vol. II

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## PREFATORY NOTE

The present volume completes the *Second Bibliography and Catalogue of the fossil Vertebrata of North America*. The work considerably exceeds in size the author's early estimates. It is hoped, however, that the book will not on that account be less useful.

While every reasonable effort has been made to secure accuracy of reference to original sources and citation to the vertebrate categories, it must be realized that each reference ought to be verified before acceptance. Nor will any one understand that he must adopt the classification presented or even the generic or specific names employed. Each person must depend on his own judgment. Nevertheless the writer hopes that the book will lend assistance to every user.



TABULAR KEY TO CATALOGUE  
Class REPTILIA

| Subclass               | Superorder      | Orders               | Suborders          | Superfamilies    | Families         | Page |
|------------------------|-----------------|----------------------|--------------------|------------------|------------------|------|
| Atremata               |                 | Cotylosauria         | {Conodectiformes   |                  | Conodectidae     | 30   |
|                        |                 |                      | Sauraviformes      |                  | Saurividae       | 31   |
|                        |                 |                      | Gymnarthriiformes  |                  | Gymnarthridae    | 32   |
|                        |                 |                      | {Diadectiformes    |                  | Diadectidae      | 33   |
|                        |                 |                      |                    |                  | Procolophonidae  | 36   |
|                        |                 |                      | {Pareiasauriformes |                  | Bolosauridae     | 36   |
|                        |                 |                      |                    |                  | Pareiasauridae   | 38   |
|                        |                 |                      | {Captorhiniformes  |                  | Captorhinidae    | 39   |
|                        |                 |                      |                    |                  | Pariochidae      | 42   |
|                        |                 |                      | {Pantyliformes     |                  | Limnoscelidae    | 43   |
| Peculio-<br>loglyptica | {Elpidosauria   | {Sphenacodontomorphi | {Poliosauriformes  |                  | Pantylidae       | 44   |
|                        |                 |                      |                    |                  | Glaucosauridae   | 46   |
|                        |                 |                      |                    |                  | Poliosauridae    | 47   |
|                        |                 |                      |                    |                  | Ophiacodontidae  | 49   |
|                        |                 |                      |                    |                  | Sphenacodontidae | 52   |
|                        |                 |                      |                    |                  | Edaphosauridae   | 57   |
|                        |                 |                      | {Caseiformes       |                  | Caseidae         | 59   |
|                        |                 |                      |                    |                  | Dicynodontidae   | 62   |
|                        |                 | {Therapsida          | {Athece            |                  | Dermochelyidae   | 67   |
|                        |                 |                      |                    |                  | Pleurosternidae  | 70   |
|                        |                 |                      | {Thecophora        | Pleurosternoidae | Baenidae         | 71   |
|                        |                 |                      |                    | Chelydroidea     | Bothremyidae     | 74   |
|                        |                 |                      |                    | Thalassemydoidae | Thalassemydidae  | 75   |
|                        |                 |                      |                    | Chelonioidea     | Desmatochelyidae | 77   |
|                        | {Astatoglyptica | Testudinata          | {Thecophora        | Protostegidae    | Chelonidae       | 78   |
|                        |                 |                      |                    |                  | Chelydridae      | 79   |
|                        |                 |                      |                    |                  | Toxochelyidae    | 84   |
|                        |                 |                      |                    |                  | Dermatemnydidae  | 86   |
|                        |                 |                      |                    |                  | Anosternidae     | 87   |
|                        |                 |                      |                    |                  | Kinostermidae    | 92   |
|                        |                 |                      |                    |                  | Emydidae         | 93   |
|                        |                 |                      |                    |                  | Testudinidae     | 93   |
|                        |                 |                      |                    |                  | Pliastomenidae   | 99   |
|                        |                 |                      |                    |                  | Trionychidae     | 106  |
|                        |                 |                      |                    |                  | Trionychidae     | 107  |

## TABULAR KEY TO CATALOGUE

|                 |                 |          |     |
|-----------------|-----------------|----------|-----|
| Pecioliglyptica | Catacrifosauria | Plesiosa | 115 |
|                 |                 | Plesiosa | 116 |
|                 |                 | Plesiosa | 117 |
|                 |                 | Plesiosa | 119 |
|                 |                 | Plesiosa | 124 |
|                 |                 | Plesiosa | 124 |
|                 |                 | Plesiosa | 127 |
|                 |                 | Plesiosa | 128 |
|                 |                 | Plesiosa | 129 |
|                 |                 | Plesiosa | 132 |
|                 |                 | Plesiosa | 134 |
|                 |                 | Plesiosa | 138 |
|                 |                 | Plesiosa | 139 |
|                 |                 | Plesiosa | 139 |
|                 |                 | Plesiosa | 141 |
|                 |                 | Plesiosa | 146 |
|                 |                 | Plesiosa | 147 |
|                 |                 | Plesiosa | 148 |
|                 |                 | Plesiosa | 149 |
|                 |                 | Plesiosa | 150 |
|                 |                 | Plesiosa | 161 |
|                 |                 | Plesiosa | 161 |
|                 |                 | Plesiosa | 164 |
|                 |                 | Plesiosa | 168 |
|                 |                 | Plesiosa | 170 |
|                 |                 | Plesiosa | 173 |
|                 |                 | Plesiosa | 175 |
|                 |                 | Plesiosa | 176 |
|                 |                 | Plesiosa | 181 |
|                 |                 | Plesiosa | 184 |
|                 |                 | Plesiosa | 187 |
|                 |                 | Plesiosa | 187 |
|                 |                 | Plesiosa | 189 |
|                 |                 | Plesiosa | 194 |
|                 |                 | Plesiosa | 197 |
|                 |                 | Plesiosa | 197 |

## Class REPTILIA—Continued

| Subclass     | Superorder | Orders    | Suborders | Superfamilies | Families                 | Page |
|--------------|------------|-----------|-----------|---------------|--------------------------|------|
| Diplotremata | Dinosauria | Orthopoda |           | {             | Nanosauridae.....        | 203  |
|              |            |           |           |               | Camposauridae.....       | 204  |
|              |            |           |           |               | Laosauridae.....         | 205  |
|              |            |           |           |               | Hipasilophodontidae..... | 207  |
|              |            |           |           |               | Troodontidae.....        | 207  |
|              |            |           |           |               | Hadrosauridae.....       | 208  |
|              |            |           |           |               | Iguanodontidae.....      | 210  |
|              |            |           |           |               | Ceratopsidae.....        | 220  |
|              |            |           |           |               | Scelidosauridae.....     | 231  |
|              |            |           |           |               | Stegosauridae.....       | 232  |
| Monotremata  | Squamata   | {         | {         | {             | Notosauridae.....        | 235  |
|              |            |           |           |               | Ankylosauridae.....      | 237  |
|              |            |           |           |               | Arceoscelidae.....       | 240  |
|              |            |           |           |               | Thalattosauridae.....    | 241  |
|              |            |           |           |               | Iguanidae.....           | 245  |
|              |            |           |           |               | Chamaeleonidae.....      | 247  |
|              |            |           |           |               | Lacertidae.....          | 249  |
|              |            |           |           |               | Scincidae.....           | 249  |
|              |            |           |           |               | Amphisbenidae.....       | 249  |
|              |            |           |           |               | Leposternidae.....       | 250  |
|              |            | {         | {         | {             | Varanidae.....           | 251  |
|              |            |           |           |               | Helodermidae.....        | 252  |
|              |            |           |           |               | Anguillidae.....         | 253  |
|              |            |           |           |               | Mosasauroidea.....       | 258  |
|              |            |           |           |               | Globidentidae.....       | 264  |
|              |            |           |           |               | Palaeophidae.....        | 267  |
|              |            |           |           |               | Boidea.....              | 267  |
|              |            |           |           |               | Coleubridae.....         | 269  |
|              |            |           |           |               | Crotalidae.....          | 270  |

Class AVES

|              |                           |  |                          |     |
|--------------|---------------------------|--|--------------------------|-----|
| Saurura..... | Archaeopterygomorphi..... |  | Archaeopterygidae.....   | 276 |
|              | Hesperornithomorphi.....  |  | Hesperornithidae.....    | 278 |
|              |                           |  | Ichthyornithiformes..... | 281 |
|              |                           |  | Diatrymatiformes.....    | 283 |
|              |                           |  | Gaviiformes.....         | 284 |
|              |                           |  | Colymbiformes.....       | 285 |
|              |                           |  | Procellariiformes.....   | 287 |
|              |                           |  | Procellariidae.....      | 288 |
|              |                           |  | Pelecanidae.....         | 289 |
|              |                           |  | Pelecaniformes.....      | 290 |
|              |                           |  | Sulidae.....             | 291 |
|              |                           |  | Suliformes.....          | 292 |
|              |                           |  | Phalacrocoracidae.....   | 294 |
|              |                           |  | Ardeidae.....            | 296 |
|              |                           |  | Ciconiidae.....          | 297 |
|              |                           |  | Phoenicopteridae.....    | 298 |
|              |                           |  | Plataleidae.....         | 298 |
|              |                           |  | Ibididae.....            | 299 |
|              |                           |  | Anatidae.....            | 310 |
|              |                           |  | Anatiformes.....         | 313 |
|              |                           |  | Vulturidae.....          | 314 |
|              |                           |  | Vulturiformes.....       | 314 |
|              |                           |  | Buteonidae.....          | 320 |
|              |                           |  | Falconidae.....          | 323 |
|              |                           |  | Falconiformes.....       | 324 |
|              |                           |  | Egyptidae.....           | 325 |
|              |                           |  | Cracidae.....            | 325 |
|              |                           |  | Gallinuloididae.....     | 327 |
|              |                           |  | Tetraonidae.....         | 328 |
|              |                           |  | Perdiidae.....           | 331 |
|              |                           |  | Phasianidae.....         | 333 |
|              |                           |  | Meleagridae.....         | 335 |
|              |                           |  | Gruidae.....             | 338 |
|              |                           |  | Gruiformes.....          | 338 |
|              |                           |  | Rallidae.....            | 338 |
|              |                           |  | Ralliformes.....         | 338 |
|              |                           |  | Charadriidae.....        | 339 |
|              |                           |  | Charadriiformes.....     | 339 |
|              |                           |  | Scolopacidae.....        | 339 |
|              |                           |  | Recurvirostridae.....    | 339 |
|              |                           |  | Phalaropidae.....        | 339 |
|              |                           |  | Cedrenomidae.....        | 339 |
|              |                           |  | Presbyornithidae.....    | 339 |
|              |                           |  |                          | 339 |

## Class AVES—Continued

| Subclass | Superorder | Orders    | Suborders      | Superfamilies   | Families       | Page |
|----------|------------|-----------|----------------|-----------------|----------------|------|
|          |            |           | Lariformes     | {Laroidae       | Laridae        | 339  |
|          |            |           |                | {Alcidae        | Alcidae        | 342  |
|          |            |           | {Columbiformes | Columboidea     | Columbidae     | 345  |
|          |            |           | Pittaciformes  |                 | Pittacidae     | 346  |
|          |            |           | Cuculiformes   |                 | Cuculidae      | 347  |
|          |            |           | Strigiformes   |                 | {Tytonidae     | 348  |
|          |            |           |                |                 | {Strigidae     | 349  |
|          |            | Carinatae | Piciformes     | {Picoidae       | Picidae        | 352  |
|          |            |           |                | {Formicarioidae | Pteroptochidae | 354  |
|          |            |           |                |                 | {Alaudidae     | 354  |
|          |            |           |                |                 | Hirundinidae   | 354  |
|          |            |           |                |                 | Corvidae       | 355  |
|          |            |           | Passeriformes  | Fringilloidea   | {Laniidae      | 356  |
|          |            |           |                |                 | Icteridae      | 357  |
|          |            |           |                |                 | Fringillidae   | 358  |
|          |            |           |                |                 | {Palaeospidae  | 359  |

## Class MAMMALIA

|             |  |                   |  |               |                     |     |
|-------------|--|-------------------|--|---------------|---------------------|-----|
| Prototheria |  | {Protodonta       |  |               | Dromatheriidae      | 367 |
|             |  | {Triconodonta     |  |               | Triconodontidae     | 369 |
|             |  | Symmetrodonta     |  |               | {Amphiodontidae     | 370 |
|             |  |                   |  |               | Paurodontidae       | 371 |
| Allotheria  |  | {Panotheria       |  |               | Dryolestidae        | 372 |
|             |  |                   |  |               | {Diacrocynodontidae | 374 |
|             |  |                   |  |               | Plagiolacidae       | 376 |
|             |  | {Multituberculata |  |               | {Ptilodontidae      | 378 |
|             |  |                   |  |               | Polymastodontidae   | 383 |
| Didelphia   |  | Marsupialia       |  | Didelphoidea  | Didelphidae         | 389 |
|             |  | {Teniodonta       |  |               | {Conoryctidae       | 398 |
|             |  |                   |  |               | Stylidodontidae     | 399 |
| Monodelphia |  | {Xenarthra        |  |               | Megatheriidae       | 404 |
|             |  | Hicanodonta       |  | Megatheroidea | Dasyopodidae        | 415 |

|             |                     |                      |                         |                        |     |
|-------------|---------------------|----------------------|-------------------------|------------------------|-----|
| Xenarthra   | Hianodonta.....     | Glyptodontomida..... | { Glyptodontida.....    | 419                    |     |
|             | { Paleonodonta..... |                      | { Hoplophorida.....     | 421                    |     |
|             |                     |                      |                         | { Metacheiromyida..... | 421 |
|             |                     |                      |                         | { Epiotherida.....     | 422 |
|             |                     |                      |                         | { Pantolestida.....    | 425 |
|             |                     |                      | { Aptenodida.....       | 426                    |     |
|             |                     |                      | { Solenodontida.....    | 426                    |     |
|             |                     |                      | { Tenrecida.....        | 427                    |     |
|             |                     |                      | { Chrysochlorida.....   | 428                    |     |
|             |                     |                      | { Leptocida.....        | 429                    |     |
| Insectivora | { Lepotyphla.....   |                      | { Erinaceoidea.....     | 433                    |     |
|             |                     |                      |                         | { Nyctitherida.....    | 434 |
|             |                     |                      |                         | { Talpida.....         | 435 |
|             |                     |                      |                         | { Soricida.....        | 439 |
|             |                     |                      | { Hyopsodontomida.....  | 442                    |     |
|             |                     |                      | { Plesiadaprida.....    | 445                    |     |
|             |                     |                      | { Mixodontida.....      | 447                    |     |
|             |                     |                      | { Microsomyopsidae..... | 448                    |     |
|             |                     |                      | { Apheliscida.....      | 450                    |     |
|             |                     |                      | { Adapisoricoida.....   | 451                    |     |
| Chiroptera  | { Monotyphla.....   |                      | { Tupaiida.....         | 451                    |     |
|             |                     |                      |                         | { Plagiomenida.....    | 451 |
|             |                     |                      |                         | { Vespertilionida..... | 453 |
|             |                     |                      |                         | { Phyllostomomida..... | 456 |
|             |                     |                      | { Aretocyonomida.....   | 459                    |     |
|             |                     |                      | { Mesonychoidea.....    | 463                    |     |
|             |                     |                      | { Oxyenomida.....       | 465                    |     |
|             |                     |                      | { Hyenodontomida.....   | 466                    |     |
|             |                     |                      | { Miacida.....          | 470                    |     |
|             |                     |                      | { Creotarsida.....      | 481                    |     |
| Carnivora   | { Creodontia?       |                      | { Canida.....           | 487                    |     |
|             |                     |                      |                         | { Procyonida.....      | 488 |
|             |                     |                      |                         | { Bassarisocida.....   | 513 |
|             |                     |                      |                         | { Ursida.....          | 515 |
|             |                     |                      | { Mustelida.....        | 516                    |     |
|             |                     |                      | { Hyenida.....          | 524                    |     |
|             |                     |                      | { Felida.....           | 538                    |     |
|             |                     |                      |                         |                        | 539 |

## Class MAMMALIA—Continued

| Subclass    | Superorder | Orders         | Suborders          | Superfamilies | Families              | Page |
|-------------|------------|----------------|--------------------|---------------|-----------------------|------|
| Monodelphia |            | Carnivora      | Pinnipedia         |               | Desmatophocidae.....  | 557  |
|             |            |                |                    |               | Otariidae.....        | 557  |
|             |            |                |                    |               | Odobenidae.....       | 559  |
|             |            |                |                    |               | Phocidae.....         | 561  |
|             |            | Cete           | Zeuglodontes       |               | Dorudontidae.....     | 568  |
|             |            |                |                    |               | Basilosauridae.....   | 569  |
|             |            |                | Mysticete          |               | Cetotheriidae.....    | 571  |
|             |            |                |                    |               | Balenopteridae.....   | 573  |
|             |            |                |                    |               | Balenidae.....        | 576  |
|             |            |                |                    |               | Agorophniidae.....    | 579  |
|             |            |                |                    |               | Squalodontidae.....   | 580  |
|             |            |                |                    |               | Iniidae.....          | 582  |
|             |            |                | Odontocete         |               | Ziphiidae.....        | 582  |
|             |            |                |                    |               | Delphinidae.....      | 585  |
| Ungulata    |            | Condylarthra   |                    |               | Platystrophia.....    | 596  |
|             |            |                |                    |               | Phylacanthidae.....   | 596  |
|             |            |                |                    |               | Phenacodontidae.....  | 602  |
|             |            |                |                    |               | Meniscotheriidae..... | 606  |
|             |            | Amblypoda      |                    |               | Miclenidae.....       | 607  |
|             |            |                | Periptychiformes   |               | Periptychidae.....    | 609  |
|             |            |                |                    |               | Pantolambidae.....    | 612  |
|             |            |                | Coryphodontiformes |               | Coryphodontidae.....  | 614  |
|             |            | Proboscidea    |                    |               | Eobasilidae.....      | 617  |
|             |            |                |                    |               | Elephantidae.....     | 622  |
|             |            |                |                    |               | Desmostylidae.....    | 654  |
|             |            |                | Desmostyliformes   |               | Halitheriidae.....    | 655  |
|             |            | Sirenia        |                    |               | Hydrodamalidae.....   | 657  |
|             |            |                | Trichechiformes    |               | Trichechidae.....     | 658  |
|             |            |                |                    |               | Archaeocystidae.....  | 660  |
|             |            |                | Entelonychia       |               | Chalicotheriidae..... | 661  |
|             |            | Notoungulata   |                    |               | Moropodidae.....      | 661  |
|             |            | Ancylopoda     |                    |               | Equidae.....          | 664  |
|             |            | Perissodactyla |                    |               | Lambdotheriidae.....  | 711  |
|             |            |                |                    |               | Brontotheriidae.....  | 717  |

## TABULAR KEY TO CATALOGUE

XIII

|             |          |              |                   |           |                |                |   |                 |   |                        |     |
|-------------|----------|--------------|-------------------|-----------|----------------|----------------|---|-----------------|---|------------------------|-----|
| Monodelphia | Ungulata | Artiodactyla | Agriocheiriformes | Suiformes | Dichobunifomes | Perissodactyla | { | Tapiroidea..... | { | Helatidea.....         | 723 |
|             |          |              |                   |           |                |                |   |                 | { | Iactolophida.....      | 727 |
|             |          |              |                   |           |                |                |   |                 | { | Tapirida.....          | 727 |
|             |          |              |                   |           |                |                |   |                 | { | Hyracodontida.....     | 732 |
|             |          |              |                   |           |                |                |   |                 | { | Anynodontida.....      | 737 |
|             |          |              |                   |           |                |                |   |                 | { | Rhinocerotidea.....    | 738 |
|             |          |              |                   |           |                |                |   |                 | { | Leptocerida.....       | 752 |
|             |          |              |                   |           |                |                |   |                 | { | Dichobunida.....       | 753 |
|             |          |              |                   |           |                |                |   |                 | { | Anoplotherida.....     | 757 |
|             |          |              |                   |           |                |                |   |                 | { | Anthracotherioida..... | 758 |
|             |          |              |                   |           |                |                | { | Helohyida.....  | { | Helohyida.....         | 760 |
|             |          |              |                   |           |                |                |   |                 | { | Achenodontida.....     | 761 |
|             |          |              |                   |           |                |                |   |                 | { | Elotherida.....        | 762 |
|             |          |              |                   |           |                |                |   |                 | { | Suoida.....            | 766 |
|             |          |              |                   |           |                |                |   |                 | { | Suoida.....            | 769 |
|             |          |              |                   |           |                |                |   |                 | { | Tayassuida.....        | 776 |
|             |          |              |                   |           |                |                |   |                 | { | Agriocheirida.....     | 791 |
|             |          |              |                   |           |                |                |   |                 | { | Camelida.....          | 809 |
|             |          |              |                   |           |                |                |   |                 | { | Hypertragulida.....    | 813 |
|             |          |              |                   |           |                |                |   |                 | { | Protoceratida.....     | 815 |
|             |          |              | Ruminantia        |           |                |                | { | Traguloida..... | { | Tragulida.....         | 816 |
|             |          |              |                   |           |                |                |   |                 | { | Palaemonerycida.....   | 836 |
|             |          |              |                   |           |                |                |   |                 | { | Cervida.....           | 839 |
|             |          |              |                   |           |                |                |   |                 | { | Merycodontida.....     | 834 |
|             |          |              |                   |           |                |                |   |                 | { | Giraffida.....         | 834 |
|             |          |              |                   |           |                |                |   |                 | { | Antilocaprida.....     | 836 |
|             |          |              |                   |           |                |                |   |                 | { | Bovida.....            | 854 |
|             |          |              |                   |           |                |                |   |                 | { | Eathonychida.....      | 855 |
|             |          |              |                   |           |                |                |   |                 | { | Anchippodontida.....   | 855 |
|             |          |              |                   |           |                |                |   |                 | { | Tillotherida.....      | 859 |
|             |          |              |                   |           |                |                | { | Ochotonida..... | { | Ochotonida.....        | 867 |
|             |          |              |                   |           |                |                |   |                 | { | Leporida.....          | 876 |
|             |          |              |                   |           |                |                |   |                 | { | Sciurida.....          | 880 |
|             |          |              |                   |           |                |                |   |                 | { | Geomysida.....         | 881 |
|             |          |              |                   |           |                |                |   |                 | { | Heteromyida.....       | 882 |
|             |          |              |                   |           |                |                |   |                 | { | Adidaumida.....        | 884 |
|             |          |              |                   |           |                |                |   |                 | { | Eutyromyida.....       | 888 |
|             |          |              |                   |           |                |                |   |                 | { | Chalicomyida.....      | 890 |
|             |          |              |                   |           |                |                |   |                 | { | Castorida.....         | 891 |
|             |          |              |                   |           |                |                |   |                 | { | Castoroidida.....      |     |
|             |          |              | Sciuriformes      |           |                |                | { | Sciuroidea..... | { | Sciuroidea.....        |     |
|             |          |              |                   |           |                |                |   |                 | { | Eutyromyida.....       |     |
|             |          |              |                   |           |                |                |   |                 | { | Chalicomyida.....      |     |
|             |          |              |                   |           |                |                |   |                 | { | Castorida.....         |     |
|             |          |              |                   |           |                |                |   |                 | { | Castoroidida.....      |     |
|             |          |              |                   |           |                |                |   |                 | { | Iachyromyida.....      |     |
|             |          |              |                   |           |                |                |   |                 | { | Cricetida.....         |     |
|             |          |              |                   |           |                |                |   |                 | { | Sciuroidea.....        |     |
|             |          |              |                   |           |                |                |   |                 | { | Sciuroidea.....        |     |
|             |          |              |                   |           |                |                |   |                 | { | Sciuroidea.....        |     |



Class MAMMALIA—Continued

| Subclass    | Superorder | Orders          | Suborders              | Superfamilies | Families   | Page  |
|-------------|------------|-----------------|------------------------|---------------|--|---|
| Monodelphia | Ciltres    | Simplicidentata | {<br>Sciuriformes<br>} | Dipodoide     | {<br>Paramyidae.....<br>Alomyidae.....<br>Aplodontidae.....<br>Cylindrodontidae.....<br>Mylagaulidae.....<br>Sciuravidae.....<br>Zapodidae.....<br>Dipodidae.....<br>Erethizontidae.....<br>Dasyproctidae.....<br>Cavidae.....<br>Hydrochoeridae.....<br>Adapidae.....<br>Tarsiidae.....<br>Pongidae.....<br>} | 902<br>905<br>905<br>907<br>907<br>909<br>909<br>910<br>911<br>913<br>913<br>914<br>919<br>925<br>930 |

# SECOND BIBLIOGRAPHY AND CATALOGUE OF THE FOSSIL VERTEBRATA OF NORTH AMERICA

By OLIVER PERRY HAY

## CATALOGUE ICHNITES.

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| Hay, O. P. 1902 A, 538.                            | Hitchcock, C. H. 1898 A, 400 (Ichnozoa).         |
| Abel, O. 1926 B, 444 ("fahrten").                  | 1927 A, 166 (Ornithichnites).                    |
| Arlt, T. 1907 D, 669 (Ornithichnites).             | Hitchcock and Grier 1927 A, 184-197.             |
| Blake, W. P. 1884 A, 273.                          | Kirchner, H. 1928 A, 184.                        |
| Bronn, H. G. 1848 B, 851 (Ornithoidichnites).      | 1927 A, 112 ("tierfahrten").                     |
| Campbell, G. D. 1888 A, 578.                       | Kukuk, P. 1926 A, 600 ("fahrten").               |
| Carus and Engelmann 1861 A, 1812 ("thierfahrten"). | Le Conte, J. 1882 A, 1.                          |
| Cope, E. D. 1883 V, 69.                            | 1882 B, 1.                                       |
| Dietrich, W. O. 1926 A, 614 ("fahrten").           | Lull, R. S. 1918 B, 200 ("footprints").          |
| Gibbes, C. D. 1882 A, 1, pls.                      | Lyell, C. 1845 B, 1, 252 ("Ornithichnites").     |
| Gilmore, C. W. 1921 C, 333 ("footprints").         | Mantell, G. A. 1844 A, 810 (Ornithichnites).     |
| 1926 C, xvi ("footprints").                        | Marsh, O. C. 1883 B, 139.                        |
| 1926 D, 362, 5 figs.                               | Miller, H. 1857 A, 113 ("footprints").           |
| 1926 G, 240.                                       | Moodie, R. L. 1928 B, 215 ("footprints").        |
| 1927 C, 45-48.                                     | Mudge, B. F. 1873 A, 228 ("footprints").         |
| 1927 F, 272 ("footprints").                        | Murchison, R. I. 1843 B, 141 ("ornithichnites"). |
| Gilmore and Sturdevant 1928 A, 216 ("footprints"). | Owen, R. 1842 F, 86 ("ornithichnites").          |
| Harkness, H. W. 1882 A, 1, pl.                     | Pabst, W. 1896 A, 638.                           |
| Harkness, R. 1852 A, 246 ("footprints").           | 1900 A, 48, 59 ("thierfahrten").                 |
|  | 1905 A, 1, 361 ("thierfahrten").                 |
|  | 1908 A, 325 ("thierfahrten").                    |
|  | Rogers, H. D. 1844 A, 248 ("bird-tracks").       |

Dr. R. S. Lull has proposed the following nine families for the reception of the foot-prints found in the Connecticut Valley. In the present work the genera are arranged alphabetically.

### ANCHISAURIPODIDÆ Lull.

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|---------------------------------|---------------------------------|
| <i>Lull, R. S.</i> 1904 A, 486. | <i>Lull, R. S.</i> 1915 A, 180. |
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### ANOMCEPODIDÆ Lull.

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|---------------------------------|---------------------------------|
| <i>Lull, R. S.</i> 1904 A, 499. | <i>Lull, R. S.</i> 1915 A, 208. |
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### BATRACHOPODIDÆ Lull.

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| <i>Lull, R. S.</i> 1904 A, 482. | <i>Lull, R. S.</i> 1915 A, 174. |
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### EUBRONTIDÆ Lull.

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|---------------------------------|---------------------------------|
| <i>Lull, R. S.</i> 1904 A, 510. | <i>Lull, R. S.</i> 1915 A, 194. |
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### GIGANDIPODIDÆ Lull.

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|---------------------------------|---------------------------------|
| <i>Lull, R. S.</i> 1904 A, 492. | <i>Lull, R. S.</i> 1915 A, 191. |
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### GRALLATORIDÆ Lull.

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|---------------------------------|---------------------------------|
| <i>Lull, R. S.</i> 1904 A, 494. | <i>Lull, R. S.</i> 1915 A, 200. |
|---------------------------------|---------------------------------|

## OTOUPHEPODIDÆ Lull.

Lull, R. S. 1915 A, 187.

## OTOZOIDÆ Lull.

Lull, R. S. 1904 A, 513.

Lull, R. S. 1915 A, 222.

## SELENICHIDÆ Lull.

Lull, R. S. 1915 A, 206.

## GENERA AND SPECIES.

AGOSTOPUS Gilmore. Type *A. matheri* Gilmore.

Gilmore, C. W. 1926 A, 23.

1927 D, 26.

**Agostopus matheri** Gilmore.

Gilmore, C. W. 1926 A, 23, 36, pl. x; text-fig. 16.

1927 D, 26, 28.

Permian (Coconino); Arizona.

**Agostopus medius** Gilmore.

Gilmore, C. W. 1927 D, 27, pl. viii; text-fig. 11.

1927 D, 4 (*A. robustus*; nom. nud.).

1928 A, 15 (*A. robustus*; nom. nud.).

Permian (Coconino); Arizona.

ALLOPUS Marsh. Type *A. littoralis* Marsh.

Hay, O. P. 1902 A, 538.

Gilmore, C. W. 1926 A, 30.

Tilton, J. L. 1926 B, 391.

**Allopus ? arizonæ** Gilmore.

Gilmore, C. W. 1926 A, 29, pl. xi, fig. 2; text-fig. 2.

1927 D, 26 (This genus?).

Tilton, J. L. 1926 B, 391.

Permian (Coconino); Arizona.

**Allopus littoralis** Marsh.

Hay, O. P. 1902 A, 538.

Abel, O. 1912 F, 67.

Gilmore, C. W. 1926 A, 30.

Pennsylvanian; Kansas.

AMBLYOPUS Gilmore. Type *A. pachypodus* Gilmore.

Gilmore, C. W. 1927 D, 29.

**Amblyopus pachypodus** Gilmore.

Gilmore, C. W. 1927 D, 29, pl. ix; text-fig. 12.

Permian (Coconino); Arizona.

AMBLYPUS E. Hitchcock. Type *A. dextratus* E. Hitchcock.

Hay, O. P. 1902 A, 538.

Lull, R. S. 1904 A, 530.

1915 A, 249.

1917 D, 123.

**Amblypus dextratus** E. Hitchcock.

Hay, O. P. 1902 A, 538.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 530.

1915 A, 249, fig. 107.

1917 D, 123.

Triassic (Newark); Massachusetts.

AMMOBATRACHUS Gilmore. Type *A. turbatans* Gilmore.

Gilmore, C. W. 1928 A, 8.

**Ammobatrachus montanensis** Gilmore.

Gilmore, C. W. 1928 D, 1, pls. i-iii; text-fig. 1.

Paleocene (Fort Union); Montana.

**Ammobatrachus turbatans** Gilmore.

Gilmore, C. W. 1928 A, 8, pl. ii; text-fig. 4.

1928 D, 3.

Permian (Supai); Arizona.

AMMOPUS Marsh. Type *A. marshi* Lull.

Marsh, O. C. 1896 C, pl. v, fig. 1 (No description; no species).

Abel, O. 1926 B, 36.

Lull, R. S. 1915 A, 263.

1917 D, 126.

Nopcsa, F. 1923 C, 464, fig. 3.

1923 H, 145, 146.

**Ammopus marshi** Lull.

Lull, R. S. 1915 A, 264, figs. 125, 126.

1917 D, 126.

Triassic (Newark); Massachusetts.

ANCHISAURIPUS Lull. Type *A. sillimani* (E. Hitchcock).

Lull, R. S. 1904 A, 486.

Hay, O. P. 1902 A, 543 (Eubrontes, part).

Abel, O. 1911 A, 156.

1912 F, 271, 659.

Abel, O. 1926 B, 36, 38, 433.

1926 G (146).

Lull, R. S. 1905 C, 299.

1910 A, 14.

1915 A, 180.

1917 D, 114.

Nopcsa, F. 1923 C, 464, fig. 2.

1923 H, 145, 146 (*Anchisauripus*).

Reichbach, H. G. L. 1853 A, xxx (Cybele, type *Ornithichnites tuberosus* E. Hitchcock).

### ***Anchisauripus dananus* (E. Hitchcock).**

Hitchcock, E. 1843 A, 256, pl. xi, fig. 2 (*Ornithoidichnites*).

Hay, O. P. 1902 A, 543 (*Eubrontes dananus*, part).

Abel, O. 1911 A, 157 (*A. dananus*).

1912 F, 403, fig. 287 (*A. dananus*).

Hay, O. P. 1910 C, 13 (*A. dananus*).

Heilmann, G. 1926 A, 180, fig. 130 (*A. sillimani*).

Hitchcock, E. 1845 B, 23 (*Eubrontes dananus*, part).

1847 A, 49 (*Brontozoum sillimanium*).

1858 A, 68, pl. xii, fig. 3; pl. xxxiii, figs. 4, 5; pl. xliii, fig. 6 (part).

Hitchcock and Grier 1927 A, 186, 187, 188, 190, 191, 197 (*A. sillimani*).

Lull, R. S. 1904 A, 470, 487, fig. 4 (*A. dananus*).

1915 A, 141, 181, 223, fig. 38 (*A. sillimani*).

1917 D, 114 (*A. sillimani*).

Lyman, B. S. 1894 A, 205, 209, 210, 213 (*Brontozoum sillimanium*).

Rice and Gregory 1906 A, 175, text-figs. 4, 5 (*A. dananus*).

Triassic (Newark); Massachusetts, Connecticut, Pennsylvania.

### ***Anchisauripus exsertus* (E. Hitchcock).**

Hay, O. P. 1902 A, 543 (*Eubrontes*).

Abel, O. 1911 A, 157.

Hitchcock and Grier 1927 A, 193.

Lull, R. S. 1904 A, 489, fig. 7.

1915 A, 184, fig. 41.

1917 D, 114.

Lyman, B. S. 1894 A, 205, 210 (*Brontozoum*).

Triassic (Newark); Massachusetts, Connecticut.

### ***Anchisauripus hitchcocki* Lull.**

Lull, R. S. 1904 A, 488, fig. 5.

Heilmann, G. 1926 A, 180, fig. 130.

Hitchcock and Grier 1927 A, 186, 187, 189, 191 (*A. hitchcocki*).

Lull, R. S. 1915 A, 182, fig. 39.

1917 D, 114.

Triassic (Newark); Massachusetts.

### ***Anchisauripus minusculus* (E. Hitchcock).**

Hay, O. P. 1902 A, 544 (*Eubrontes*).

Hitchcock and Grier 1927 A, 191.

Lull, R. S. 1904 A, 490, fig. 8.

1915 A, 185, fig. 42.

1917 D, 114.

Lyman, B. S. 1894 A, 205, 206, 209, 210, 213 (*Brontozoum*).

Triassic (Newark); Massachusetts.

### ***Anchisauripus parallelus* (E. Hitchcock).**

Hay, O. P. 1902 A, 545 (*Grallator*).

Heilmann, G. 1926 A, 180, fig. 130.

Lull, R. S. 1904 A, 490, fig. 9.

1915 A, 187, fig. 43.

1917 D, 114.

Lyman, B. S. 1894 A, 205, 213, 214.

Triassic (Newark); Massachusetts, New Jersey.

### ***Anchisauripus tuberatus* (E. Hitchcock).**

Hay, O. P. 1902 A, 544 (*Eubrontes*).

Lull, R. S. 1904 A, 491, fig. 10.

1915 A, 187 (*Anchisauripus*); 199, fig. 52 (*Eubrontes*).

1917 D, 116 (*Eubrontes tuberatus*).

Lyman, B. S. 1894 A, 206 (*Brontozoum*).

Triassic (Newark); Massachusetts.

### ***Anchisauripus tuberosus* (E. Hitchcock).**

Hay, O. P. 1902 A, 544 (*Eubrontes*).

Abel, O. 1926 B, 24, fig. 14.

Cushman, J. A. 1907 A, 273 (*Brontozoum validum*).

Hitchcock and Grier 1927 A, 187, 193.

Lull, R. S. 1904 A, 488, fig. 6.

1915 A, 182, fig. 40.

1917 D, 114.

1927 A, 48, fig. 1.

Lyman, B. S. 1894 A, 205, 210 (*Brontozoum validum*).

Reichenbach, H. G. L. 1853 A, xxx (Cybele).

Triassic (Newark); Massachusetts.

### ***Anchisauripus* sp. indet.**

Thorpe, M. R. 1928 A, 39.

Triassic (Newark); Connecticut.

**ANCYROPUS** E. Hitchcock. Type *Sauroidichnites heteroclitus* E. Hitchcock.

Hay, O. P. 1902 A, 538.

Lull, R. S. 1904 A, 528.

1915 A, 247.

1917 D, 123.

### ***Ancyropus heteroclitus* E. Hitchcock.**

Hay, O. P. 1902 A, 538.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 529.

1915 A, 247, fig. 105.

1917 D, 123.

Lyman, B. S. 1894 A, 211.

Triassic (Newark); Connecticut, Massachusetts.

ANOMALOPUS Gilmore. Type *A. sturdevanti* Gilmore.

Gilmore, C. W. 1927 D, 68.

**Anomalopus sturdevanti** Gilmore.

Gilmore, C. W. 1927 D, 10, 68, pl. xx; text-fig. 38.

Permian (Supai); Arizona.

ANOMCEPUS E. Hitchcock. Type *A. scambus* E. Hitchcock.

Hay, O. P. 1902 A, 539.

Abel, O. 1912 F, 271, 680.

1926 B, 36, 39, 438.

Heilmann, G. 1926 A, 208, fig. 115.

Hitchcock, C. H. 1898 A, 401.

Lucas, F. A. 1901 J, 39.

Lull, R. S. 1904 A, 500, 544.

1905 C, 299.

1915 A, 208.

1917 D, 117, pl. iii, fig. 3.

1924 A, 260.

Nopcea, F. 1923 C, 464, fig. 3.

1923 H, 145, 146.

Osborn, H. F. 1917 B, 211, fig.

Reichenbach, H. G. L. 1853 A, xx, xxi, xxxi (Hitchcockia, type *Ornithichnites gracillimus* E. Hitch.); xxii (*Dacnea*, type *O. fuliculoides*).

Wyman, J. 1887 B, 249.

**Anomcepus crassus** (C. H. Hitchcock).

Hay, O. P. 1902 A, 540 (*Apatichnus*).

Lull, R. S. 1904 A, 503, fig. 23.

1915 A, 212, fig. 65.

1917 D, 118.

Lyman, B. S. 1894 A, 214 (*Apatichnus*).

Triassic (Newark); New Jersey.

**Anomcepus? culbertsonii** (King).

Hay, O. P. 1902 A, 539.

Gilmore, C. W. 1927 D, 10.

Matthew, G. F. 1903 D, 113 (*Ornithichnites*).

Nopcea, F. 1923 H, 137 (*Ornithichnites*).

Pennsylvanian; Pennsylvania.

**Anomcepus cuneatus** C. H. Hitchcock.

Hay, O. P. 1902 A, 539.

Lull, R. S. 1904 A, 504.

1915 A, 215.

1917 D, 118.

Triassic (Newark); Massachusetts, Connecticut.

**Anomcepus curvatus** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Abel, O. 1926 B, 20, fig. 10.

Lull, R. S. 1904 A, 474, 502, fig. 22.

1915 A, 212, fig. 64.

1917 D, 118.

Lyman, B. S. 1894 A, 205, 209.

Triassic (Newark); Massachusetts.

**Anomcepus? gallinuloides** (King).

Hay, O. P. 1902 A, 539.

Matthew, G. F. 1903 D, 113, pl. ii, fig. 1 (*Ornithichnites*).

Nopcea, F. 1923 H, 137 (*Ornithichnites*).

Pennsylvanian; Pennsylvania.

**Anomcepus giganteus** Hitchcock and Grier.

*Hitchcock and Grier* 1927 A, 187.

Triassic (Newark); Massachusetts.

**Anomcepus gracillimus** (E. Hitchcock).

Hay, O. P. 1902 A, 539.

Hitchcock and Grier 1927 A, 187.

Lull, R. S. 1904 A, 504.

1915 A, 214, fig. 67.

1917 D, 118.

Lyman, B. S. 1894 A, 205, 210 (*Grallator*).

Reichenbach, H. G. L. 1853 A, 29 (*Hitchcockia gracilis*); xx, xxi (*Hitchcockia gracillima*, H. fulcaria).

Triassic (Newark); Connecticut, Massachusetts, Pennsylvania.

**Anomcepus intermedius** E. Hitchcock.

Hay, O. P. 1902 A, 539 (*A. intermedius*); 550 (*Plesionis minor*).

Abel, O. 1911 A, 158, 174.

1912 F, 277.

Cushman, J. A. 1907 A, 274 (*Plesionis quadrupes*).

Heilmann, G. 1926 A, 159, fig. 113.

Lull, R. S. 1904 A, 470, 501, figs. 19-21.

1915 A, 210, figs. 62, 63.

1917 B, 414, 509, fig. 101.

1917 D, 117.

Lyman, B. S. 1894 A, 205, 213 (*A. intermedius*); 205, 208 (*Plesionis quadrupes*); 210, 214 (*Brontozoum isodactylum*).

Reichenbach, L. 1852 A, xxii (*Dacnea fulicoides*).

Triassic (Newark); Massachusetts, Connecticut, New Jersey.

**Anomcepus isodactylus** C. H. Hitchcock.

Hay, O. P. 1902 A, 539.

Abel, O. 1926 B, 21.

Lull, R. S. 1904 A, 505, fig. 25.

1915 A, 215, fig. 68.

1917 D, 118.

Triassic (Newark); Massachusetts.

**Anomcepus major** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Lyman, B. S. 1894 A, 207.

Triassic (Newark); Massachusetts, New Jersey.

**Anomcepus minimus** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Abel, O. 1912 F, 70.

Lull, R. S. 1904 A, 503, fig. 24.

1915 A, 213, fig. 68.

1917 D, 118.

Lyman, B. S. 1894 A, 205.

Triassic (Newark); Massachusetts.

**Anomæpus scambus** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Abel, O. 1912 F, 273, 277, fig. 200.

Heilmann, G. 1926 A, 153, figs. 112, 114, 116.

Lull, R. S. 1904 A, 500, fig. 18.

1912 D, 415, fig. 5.

1915 A, 209, fig. 61.

Lull, R. S. 1917 D, 117

Lyman, B. S. 1894 A, 205, 214 (A. minor).

Triassic (Newark); Massachusetts.

**Anomæpus** sp. indet.

Hitchcock and Grier 1927 A, 196, 197.

Triassic (Newark); Massachusetts.

**ANTHRACOPUS** Leidy. Type *A. ellangowensis* Leidy.

Hay, O. P. 1902 A, 539.

Gilmore, C. W. 1927 D, 51, text-fig. 24.

Matthew, G. F. 1903 D, 109 (Syn. of *Palæosauropus* Hay).**Anthracopus ellangowensis** Leidy.

Hay, O. P. 1902 A, 539.

Matthew, G. F. 1903 B, 104.

1903 D, 112.

Pennsylvanian; Pennsylvania.

**ANTICHEIROPUS** E. Hitchcock. Type *A. pilulatus* E. Hitchcock.

Hay, O. P. 1902 A, 539.

Hitchcock, C. H. 1898 A, 401.

Lull, R. S. 1904 A, 540.

A genus of doubtful validity.

Lyman, B. S. 1894 A, 205.

Triassic (Newark); Massachusetts.

**Anticheiropus pilulatus** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Hitchcock and Grier 1927 A, 192.

Lull, R. S. 1904 A, 540.

Lyman, B. S. 1894 A, 210.

Triassic (Newark); Massachusetts.

**Anticheiropus hamatus** E. Hitchcock.

Hay, O. P. 1902 A, 539.

Hitchcock and Grier 1927 A, 186.

Lull, R. S. 1904 A, 541.

**ANTIPUS** E. Hitchcock. Type *A. flexiloquus* E. Hitchcock.

Hay, O. P. 1902 A, 540.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 536.

1913 A, 257.

1917 D, 125.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**Antipus flexiloquus** E. Hitchcock.

Hay, O. P. 1902 A, 540.

Lull, R. S. 1904 A, 536.

1915 A, 253, fig. 117.

1917 D, 125.

Lyman, B. S. 1894 A, 206 (Orthodactylus).

Triassic (Newark); Massachusetts.

**Antipus bifidus** E. Hitchcock.

Hay, O. P. 1902 A, 540.

Lull, R. S. 1904 A, 536.

**APATICHNUS** E. Hitchcock. Type *A. circumagens* E. Hitchcock.

Hay, O. P. 1902 A, 540.

Abel, O. 1912 F, 272.

1926 B, 36.

Hitchcock, C. H. 1898 A, 401.

Lull, R. S. 1904 A, 508.

1915 A, 220.

1917 D, 118.

Nopcea, F. 1923 C, 464, fig. 2.

1923 H, 145, 146.

**Apatichnus holyokensis** C. H. Hitchcock.

Hay, O. P. 1902 A, 540.

Lull, R. S. 1915 A, 211 (Syn. of *Anomæpus intermedius*).

Triassic (Newark); Massachusetts.

**Apatichnus minor** (E. Hitchcock).

Hay, O. P. 1902 A, 545 (Gigandipus).

Abel, O. 1911 A, 158.

Lull, R. S. 1904 A, 509, fig. 30.

1915 A, 221, fig. 73.

1917 D, 119.

Lyman, B. S. 1894 A, 206 (Gigantitherium).

Triassic (Newark); Massachusetts.

**Apatichnus circumagens** E. Hitchcock.

Hay, O. P. 1902 A, 540.

Lull, R. S. 1904 A, 508, fig. 29.

1915 A, 220, fig. 72.

1917 D, 118.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**ARACHNICHNUS** E. Hitchcock. Type *A. dehiscens* E. Hitchcock.

Hay, O. P. 1902 A, 540.

Lull, R. S. 1904 A, 538.

1915 A, 261.

1917 D, 126.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 539.

1915 A, 261, fig. 122.

1917 D, 126.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**Arachnichnus dehiscens** E. Hitchcock.

Hay, O. P. 1902 A, 540.

ARGOIDES E. Hitchcock. Type *A. isodactylus* E. Hitchcock.

- Hay, O. P. 1902 A, 540.  
 Hitchcock, C. H. 1898 A, 401 (Argozoum).  
 Lull, R. S. 1904 A, 518.  
 1915 A, 230.  
 1917 D, 120.  
 Reichenbach, L. 1853 A, 25, xii, xix (Argoides);  
 25, xxii, xxx (Berycynthia, type *Ornithich-*  
*nites redfieldii* E. Hitchcock).

**Argoides isodactylatus** E. Hitchcock.

- Hay, O. P. 1902 A, 540 (*A. isodactylatus*).  
 Lull, R. S. 1904 A, 518.  
 1915 A, 230 (Syn. of *A. minimus*).  
 Lyman, B. S. 1894 A, 209, 211 (Argozoum pari-  
 digitatum).  
 Triassic (Newark); Massachusetts.

**Argoides macrodactylotus** (E. Hitch-  
cock).

- Hay, O. P. 1902 A, 540 (*A. macrodactylatus*).  
 Hitchcock and Grier 1927 A, 197.  
 Lull, R. S. 1904 A, 519.  
 1915 A, 231, fig. 85 (*A. macrodactylus*).  
 1917 D, 120.  
 Lyman, B. S. 1894 A, 206 (Argozoum); 209,

- 211, 214 (Argozoum disparidigitatum).  
 Triassic (Newark); Connecticut.

**Argoides minimus** E. Hitchcock.

- Hay, O. P. 1902 A, 550 (Plesiornis).  
 Hitchcock and Grier 1927 A, 196.  
 Lull, R. S. 1915 A, 230, pl. i, fig. 84.  
 1917 D, 120.  
 Lyman, B. S. 1894 A, 209 (Plesiornis aequalipes).  
 Triassic (Newark); Massachusetts, Connecti-  
 cut.

**Argoides redfieldianus** E. Hitchcock.

- Hay, O. P. 1902 A, 540.  
 Lull, R. S. 1904 A, 519.  
 1915 A, 232 (*A. redfieldii*).  
 1917 D, 120 (*A. redfieldii*).  
 Lyman, B. S. 1894 A, 211 (Argozoum).  
 Reichenbach, L. 1853 A, 35, xxx, (*Berycynthia*  
*redfieldii*).  
 Triassic (Newark); Massachusetts.

**Argoides robustus** E. Hitchcock.

- Hay, O. P. 1902 A, 540.  
 Lull, R. S. 1904 A, 519.  
 Triassic (Newark); Massachusetts.

ARTIODACTYLUS Abel. Type *A. sinclairi* Abel.

- Abel, O. 1926 B, 42.  
**Artiodactylus sinclairi** Abel.  
 Abel, O. 1926 B, 42, 52, fig. 23.  
 Triassic (Stockton); New Jersey.

ASPERIPES Matthew. Type *A. avipes* Matthew.

- Matthew, G. F. 1903 C, 99.  
 Gregory, W. K. 1915 D, 368.  
 Matthew, G. F. 1904 A, 86.  
**Asperipes avipes** Matthew.  
 Matthew, G. F. 1903 C, 101, pl. i, fig. 3.  
 Gregory, W. K. 1915 D, 368.  
 Lambe, L. M. 1904 C, 36, 46.  
 Matthew, G. F. 1904 A, 87, 88, pl. i, fig. 2.  
 Coal Measures; Nova Scotia.  
**Asperipes caudifer** (Dawson).  
 Hay, O. P. 1902 A, 546 (Hylopus).

- Gilmore, C. W. 1927 D, 46 (Hylopus. Referred  
 to Asperipes).  
 Lambe, L. M. 1904 C, 36, 46 [*A. (Hylopus)*].  
 Matthew, G. F. 1903 C, 102 (Hylopus?).  
 1903 D, 102, 112, 114, pl. iii, fig. 3 (Hylopus).  
 1904 A, 88 (Hylopus?); 90, pl. ii, fig. 1;  
 pl. vi, fig. 5 (Asperipes).  
 Coal Measures; Nova Scotia.  
**Asperipes flexilis** Matthew.  
 Matthew, G. F. 1904 A, 89, pl. i, fig. 3; pl. vi,  
 figs. 3, 4.  
 Coal Measures; Nova Scotia.

BARILLOPUS Matthew. Type *B. unguifer* Matthew.

- Matthew, G. F. 1903 C, 103.  
 Gilmore, C. W. 1926 A, 11, 25.  
 Matthew, G. F. 1903 D, 115.  
 1904 A, 94.  
**Barillopus arctus** Matthew.  
 Matthew, G. F. 1904 A, 95, pl. iii, fig. 1.  
 Gilmore, C. W. 1926 A, 12, text-fig. 7.  
 Coal Measures; Nova Scotia.  
**Barillopus confusus** Matthew.  
 Matthew, G. F. 1904 A, 95, pl. iii, fig. 2.

- Nopcea, F. 1923 H, 135.  
 Coal Measures; Nova Scotia.  
**Barillopus unguifer** Matthew.  
 Matthew, G. F. 1903 C, 104, pl. i, fig. 5.  
 Lambe, L. M. 1904 C, 36, 46.  
 Matthew, G. F. 1903 B, 104, pl. ii, fig. 2 (*Baro-*  
*pus*).  
 1903 D, 113, 115 (*Baropus*).  
 1904 A, 94.  
 Coal Measures; Nova Scotia.

BAROPEZIA Matthew. Type *Sauropus sydnensis* Dawson.

Matthew, G. F. 1903 C, 105.

Gilmore, C. W. 1926 A, 18.

Matthew, G. F. 1904 A, 99.

**Baropezia abscissa** Matthew.

Matthew, G. F. 1904 A, 101, pl. v, fig. 4.

Gilmore, C. W. 1926 A, 20, text-fig. 13.

1926 N, 20, fig. 2.

Nopcea, F. 1923 H, 135-136.

Coal Measures; Nova Scotia.

**Baropezia eakini** Gilmore.

Gilmore, C. W. 1926 A, 18, 35, pls. viii, ix;  
text-fig. 11.

Abel, O. 1926 B, 208.

Permian (Coconino); Arizona.

**Baropezia sydnensis** (Dawson).

Hay, O. P. 1902 A, 548 (*Palaeosauropus sydenensis*).

Gilmore, C. W. 1926 A, 20; text-fig. 12.

Lambe, L. M. 1904 C, 36, 46 [*B. (Sauropus)*].

Matthew, G. F. 1903 C, 106, pl. i, fig. 1  
("Sauropus," "Baropezia").

1903 D, 110, 113 (*Sauropus*).

1904 A, 100, pl. v, fig. 3.

Nopcea, F. 1923 H, 136.

Coal Measures; Nova Scotia.

BAROPUS Marsh. Type *B. lentus* Marsh.

Hay, O. P. 1902 A, 541.

Gilmore, C. W. 1927 D, 23.

Matthew, G. F. 1903 C, 104.

1904 A, 94.

**Baropus coconinoensis** Gilmore.

Gilmore, C. W. 1927 D, 24, pl. vii; text-fig. 9.

Permian (Coconino); Arizona.

**Baropus lentus** Marsh.

Hay, O. P. 1902 A, 541.

Abel, O. 1912 F, 67.

Gilmore, C. W. 1927 D, 23, text-fig. 10.

Hickling, G. 1909 A, 30, pl. iv, fig. 33.

Jaekel, O. 1909 B, 596, fig. 7.

Martin, H. T. 1922 B, 105.

Matthew, G. F. 1903 D, 113, pl. iii, fig. 6.

Pennsylvanian; Kansas.

BARYPODUS Gilmore. Type *B. palmatus* Gilmore.

Gilmore, C. W. 1926 A, 27.

1927 D, 19.

**Barypodus metszeri** Gilmore.

Gilmore, C. W. 1927 D, 21, pl. vi; text-fig. 8.

Permian (Coconino); Arizona.

**Barypodus palmatus** Gilmore.

Gilmore, C. W. 1926 A, 27, pl. xi, fig. 1; text-fig. 18.

Gilmore, C. W. 1927 D, 1, 19.

Permian (Coconino); Arizona.

**Barypodus tridactylus** Gilmore.

Gilmore, C. W. 1927 D, 20, pl. v; text-fig. 7.

1927 B, 47, fig. 53 ("footprint").

Permian (Coconino); Arizona.

BATRACHICHNUS Woodworth. Type *B. plainvillensis* Woodworth.

Hay, O. P. 1902 A, 541 (*Batrachichnus*).

Gilmore, C. W. 1927 D, 541.

**Batrachichnus celer** (Matthew).

Matthew, G. F. 1903 B, 106, pl. ii, fig. 3 (*Dromopus*).

Gilmore, C. W. 1927 D, 36, 40 (*Dromopus*, *Batrachichnus*).

Lambe, L. M. 1904 C, 36, 46 (*Dromilopus*).

Matthew, G. F. 1903 D, 112, 114 (*Dromopus*).

1904 A, 91 (*Dromopus*).

Carboniferous; Nova Scotia.

**Batrachichnus delicatulus** (Lull).

Lull, R. S. 1918 A, 344, pl. iii, fig. 1; text-fig. 4 (*Exocampe?*).

Abel, O. 1926 B, 215 (*Exocampe?*).

Gilmore, C. W. 1927 D, 36, pl. xii; text-figs. 15, 16.

Schuchert, C. 1918 A, 354 (*Exocampe?*).

Permian (Hermit); Arizona.

**Batrachichnus jacksonensis** (Butts).

Butts, E. 1891 A, 18, fig. (*Notalacerta*).

Gilmore, C. W. 1927 D, 11, 36 (*Notalacerta*).

Referred to *Batrachichnus*.

Matthew, G. F. 1903 D, 112, 115 (*Notalacerta*).

Coal Measures (Upper); Missouri.

**Batrachichnus obscurus** Gilmore.

Gilmore, C. W. 1927 D, 40, pl. xiii; text-fig. 17.

Permian (Hermit); Arizona.

**Batrachichnus plainvillensis** Woodworth.

Hay, O. P. 1902 A, 541.

Gilmore, C. W. 1927 D, 40, text-fig. 18.

Matthew, G. F. 1903 B, 107 (*Batrachites*).

1903 D, 112, 114.

1904 A, 91.

Carboniferous; Massachusetts.



**BATRACHOIDES** E. Hitchcock. Type *B. nidificans* E. Hitchcock.

- Hay, O. P. 1902 A, 541.  
 Abel, O. 1926 B, 50-53.  
 1927 C, 329.  
 Hitchcock, C. H. in Hitchcock and Grier 1927 A, 189 (Koilosoma).  
 The objects to which this name was given are now regarded as of inorganic origin.
- Batrachoides antiquior** E. Hitchcock.  
 Hay, O. P. 1902 A, 541.  
 Abel, O. 1927 C, 329.  
 Kindle, E. M. 1914 A, 159, pl. viii (Not a fossil).  
 Triassic; Connecticut.

- Batrachoides nidificans** E. Hitchcock.  
 Hay, O. P. 1902 A, 541.  
 Abel, O. 1926 B, 50, figs. 27, 28.  
 1927 C, 329.  
 Hitchcock, C. H. 1898 A, 402.  
 Hitchcock and Grier 1927 A, 189 (Batrachoides); 193, 196 (Koilosoma).  
 Kindle, E. M. 1914 A, 159.  
 Lyman, B. S. 1894 A, 210.  
 Triassic (Newark); Connecticut.

**BATRACHOPUS** E. Hitchcock. Type *B. deweyanus* E. Hitchcock.

- Hay, O. P. 1902 A, 541.  
 Abel, O. 1912 F, 70.  
 1926 B, 37.  
 Bronn, H. G. 1848 A, 148 (Batrachoidichnites).  
 Hitchcock, C. H. 1898 A, 402 (Anisichnus).  
 Lull, R. S. 1904 A, 479, 482, 546.  
 1904 B, 381.  
 1905 C, 299.  
 1915 A, 174.  
 1917 D, 113.  
 Nopcsa, F. 1923 H, 142, 143.
- Batrachopus bellus** (E. Hitchcock).  
 Hay, O. P. 1902 A, 540 (Apatichnus).  
 Lull, R. S. 1904 A, 485.  
 1915 A, 178, fig. 36.  
 1917 D, 113.  
 Lyman, B. S. 1894 A, 206 (Apatichnus).  
 Triassic (Newark); Massachusetts.
- Batrachopus deweyanus** E. Hitchcock.  
 Hay, O. P. 1902 A, 541.  
 Lansing, G. Y. 1854 A, 62 (Batrachoidichnites deweyi).  
 Lull, R. S. 1904 A, 483.  
 1915 A, 175, fig. 32 (B. deweyi).  
 1917 D, 113 (B. deweyi).  
 Lyman, B. S. 1894 A, 205, 206, 209, 210 (Anisopus).  
 Triassic (Newark); Massachusetts, Connecticut.
- Batrachopus dispar** Lull.  
 Lull, R. S. 1904 A, 483, fig. 2.

- Lull, R. S. 1904 B, 382.  
 1915 A, 176, fig. 33.  
 1917 D, 113.  
 Triassic (Newark); Massachusetts.
- Batrachopus gracilior** (E. Hitchcock).  
 Hay, O. P. 1902 A, 541.  
 Hitchcock and Grier 1927 A, 194, 196.  
 Lull, R. S. 1904 A, 484.  
 1915 A, 177, fig. 35.  
 1917 D, 113.  
 Lyman, B. S. 1894 A, 205 (Anisopus).  
 Triassic (Newark); Massachusetts.
- Batrachopus gracilis** (E. Hitchcock).  
 Hay, O. P. 1902 A, 541.  
 Cushman, J. A. 1907 A, 273 (Anisopus).  
 Hitchcock and Grier 1927 A, 186, 189, 190.  
 Lull, R. S. 1904 A, 484, fig. 3.  
 1904 B, 382, fig. 1.  
 1915 A, 109, 177, fig. 34.  
 1917 D, 113.  
 Lydekker, R. 1905 B, 278.  
 Lyman, B. S. 1894 A, 205, 206, 207, 209, 210 (Anisopus).  
 Rice and Gregory 1906 A, 177, fig. 6.  
 Triassic (Newark); Massachusetts, Connecticut, New Jersey, Pennsylvania.
- Batrachopus** sp. indet.  
 Hitchcock and Grier 1927 A, 190.  
 Triassic (Newark); Massachusetts.  
 Thorpe, M. R. 1928 A, 39.  
 Triassic (Newark); Connecticut.

**BIPEZIA** Matthew. Type *B. bilobata* Matthew.

- Matthew, G. F. 1910 A, 121.
- Bipezia bilobata** Matthew.  
 Matthew, G. F. 1910 A, 121, pl. iv, figs. 1, 2.  
 Devonian (Little River); New Brunswick.

**CHEIROTHEROIDES** E. Hitchcock. Type *C. pilulatus* E. Hitchcock.

- Hay, O. P. 1902 A, 541.  
 Abel, O. 1926 B, 37.  
 Lull, R. S. 1904 A, 485.  
 1915 A, 179.  
 1917 D, 114.

- Nopcsa, F. 1923 H, 142, 143 (Cheritheroides).
- Cheirotheroides pilulatus** E. Hitchcock.  
 Hay, O. P. 1902 A, 541.  
 Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 435.  
1915 A, 179, fig. 37.  
1917 D, 114.

Lyman, B. S. 1894 A, 206.  
Triassic (Newark); Massachusetts.

**CHELICHNUS** Jardine. Type *Testudo duncani* Owen.

Hay, O. P. 1902 A, 542.  
Harkness, R. 1852 A, 255.  
Jardine, W. 1853 A, 9, pls. i-iii, vi, viii, x, xi.

**Chelichnus wymanianus** Lea.  
Hay, O. P. 1902 A, 542.  
Lyman, B. S. 1894 A, 212.  
Triassic (Newark); Pennsylvania.

**CHELONOIDES** E. Hitchcock. Type *C. incedens* E. Hitchcock.

Hay, O. P. 1902 A, 542.  
Lull, R. S. 1904 A, 529.  
1915 A, 248.  
1917 D, 123.

Hitchcock, C. H. 1898 A, 402.  
Lull, R. S. 1904 A, 529.  
1915 A, 248, fig. 106.  
1917 D, 123.  
Lyman, B. S. 1894 A, 206.  
Triassic (Newark); Massachusetts.

**Chelonoides incedens** E. Hitchcock.  
Hay, O. P. 1902 A, 542.

**CHIROTHERIUM** Kaup. Type *C. barthii* Kaup.

Hay, O. P. 1902 A, 542.  
Abel, O. 1912 F, 275, 665.  
1916 A, 469.  
1926 B, 37, 441.  
1926 G, (149).  
Ardt, T. 1907 D, 337.  
De la Beche, H. T. 1848 A, cxii (Cheirotherium).  
Frech, F. 1919 A, 109.  
Harkness, R. 1852 A, 254 (Cheirotherium).  
Hitchcock and Grier 1927 A, 192 (Cheirotherium).  
Kirchner, H. 1926 A, 134.  
1927 A, 112.  
Kukuk, P. 1926 A, 612.  
Lull, R. S. 1904 A, 514, pl. lxxii.  
Matthew, G. F. 1903 B, 107.  
Nopcsa, F. 1923 H, 142, 143, 144.  
Watson, D. M. S. 1914 C, 395 (Cheirotherium).

**Chirotherium? heterodactylum** (King).  
Hay, O. P. 1902 A, 542.

Hickling, G. 1909 A, 30, pl. iv, fig. 28 (Thenaropus).  
Matthew, G. F. 1903 B, 104 (Theranopus).  
1903 D, 115 (Thenaropus).  
Coal Measures; Pennsylvania.

**Chirotherium parvum** (C. H. Hitchcock).

Lull, R. S. 1915 A, 226, fig. 77 (This genus?).  
1917 D, 119 (Cheirotherium?).  
Triassic (Newark); New Jersey.

**Chirotherium? reiteri** Moore.

Hay, O. P. 1902 A, 542.  
Pennsylvanian; Pennsylvania.

**Chirotherium** sp. indet.

Gilmore, C. W. 1927 D, 65, pl. xviii (This genus?). Permian (Hermit); Arizona.  
Mudge, B. F. 1874 A, 73 (Cheirotherium. This genus?). Coal Measures; Kansas.

**COLLETTOSAURUS** Cox. Type *C. indianænsis* Cox.

Hay, O. P. 1902 A, 542 (Collettosaurus); 547 (Notalacerta, Notamphibia).  
Butts, E. 1891 B, 18 (Notalacerta); 44 (Notamphibia).  
Gilmore, C. W. 1927 D, 58.

**Collettosaurus indianænsis** Cox.

Hay, O. P. 1902 A, 542.  
Gilmore, C. W. 1927 D, 58.  
Matthew, G. F. 1903 D, 112, 115.  
Pennsylvanian; Indiana.

**Collettosaurus magnus** (Butts).

Butts, E. 1891 B, 44 (Notamphibia).  
Hay, O. P. 1902 A, 547 (Notamphibia).  
Gilmore, C. W. 1927 D, 59, text-fig. 29 (C magna).  
Pennsylvanian; Missouri.

**Collettosaurus missouriensis** (Butts).

Butts, E. 1891 A, 18, fig. 2 (Notalacerta).  
Hay, O. P. 1902 A, 547 (Notalacerta).  
Gilmore, C. W. 1927 D, 11 (Notalacerta); 59, text-fig. 30 (Collettosaurus).  
Matthew, G. F. 1903 D, 111, 114, pl. iii, figs. 1, 1a (Notalacerta).  
Nopcsa, F. 1923 H, 136 (Neolacerta).  
Pennsylvanian; Missouri.

**Collettosaurus pentadactylus** Gilmore.

Gilmore, C. W. 1927 D, 60, pl. xix, fig. 1; text-fig. 32.  
1928 A, 7, 8 (This species?).  
1928 C, 8, fig. 8.  
Permian (Hermit); Arizona.

COMPTICHNUS E. Hitchcock. Type *C. obesus* E. Hitchcock.

Hay, O. P. 1902 A, 542.

Abel, O. 1926 G, (149).

Lull, R. S. 1904 A, 538.

1915 A, 260.

1917 D, 126.

**Comptichnus obesus** E. Hitchcock.

Hay, O. P. 1902 A, 542.

Abel, O. 1926 G, (149).

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 538.

1915 A, 260, fig. 121.

1917 D, 126.

Lyman, B. S. 1894 A, 205.

Triassic (Newark); Massachusetts.

CORVIPES E. Hitchcock. Type *C. lacertoides* E. Hitchcock.

Hay, O. P. 1902 A, 542.

Abel, O. 1912 F, 272.

1926 B, 36.

Lull, R. S. 1904 A, 509.

1915 A, 246.

1917 D, 123.

Nopcsa, F. 1923 C, 464, fig. 1.

1923 H, 145, 146.

**Corvipes lacertoides** E. Hitchcock.

Hay, O. P. 1902 A, 542.

Hitchcock, C. H. 1898 A, 401.

Lull, R. S. 1904 A, 510.

1915 A, 246, fig. 104.

1917 D, 123.

Lyman, B. S. 1894 A, 205, 206, 209.

Triassic (Newark); Massachusetts, Connecticut.

CRUCIPES Butts. Type *C. parva* Butts.

Hay, O. P. 1902 A, 542.

**Crucipes parva** Butts.

Hay, O. P. 1902 A, 542 (C. parvus).

Gilmore, C. W. 1927 D, 11 (C. parvus).

Matthew, G. F. 1903 D, 113, 115.

Pennsylvanian (Kansas City); Missouri.

CUNICHNOIDES E. Hitchcock. Type *C. marsupialoides* E. Hitchcock.

Hay, O. P. 1902 A, 543.

Lull, R. S. 1904 A, 540.

**Cunichnoides marsupialoides** E. Hitchcock.

Hay, O. P. 1902 A, 543.

Lull, R. S. 1904 A, 540.

Lyman, B. S. 1894 A, 205.

Triassic (Newark); Connecticut.

CURSIPES Matthew. Type *C. dawsoni* Matthew.

Matthew, G. F. 1903 C, 102.

Gilmore, C. W. 1927 D, 63.

Matthew, G. F. 1904 A, 92.

**Cursipes dawsoni** Matthew.

Matthew, G. F. 1903 C, 103, pl. i, fig. 4.

Gilmore, C. W. 1927 D, 64.

Lambe, L. M. 1904 C, 36, 47.

Matthew, G. F. 1904 A, 93, pl. i, fig. 4.

Nopcsa, F. 1923 H, 135.

Coal Measures; Nova Scotia.

**Cursipes levis** Matthew.

Matthew, G. F. 1904 A, 93, pl. ii, fig. 3.

Gilmore, C. W. 1927 D, 64.

Coal Measures; Nova Scotia.

**Cursipes** sp. indet.

Gilmore, C. W. 1927 D, 63.

Permian (Hermit); Arizona.

DOLICHOPODUS Gilmore. Type *D. tetradactylus* Gilmore.

Gilmore, C. W. 1926 A, 6.

1927 D, 12.

**Dolichopodus tetradactylus** Gilmore.

Gilmore, C. W. 1926 A, 6, 35, pl. iv, fig. 1; text-fig. 2.

1927 D, 11, 13.

Permian (Coconino); Arizona.

DROMILOPUS Matthew. Type *D. quadrifidus* Matthew.

Matthew, G. F. 1904 A, 91.

Gilmore, C. W. 1927 D, 42.

**Dromilopus obtusus** (Matthew).

Matthew, G. F. 1904 A, 98, pl. v, fig. 1 (Nanopus).

Gilmore, C. W. 1926 A, 12 (Nanopus).

1927 D, 14, fig. 4 ("3," error) [Dromilopus (Nanopus) obtusis].

Pennsylvanian; Nova Scotia.

**Dromilopus parvus** Gilmore.

Gilmore, C. W. 1927 D, 42, pl. xiv; text-fig. 19.

Permian (Hermit); Arizona.

**Dromilopus quadratus** (Matthew).

Matthew, G. F. 1904 A, 98, pl. v, fig. 2 (Nanopus).

Gilmore, C. W. 1926 A, 12 (Nanopus).

1927 D, 11, 14, fig. 3 ("4," *errore*).

Pennsylvanian (Joggins); Nova Scotia.

**Dromilopus quadrifidus** Matthew.

Matthew, G. F. 1904 A, 91, pl. i, fig. 5.

Gilmore, C. W. 1927 D, 44, text-fig. 20.

Nopcsa, F. 1923 H, 135 (Dromopus).

Pennsylvanian; Nova Scotia.

**DROMOPUS** Marsh. Type *D. agilis* Marsh.

Hay, O. P. 1902 A, 543.

Branson, E. B. 1910 A, 358.

Fürbringer, M. 1900 A, 673.

Matthew, G. F. 1904 A, 91.

**Dromopus aduncus** Branson.

Branson, E. B. 1910 A, 358, fig. 1.

Moodie, R. L. 1911 C, 879.

1916 A, 37, pl. xviii, fig. 3.

Mississippian (Hinton); Virginia.

**Dromopus agilis** Marsh.

Hay, O. P. 1902 A, 543.

Abel, O. 1912 F, 67, fig. 24.

Gilmore, C. W. 1926 A, 8, text-fig. 3.

Hickling, G. 1909 A, 30, pl. iv, fig. 31.

Jaekel, O. 1909 B, 597, fig. 8.

Martin, H. T. 1922 B, 105.

Matthew, G. F. 1903 D, 112, pl. ii, figs. 3, 4.  
1904 A, 93.

Moodie, R. L. 1916 A, 199, fig. 43.

Nopcsa, F. 1923 H, 136.

Williston, S. W. 1911 B, 40.

Pennsylvanian; Kansas.

**Dromopus velox** Matthew.

Matthew, G. F. 1904 A, 86, pl. ii, fig. 2.

Gilmore, C. W. 1927 D, 11, 60, text-fig. 31.

Pennsylvanian (Joggins); Nova Scotia.

**Dromopus? woodworthi** Lull.

Lull, R. S. 1920 B, 234, fig. 1.

Gilmore, C. W. 1927 D, 11.

Martin, H. T. 1922 B, 105.

Pennsylvanian (Alleghanian); Massachusetts.

**DUOVESTIGIA** Butts. Type *D. scala* Butts.

Butts, E. 1891 A, 19.

**Duovestigia scala** Butts.

Butts, E. 1891 A, 19, fig. 4.

Pennsylvanian; Missouri.

**EUBRONTES** E. Hitchcock. Type *E. giganteus* E. Hitchcock.

Hay, O. P. 1902 A, 543.

Abel, O. 1912 F, 70, 272.

1926 B, 36, 39, 444.

Gadow, H. 1901 B, 414 (Brontozoum).

Hitchcock, C. H. 1898 A, 401 (Brontozoum).

Huxley, T. H. 1876 F, 180 (Brontozoum).

Koken, E. 1893 B, 261 (Brontozoum).

Lull, R. S. 1904 A, 510, 544.

1905 C, 299.

1910 A, 17.

1915 A, 195.

1917 D, 115.

Nopcsa, F. 1923 H, 145 (Eubrontes, Brontozoum).

Reichenbach, L. 1853 A, xxx (Bellona, type *Ornithichnites giganteus* E. Hitchcock).

**Eubrontes approximatus** (E. Hitchcock).

Hay, O. P. 1902 A, 543.

Hitchcock and Grier 1927 A, 191, 194.

Lull, R. S. 1904 A, 511, fig. 32.

1915 A, 196, fig. 49.

1917 D, 116.

Lyman, B. S. 1894 A, 205, 206, 211, 214 (Brontozoum).

Triassic (Newark); Massachusetts, Connecticut, New Jersey.

**Eubrontes divaricatus** (E. Hitchcock).

Hay, O. P. 1902 A, 543.

Hitchcock and Grier 1927 A, 187, 193.

Lull, R. S. 1904 A, 512, fig. 33.

1915 A, 198, fig. 50.

1917 D, 116.

Lyman, B. S. 1894 A, 205, 209 (Brontozoum).

Triassic (Newark); Massachusetts, Connecticut, New Jersey.

**Eubrontes expansus** E. Hitchcock.

Hay, O. P. 1902 A, 543.

Hitchcock and Grier 1927 A, 186 (Brontozoum); 187, 190, 191, 196 (Anchisauripus).

Lull, R. S. 1915 A, 213.

Triassic (Newark); Massachusetts.

**Eubrontes giganteus** E. Hitchcock.

Hay, O. P. 1902 A, 543.

Abel, O. 1926 B, 23, fig. 16.

Cushman, J. A. 1907 A, 273 (Brontozoum).

Gadow, H. 1901 B, 420 (Brontozoum).

Heilmann, G. 1926 A, 180, fig. 130.

Hitchcock and Grier 1927 A, 187, 188, 192.

Lull, R. S. 1904 A, 510, 544, fig. 31.

1912 D, 420.

1915 A, 195, fig. 48.

1917 D, 115.

1924 A, 268.

Lyell, C. 1843 B, 1, 254 (Ornithichnites).

Lyman, B. S. 1894 A, 204-213 (Brontozoum).

Reichenbach, L. 1853 A, 35, xxx (Bellona).

Serres, M. 1852 A, 118 (Ornithichnites).

Triassic (Newark); Massachusetts, Connecticut, New Jersey.

### **Eubrontes platypus** Lull.

Lull, R. S. 1904 A, 512, fig. 34.

Abel, O. 1926 B, 25, fig. 15.

Gilmore, C. W. 1924 K, 16, fig. 2 ("footprints").

Heilmann, G. 1926 A, 180, fig. 130.

Lull, R. S. 1915 A, 199, fig. 51.

1917 D, 116.

Triassic (Newark); Massachusetts.

**Eubrontes? titanopelopatidus** Shuler.

Shuler, E. W. 1917 A, 294.

Lower Cretaceous (Glen Rose); Texas.

**Eubrontes** sp. indet.

Abel, O. 1926 B, 30, figs. 17, 18.

Triassic (Newark); Massachusetts.

Thorpe, M. R. 1928 A, 39.

Triassic (Newark); Connecticut.

**EUPALAMOPUS** Hay. Type *Palamopus dananus* E. Hitchcock=*P. clarki* E. Hitchcock.

Hay, O. P. 1902 A, 544.

Abel, O. 1926 B, 36.

Lull, R. S. 1904 A, 531.

1915 A, 250.

1917 D, 124.

Nopcsa, F. 1923 C, 464, fig. 3.

1923 H, 145, 146.

**Eupalamopus dananus** (E. Hitchcock).

Hay, O. P. 1902 A, 544.

Hitchcock, C. H. 1898 A, 402 (*Palamopus clarkii*).

Lull, R. S. 1904 A, 531.

1915 A, 250, fig. 108.

1917 D, 124.

Lyman, B. S. 1894 A, 210 (*Palamopus clarki*).

Triassic (Newark); Massachusetts.

**EXOCAMPE** E. Hitchcock. Type *E. arcta* E. Hitchcock.

Hay, O. P. 1902 A, 544.

Abel, O. 1926 B, 36.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 534.

1915 A, 254.

1917 D, 124.

Nopcsa, F. 1923 C, 464.

1923 H, 145.

**Exocampe arcta** E. Hitchcock.

Hay, O. P. 1902 A, 544.

Lull, R. S. 1904 A, 534.

1915 A, 254, fig. 112.

1917 D, 124.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**Exocampe minima** E. Hitchcock.

Hay, O. P. 1902 A, 544.

Lull, R. S. 1904 A, 534.

1915 A, 255.

1917 D, 124.

Triassic (Newark); Massachusetts.

**Exocampe ornata** E. Hitchcock.

Hay, O. P. 1902 A, 544.

Hitchcock and Grier 1927 A, 195.

Lull, R. S. 1904 A, 534.

1915 A, 255, fig. 113.

1917 D, 124.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts, Connecticut.

**FULICOPUS** E. Hitchcock. Type *F. lyellianus* E. Hitchcock.

Hay, O. P. 1902 A, 544.

Abel, O. 1912 F, 272.

Hitchcock, C. H. 1898 A, 401 (*Amblyonyx*).

Lull, R. S. 1904 A, 505, 545.

**Fulicopus giganteus** (E. Hitchcock).

Hay, O. P. 1902 A, 544.

Cushman, J. A. 1907 A, 273 (*Amblyonyx*).

Lyman, B. S. 1894 A, 205 (*Amblyonyx*).

Triassic (Newark); Massachusetts, Connecticut, New Jersey.

**Fulicopus lyellianus** (E. Hitchcock).

Hay, O. P. 1902 A, 544.

Abel, O. 1911 A, 174.

1912 F, 69, 277, fig. 26.

Lull, R. S. 1904 A, 472, 474, 506, figs. 26-28.

Lyman, B. S. 1894 A, 205 (*Amblyonyx*).

Triassic (Newark); Massachusetts.

**GIGANDIPUS** E. Hitchcock. Type *G. caudatus* E. Hitchcock.

Hay, O. P. 1902 A, 545.

Abel, O. 1912 F, 271, 276.

1926 B, 36.

Hitchcock, C. H. 1898 A, 401 (*Gigantitherium*).

Lull, R. S. 1904 A, 492.

1905 C, 299.

1910 A, 14.

Lull, R. S. 1915 A, 191.

1917 D, 115.

Nopcsa, F. 1923 C, 464.

1923 H, 146, 147, pl. vi. fig. 11a.

**Gigandipus caudatus** E. Hitchcock.

Hay, O. P. 1902 A, 545.

- Abel, O. 1911 A, 157.  
 1912 F, 404, fig. 288.  
 Heilmann, G. 1926 A, 180, fig. 130.  
 Lull, R. S. 1904 A, 492, fig. 11.  
 1915 A, 191, fig. 46.  
 1917 D, 115.  
 1924 A, 268.

- Lyman, B. S. 1894 A, 206 (*Gigantitherium*).  
 Triassic (Newark); Massachusetts.

***Gigandipus* sp. indet.**

- Thorpe, M. R. 1928 A, 39.  
 Triassic (Newark); Connecticut.

**GRALLATOR E. Hitchcock. No type designated.**

- Hay, O. P. 1902 A, 545.  
 Abel, O. 1911 A, 158.  
 1912 F, 271.  
 1926 B, 36, 39.  
 Heilmann, G. 1926 A, 205.  
 Hitchcock, C. H. 1898 A, 401.  
 Lull, R. S. 1904 A, 494, 544.  
 1904 D, 144.  
 1905 C, 299.  
 1915 A, 200.  
 1917 D, 116.  
 Nopcsa, F. 1923 C, 464, fig. 2.  
 1923 H, 146, 147.

***Grallator cuneatus* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Heilmann, G. 1913 B, 28, fig. 73.  
 Hitchcock and Grier 1927 A, 188, 187, 189.  
 Lull, R. S. 1904 A, 495, fig. 15.  
 1915 A, 202, fig. 56.  
 1917 D, 116.

- Lyman, B. S. 1894 A, 205, 209, 210, 214.  
 Triassic (Newark); Connecticut, Massachusetts, New Jersey.

***Grallator cursorius* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Heilmann, G. 1926 A, 180, fig. 130.  
 Lull, R. S. 1904 A, 494, fig. 12.  
 1912 D, 420.  
 1915 A, 168, 200, fig. 53.  
 1917 D, 116.

- Lyman, B. S. 1894 A, 205, 210, 213.  
 Triassic (Newark); Connecticut, Massachusetts, New Jersey.

***Grallator formosus* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Lull, R. S. 1904 A, 496, fig. 16.  
 1915 A, 205, fig. 57 (This genus?).  
 1917 D, 117.

- Lyman, B. S. 1894 A, 206, 213, 214.  
 Triassic (Newark); Connecticut, Massachusetts, New Jersey.

***Grallator gracilis* C. H. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Heilmann, G. 1926 A, 180, fig. 130.  
 Hitchcock and Grier 1927 A, 196.  
 Lull, R. S. 1904 A, 496, fig. 17.  
 1915 A, 202, fig. 55.  
 1917 D, 116.

- Lyman, B. S. 1894 A, 205, 214.  
 Triassic (Newark); Connecticut, Massachusetts, New Jersey.

***Grallator tennis* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Heilmann, G. 1926 A, 180, fig. 130.  
 Lull, R. S. 1904 A, 495, fig. 14.  
 1915 A, 201, fig. 54.  
 1917 D, 116.

- Lyman, B. S. 1894 A, 205, 209, 210.  
 Triassic (Newark); Massachusetts, Connecticut, New Jersey.

***Grallator* sp. indet.**

- Hitchcock and Grier 1927 A, 186, 188, 190, 195, 197. Triassic (Newark); Massachusetts.  
 Thorpe, M. R. 1928 A, 39.  
 Triassic (Newark); Connecticut.

**HARPEDACTYLUS E. Hitchcock. Type *H. tenuissimus* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Abel, O. 1926 B, 36.  
 Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 527.  
 1915 A, 245.  
 1917 D, 122.  
 Nopcsa, F. 1923 C, 464, fig. 1 (*Harpedactylus*).  
 1923 H, 145, 146.

***Harpedactylus crassus* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Lull, R. S. 1904 A, 528.  
 1915 A, 246.  
 1917 D, 122.

- Lyman, B. S. 1894 A, 205.  
 Triassic (Newark); Massachusetts.

***Harpedactylus gracilior* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.

- Lull, R. S. 1904 A, 528.  
 1915 A, 246, fig. 10.  
 1917 D, 122.

- Lyman, B. S. 1894 A, 205.  
 Triassic (Newark); Massachusetts.

***Harpedactylus tenuissimus* E. Hitchcock.**

- Hay, O. P. 1902 A, 545.  
 Lull, R. S. 1904 A, 527.  
 1915 A, 245, fig. 102.  
 1917 D, 122.

- Lyman, B. S. 1894 A, 205 (*H. gracilis*).  
 Triassic (Newark); Massachusetts, Connecticut.

**HELICURA** E. Hitchcock. Type *H. littoralis* E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 530.  
     1915 A, 249.  
     1917 D, 123.

**Helicura anguinea** E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Lull, R. S. 1904 A, 530.  
     1915 A, 249.  
     1917 D, 123.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**Helicura littoralis** E. Hitchcock.

Hay, O. P. 1902 A, 546.

Hitchcock, C. H. 1898 A, 402 (*H. caudata*).  
 Lull, R. S. 1904 A, 531.  
     1915 A, 250.  
     1917 D, 123.  
 Triassic (Newark); Massachusetts.

**Helicura surgens** E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Lull, R. S. 1904 A, 531.  
     1915 A, 250.  
     1917 D, 124.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**HOPLICHNUS** E. Hitchcock. Type *H. quadrupedans* E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Lull, R. S. 1904 A, 541.  
 A genus of doubtful validity.

**Hoplichnus equus** E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Lull, R. S. 1904 A, 541.  
 Lyman, B. S. 1894 A, 205, 211.  
 Triassic (Newark); Massachusetts.

**Hoplichnus quadrupedans** E. Hitchcock.

Hay, O. P. 1902 A, 546.  
 Lull, R. S. 1904 A, 541.  
 Lyman, B. S. 1894 A, 206 (*H. poledrus*).  
 Triassic (Newark); Massachusetts.

**HYLODICHNUS** Gilmore. Type *H. bifurcatus* Gilmore.

Gilmore, C. W. 1927 D, 51.  
     1928 A, 5.

**Hyloidichnus bifurcatus** Gilmore.

Gilmore, C. W. 1927 D, 52, pl. xvi; text-fig. 25.  
 Permian (Hermit); Arizona.

**Hyloidichnus whitei** Gilmore.

Gilmore, C. W. 1928 A, 5, pl. iii, fig. 1; text-fig. 3.  
 Permian (Hermit); Arizona.

**HYLOPUS** Dawson. Type *H. logani* Dawson.

Hay, O. P. 1902 A, 546.  
 Ami, H. M. 1899 A, 181.  
 Gilmore, C. W. 1927 D, 45, 46.  
 Lull, R. S. 1918 A, 343.  
 Matthew, G. F. 1903 A, 102.  
     1903 C, 101.  
     1903 D, 114.  
     1904 A, 82.  
     1904 B, 247.

Whiteaves, J. F. 1901 A, 180, 190.

**Hylopus hardingi** Dawson.

Hay, O. P. 1902 A, 546.  
 Barrell, J. 1915 B, 410.  
 Gilmore, C. W. 1927 D, 11, 45, text-figs. 22, 23.  
 Lambe, L. M. 1904 C, 18, 35, 46.  
 Lull, R. S. 1917 B, 491.  
 Matthew, G. F. 1903 D, 111, pl. i, figs. 3, 4.  
     1904 A, 82, pl. i, fig. 1; pl. vi, fig. 2.  
     1904 B, 247, fig. 5.  
 Nopcsa, F. 1923 H, 135.  
 Mississippian; Nova Scotia.

**Hylopus hermitanus** Gilmore.

Gilmore, C. W. 1927 D, 46, fig. 21 (P. 7, *H. hermitus*; p. 78, *H. hermitensis*, *errore*).  
     1928 A, 7.  
     1928 C, 8, fig. 8.  
 Permian (Hermit); Arizona.

**Hylopus logani** Dawson.

Hay, O. P. 1902 A, 546.  
 Gilmore, C. W. 1927 D, 11, 46.  
 Lambe, L. M. 1904 C, 18, 35, 46.  
 Matthew, G. F. 1903 D, 112, pl. i, figs. 3, 4.  
     1904 A, 82, 85, pl. vi, fig. 1.  
     1904 B, 247.  
 Moodie, R. L. 1908 E, 562.  
 Mississippian; Nova Scotia.

**Hylopus minor** Dawson.

Hay, O. P. 1902 A, 546.  
 Gilmore, C. W. 1927 D, 46.  
 Lambe, L. M. 1904 C, 36, 46.

Matthew, G. F. 1903 D, 112.  
1904 A, 81 (This genus?).  
1904 B, 252.  
Mississippi; Nova Scotia.

*Hylopus* ? *variabilis* Matthew.

Matthew, G. F. 1910 A, 120, pl. ii, figs. 1-3.  
Devonian (Little River); New Brunswick.

*Hylopus* sp. indet.

Hay, O. P. 1902 A, 546.

**HYPHEPUS** E. Hitchcock. Type *H. fieldi* E. Hitchcock.

Hay, O. P. 1902 A, 546.

Abel, O. 1912 F, 271.

1926 B, 36.

Lull, R. S. 1904 A, 493.

1915 A, 193.

1917 D, 115.

Nopcsa, F. 1923 C, 464.

1923 H, 146.

*Hyphepus fieldi* E. Hitchcock.

Hay, O. P. 1902 A, 546.

Hitchcock, C. H. 1898 A, 401.

Lull, R. S. 1904 A, 493.

1915 A, 193, fig. 47.

1917 D, 115.

Lyman, B. S. 1894 A, 206.

Triassic (Newark); Massachusetts.

**ICHTHYOIDICHNITES** Ami. Type *I. acadiensis* Ami.

Ami, H. M. 1902 A, 330.

Sauvage, H. E. 1903 D, 228 (Ichthyoidinites).

*Ichthyoidichnites acadiensis* Ami.

Ami, H. M. 1902 A, 330, pl. ii.

1901 B, 309 (No description).

Twenhofel, W. H. 1913 A, 303.

Lower Devonian (Knorydard); Nova Scotia.

**ISOCAMPE** E. Hitchcock. Type *I. strata* E. Hitchcock.

Hay, O. P. 1902 A, 546.

Lull, R. S. 1904 A, 537.

1915 A, 259.

1917 D, 125.

*Isocampe strata* E. Hitchcock.

Hay, O. P. 1902 A, 546.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 537.

1915 A, 259, fig. 119.

1917 D, 125.

Lyman, B. S. 1894 A, 206 (*I. strata*); 205 (*I. moodii*. This species?).

Triassic (Newark); Massachusetts, Connecticut.

**LAGUNCULAPES** E. Hitchcock. Type *L. latus* E. Hitchcock.

Hay, O. P. 1902 A, 546 (Lagunculapes, *errore*).

Lull, R. S. 1904 A, 525.

1915 A, 242.

1917 D, 122.

*Lagunculapes latus* E. Hitchcock.

Hay, O. P. 1902 A, 546 (Lagunculapes, *errore*).

Abel, O. 1912 F, 272.

Hitchcock, C. H. 1898 A, 402 (Lagunculipes).

Lull, R. S. 1904 A, 525.

1915 A, 242, fig. 99.

1917 D, 122.

Triassic (Newark); Massachusetts.

**LAOPORUS** Lull. Type *L. schucherti* Lull.

Lull, R. S. 1918 A, 338.

Gilmore, C. W. 1926 A, 13.

1927 D, 17.

1928 A, 3.

Nopcsa, F. 1923 H, 141.

Thorpe, M. R. 1926 A, 7.

*Laoporus coloradensis* (Henderson).

Henderson, J. 1924 A, 228, figs. 1-3 (*Limnopus*?).

Gilmore, C. W. 1926 A, 16, 19, 36, pl. vii, figs. 1, 2; text-fig. 10 (*L. coloradoensis*).

Permian (Lyons); Colorado.

*Laoporus noblei* Lull.

Lull, R. S. 1918 A, 339, pl. ii; text-fig. 2.

Abel, O. 1926 B, 203, 211.

Gilmore, C. W. 1926 A, 13, pl. v, fig. 2; pl. vi; text-fig. 9 (*L. nobeli*).

1927 C, 47, fig. 53.

1927 D, 11, 18, pl. iv, fig. 2.

Schuchert, C. 1918 A, 350.

Permian (Coconino); Arizona.

*Laoporus schucherti* Lull.

Lull, R. S. 1918 A, 338, pl. i, fig. 1; text-fig. 1.

Abel, O. 1926 B, 206, 211, figs. 123, 124.

Gilmore, C. W. 1926 A, 17, 18.

1927 D, 11.

Schuchert, C. 1918 A, 350.

Permian (Coconino); Arizona.

**LIMNOPUS** Marsh. Type *L. vagus* Marsh.

Hay, O. P. 1902 A, 547.

Lull, R. S. 1918 A, 341.

*Limnopus vagus* Marsh.

Hay, O. P. 1902 A, 547.

Abel, O. 1912 F, 67, fig. 24.



Gilmore, C. W. 1926 A, 14, text-fig. 8.  
 Matthew, G. F. 1903 D, 112, pl. iii, fig. 2 (L.  
 vagans).

Nopcea, F. 1923 H, 135 (Limopus vagans).  
 Coal Measures; Kansas.

**MEGAPEZIA** Matthew. Type *M. pineoi* Matthew.

Matthew, G. F. 1903 C, 107.

Lull, R. S. 1918 A, 343.

Matthew, G. F. 1904 A, 102.

**Megapezia pineoi** Matthew.

Matthew, G. F. 1903 C, 108, pl. i, fig. 2.

Jaekel, O. 1909 B, 595, fig. 6.

Lambe, L. M. 1904 C, 35, 46.

Lull, R. S. 1918 A, 344.

Matthew, G. F. 1904 A, 103, pl. ii, fig. 4; pl.  
 vi, fig. 6.

Coal Measures; Nova Scotia.

**MICRICHNUS** Abel. Type *M. scotti* Abel.

Abel, O. 1926 B, 32.

**Micrichnus scotti** Abel.

Abel, O. 1926 B, 32, 44, 52, 451, figs. 19-23.

1926 G, (146) (Micrichnum).

Triassic (Stockton); New Jersey.

**NANOPUS** Marsh. Type *N. caudatus* Marsh.

Hay, O. P. 1902 A, 547.

Gilmore, C. W. 1926 A, 9.

1927 D, 13.

**Nanopus caudatus** Marsh.

Hay, O. P. 1902 A, 547.

Gilmore, C. W. 1926 A, 11, text-fig. 6.

1927 D, 14.

Henderson, J. 1924 A, 229.

Matthew, G. F. 1903 D, 113, pl. iii, figs. 5, 5a.

Pennsylvanian; Kansas.

**Nanopus maximus** Gilmore.

Gilmore, C. W. 1927 D, 15, pl. iii; text-fig. 5.

Permian (Coconino); Arizona.

**Nanopus merriami** Gilmore.

Gilmore, C. W. 1926 A, 9, pl. iv, fig. 2; text-  
 fig. 5.

1927 D, 11, 15, pl. iv, fig. 1.

Permian (Coconino); Arizona.

**Nanopus ? vetustus** Matthew.

Matthew, G. F. 1910 A, 121, pl. ii, figs. 4, 5.

Devonian (Little River); New Brunswick.

**ONYCHOPUS** Martin. Type *O. gigas* Martin.

Martin, H. T. 1922 B, 104.

Kukuk, P. 1926 A, 610.

Martin, H. T. 1922 C, 99 ("footprints").

**Onychopus gigas** Martin.

Martin, H. T. 1922 B, 104, pls. i-iii.

1922 C, 99 ("footprints").

Coal Measures (Weston shales); Kansas.

**ORNITHOIDES** Matthew. Type *Hylopus? trifidus* Dawson.

Matthew, G. F. 1903 C, 104.

Hay, O. P. 1902 A, 546 (Hylopus, in part).

Matthew, G. F. 1904 A, 96.

**Ornithoides ? adamsi** Matthew.

Matthew, G. F. 1904 A, 97, pl. iv, fig. 2 (This  
 genus?).

Gilmore, C. W. 1927 D, 67, text-fig. 35 (This  
 genus?).

Pennsylvanian; Nova Scotia.

**Ornithoides trifidus** (Dawson).

Hay, O. P. 1902 A, 546 (Hylopus?).

Gilmore, C. W. 1927 D, 46 (Hylopus. Referred  
 to Ornithoides).

Lambe, L. M. 1904 C, 36, 46 [O. (Hylopus?)].

Matthew, G. F. 1903 C, 105, pl. i, fig. 6 (Hy-  
 lopus?).

1903 D, 113, pl. ii, fig. 2 (Hylopus?).

1904 A, 96, pl. iv, fig. 1 (From Hylopus).

Coal Measures; Nova Scotia.

**ORNITHOMIMIPUS** Sternberg. Type *O. angustus* Sternberg.

Sternberg, C. M. 1926 C, 87.

Huene, F. 1927 G, 230 (Ornithomimus).

Sternberg, C. M. 1926 A, 104 (No description;  
 no species).

**Ornithomimipus angustus** Sternberg.

Sternberg, C. M. 1926 C, 87, pl. xviii; text-  
 fig. 4.

Huene, F. 1926 A, 230 (Ornithomimus).

Upper Cretaceous (Edmonton); Alberta.

**ORTHODACTYLUS** E. Hitchcock. Type *O. floriferus* E. Hitchcock.

Hay, O. P. 1902 A, 547.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 535.

1915 A, 256.

1917 D, 125.

**Orthodactylus floriferus** E. Hitchcock.

Hay, O. P. 1902 A, 547.

Hitchcock and Grier 1927 A, 194.

Lull, R. S. 1904 A, 535.

Lull, R. S. 1917 D, 125.  
 Lyman, B. S. 1894 A, 206.  
 Triassic (Newark); Massachusetts.

**Orthodactylus introvergens E. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Lull, R. S. 1904 A, 535.  
 1915 A, 256, fig. 115.  
 1917 D, 125.

Lyman, B. S. 1894 A, 206.  
 Triassic (Newark); Massachusetts.

**Orthodactylus linearis E. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 536.  
 1915 A, 257, fig. 116.  
 1917 D, 125.

Lyman, B. S. 1894 A, 206.  
 Triassic (Newark); Massachusetts.

**OTOUPHEPUS Cushman. Type *O. magnificus* Cushman.**

Cushman, J. A. 1904 A, 155.  
 Abel, O. 1926 B, 36.  
 Lull, R. S. 1915 A, 187.  
 1917 D, 114.  
 Nopcsa, F. 1923 H, 145 (Otophepus).

**Otophepus magnificus Cushman.**

Cushman, J. A. 1904 A, 155, pl. vi.  
 1907 A, 274.

Lull, R. S. 1915 A, 190, fig. 44.  
 1917 D, 115.  
 Triassic (Newark); Massachusetts.

**Otophepus minor Lull.**

Lull, R. S. 1915 A, 190, fig. 45.  
 1917 D, 115.  
 Triassic (Newark); Massachusetts.

**OTOZOOM E. Hitchcock. Type *E. moodii* E. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Abel, O. 1912 F, 70, 272, 275.  
 1926 B, 37.  
 1926 G, (149).  
 Gilmore, C. W. 1926 A, 29 (Otozorom).  
 Heilmann, G. 1926 A, 206.  
 Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 513, 514, 545.  
 1905 C, 299.  
 1910 A, 17.  
 1915 A, 222.  
 1917 D, 119.

Nopcsa, F. 1923 H, 144, pl. vi, fig. 13.

**Otozoom caudatum C. H. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Lull, R. S. 1904 A, 514.  
 Triassic (Newark); Connecticut.

**Otozoom minus Lull.**

Lull, R. S. 1915 A, 225, fig. 76.  
 1917 D, 119.

Nopcsa, F. 1923 H, 144.  
 Triassic (Newark); Massachusetts.

**Otozoom moodii E. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Abel, O. 1926 B, 33.  
 Heilmann, G. 1926 A, 159, figs. 113, 116.  
 Hitchcock and Grier 1927 A, 194.  
 Lull, R. S. 1904 A, 513, pl. lxxii, figs. e-g.  
 1915 A, 223, pl. xii; text-figs. 74, 75.  
 1917 D, 119.

Lyman, B. S. 1894 A, 205, 206, 210.  
 Rice and Gregory 1906 A, 175, fig. 5.  
 Triassic (Newark); Massachusetts, Connecticut.

**Otozoom parvum C. H. Hitchcock.**

Hay, O. P. 1902 A, 547.  
 Lull, R. S. 1904 A, 515 (This genus?).  
 Lyman, B. S. 1894 A, 214.  
 Triassic (Newark); New Jersey, Pennsylvania.

**PALÆOPUS Gilmore. Type *P. regularis* Gilmore.**

Gilmore, C. W. 1926 A, 25.  
**Palæopus regularis Gilmore.**  
 Gilmore, C. W. 1926 A, 25, pl. v, fig. 1; text-fig. 17.

Abel, O. 1926 B, 208.  
 Gilmore, C. W. 1927 D, 4 (Paleopus).  
 Permian (Coconino); Arizona.

**PALÆOSAUROPUUS Hay. Type *Sauropus primævus* Lea.**

Hay, O. P. 1902 A, 548.  
 Ami, H. M. 1899 A, 181.  
 Matthew, G. F. 1903 A, 102.  
 1903 C, 106.  
 1903 D, 109.  
 1904 A, 99.

Whiteaves, J. F. 1901 A, 181 (Sauropus).

**Palæosauropus antiquior (Dawson).**

Hay, O. P. 1902 A, 548.  
 Barrell, J. 1915 B, 410 (Sauropus).

Lambe, L. M. 1904 C, 18, 35, 46.  
 Coal Measures; Nova Scotia.

**Palæosauropus primævus (Lea).**

Hay, O. P. 1902 A, 548.  
 Amer. Jour. Sci. 1852 B, 451 (Sauropus).  
 Barrell, J. 1907 A, 400 (Sauropus).  
 1915 B, 410 (Sauropus).  
 Branson, E. B. 1910 A, 353 (Paleosauropus primævus).

- Hickling, G. 1909 A, 30, pl. iv, fig. 31 (Sauropus).  
 Lcoe, R. D. 1882 A, 7 (Sauropus).  
 Lull, R. S. 1917 B, 491.
- Matthew, G. F. 1903 D, 109, 112 (Sauropus).  
 1904 A, 93.  
 Roemer, F. 1856 B, 23 (Sauropus).  
 Coal Measures; Pennsylvania.

**PALAMOPUS E. Hitchcock. Type *P. anomalus* E. Hitchcock.**

- Hay, O. P. 1902 A, 548.  
 Abel, O. 1926 B, 36.  
 Hitchcock, C. H. 1898 A, 402 (Macropterna).  
 Lull, R. S. 1904 A, 532.  
 1915 A, 252.  
 1917 D, 124.  
 Nopcsa, F. 1923 C, 464.  
 1923 H, 145, 146.
- Palamopus anomalus E. Hitchcock.**  
 Hay, O. P. 1902 A, 548.  
 Lull, R. S. 1904 A, 532.  
 Triassic (Newark); Massachusetts.
- Palamopus divaricans (E. Hitchcock).**  
 Hay, O. P. 1902 A, 548.  
 Cushman, J. A. 1907 A, 273 (Macropterna).  
 Lull, R. S. 1904 A, 532.  
 Lyman, B. S. 1894 A, 206 (Macropterna).  
 Triassic (Newark); Massachusetts.
- Palamopus gracilipes (E. Hitchcock).**  
 Hay, O. P. 1902 A, 548.  
 Cushman, J. A. 1907 A, 274 (Macropterna).
- Hitchcock and Grier 1927 A, 195.  
 Lull, R. S. 1904 A, 533.  
 1915 A, 253, fig. 100.  
 1917 D, 124.  
 Lyman, B. S. 1894 A, 206 (Macropterna).  
 Triassic (Newark); Massachusetts.
- Palamopus palmatus (E. Hitchcock).**  
 Hay, O. P. 1902 A, 548 (Palamopus anomalus, part).  
 Lull, R. S. 1915 A, 252, fig. 109.  
 1917 D, 124.  
 Triassic (Newark); Massachusetts.
- Palamopus rogersianus (E. Hitchcock).**  
 Hay, O. P. 1902 A, 548.  
 Lull, R. S. 1904 A, 533.  
 1915 A, 253, fig. 111 (P. rogersi).  
 1917 D, 124 (P. rogersi).  
 Lyman, B. S. 1894 A, 206 (Macropterna vulgaris).  
 Triassic (Newark); Massachusetts, Connecticut.

**PARABAROPUS Gilmore. Type *Megapezia? coloradensis* Lull.**

- Gilmore, C. W. 1927 D, 53.
- Parabaropus coloradensis (Lull).**  
 Lull, R. S. 1918 A, 341, pl. iii, fig. 2; text-fig. 3 (Megapezia?).  
 Abel, O. 1926 B, 213 (This genus?).
- Gilmore, C. W. 1927 D, 54, pl. xvii, fig. 1; text-figs. 27, 28 (Parabaropus); 11, text-fig. 26 (Megapezia?).  
 1928 A, 7, pl. i.  
 1928 C, 8, fig. 8.  
 Schuchert, C. 1918 A, 354.  
 Permian (Hermit); Arizona.

**PLATYPTERNA E. Hitchcock. Type *P. deaniana* E. Hitchcock.**

- Hay, O. P. 1902 A, 549.  
 Abel, O. 1912 F, 272.  
 1926 B, 36.  
 Hitchcock, C. H. 1898 A, 401.  
 Lull, R. S. 1904 A, 515.  
 1915 A, 227.  
 1917 D, 119.  
 Nopcsa, F. 1923 C, 464, fig. 3.  
 1923 H, 145, pl. vi, fig. 7.
- Platypterna concamerata (E. Hitchcock).**  
 Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 516.  
 1915 A, 227, fig. 79.  
 1917 D, 120.  
 Lyman, B. S. 1894 A, 205 (P. varica).  
 Triassic (Newark); Massachusetts.
- Platypterna deaniana E. Hitchcock.**  
 Hay, O. P. 1902 A, 549.  
 Hitchcock and Grier 1927 A, 192 (P. deanii).  
 Lull, R. S. 1904 A, 516.  
 1915 A, 227, fig. 78 (P. deanii).  
 1917 D, 119 (P. deanii).
- Lyman, B. S. 1894 A, 209.  
 Triassic (Newark); Massachusetts, Connecticut.
- Platypterna delicatula (E. Hitchcock).**  
 Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 517.  
 1915 A, 229, fig. 82.  
 1917 D, 120.  
 Lyman, B. S. 1894 A, 209.  
 Triassic (Newark); Connecticut.
- Platypterna digitigrada E. Hitchcock.**  
 Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 516.  
 1915 A, 228, fig. 80.  
 1917 D, 120.  
 Lyman, B. S. 1894 A, 206.  
 Nopcsa, F. 1923 H, 145.  
 Triassic (Newark); Massachusetts.
- Platypterna gracillima E. Hitchcock.**  
 Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 517.  
 Lyman, B. S. 1894 A, 205.  
 Triassic (Newark); Massachusetts.

**Platypterna recta** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 518.  
     1915 A, 230, fig. 88.  
     1917 D, 120.  
 Lyman, B. S. 1894 A, 205.  
     Triassic (Newark); Massachusetts.

**Platypterna tenuis** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 517.  
     1915 A, 229, fig. 81.  
     1917 D, 120.  
 Lyman, B. S. 1894 A, 209.  
     Triassic (Newark); Connecticut.

**PLECTOPTERNA** E. Hitchcock. Type *Plectropus minitans* E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Abel, O. 1912 F, 272 (*Tarsoplectrus*).  
     1926 B, 36.  
 Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 519 (*Tarsoplectrus*; Type  
     *P. angustus*).  
     1915 A, 232.  
     1917 D, 120.  
 Nopcsa, F. 1923 C, 464, fig. 1.  
     1923 H, 145, 146 (*Plectopterna*).

**Plectropterna angusta** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 520 (*Tarsoplectrus*).  
     1915 A, 233, fig. 87.  
     1917 D, 120.  
 Lyman, B. S. 1894 A, 205.  
     Triassic (Newark); Massachusetts.

**Plectropterna elegans** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1904 A, 520 (*Tarsoplectrus*).  
     1915 A, 234, fig. 88.  
     1917 D, 120.

- Lyman, B. S. 1894 A, 209.  
     Triassic (Newark); Connecticut.

**Plectropterna gracilis** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lyman, B. S. 1894 A, 206, 209.  
     Triassic (Newark); Massachusetts, Connecticut.

**Plectropterna lineans** E. Hitchcock.

- Hay, O. P. 1902 A, 549.  
 Lull, R. S. 1915 A, 234, fig. 89.  
     1917 D, 120.  
 Lyman, B. S. 1894 A, 205, 209.  
     Triassic (Newark); Massachusetts, Connecticut.

**Plectropterna minitans** (E. Hitchcock).

- Hay, O. P. 1902 A, 549.  
 Abel, O. 1926 B, 23, fig. 13.  
 Lull, R. S. 1915 A, 232, fig. 86.  
     1917 D, 120.  
 Lyman, B. S. 1894 A, 205, 209, 211.  
     Triassic (Newark); Massachusetts, Connecticut.

**Plesiornis** E. Hitchcock. Type *Plesiornis pilulatus* E. Hitchcock.

- Hay, O. P. 1902 A, 550.  
 Abel, O. 1912 F, 272.  
 Hitchcock, C. H. 1898 A, 401.  
 Lull, R. S. 1904 A, 521.  
     1915 A, 236.  
     1917 D, 121.

**Plesiornis giganteus** C. H. Hitchcock.

- Hay, O. P. 1902 A, 550.  
 Lull, R. S. 1904 A, 522.  
 Lyman, B. S. 1894 A, 209.  
     Triassic (Newark); Connecticut.

**Plesiornis mirabilis** E. Hitchcock.

- Hay, O. P. 1902 A, 550.

- Lull, R. S. 1904 A, 522.  
 Lyman, B. S. 1894 A, 205, 206.  
     Triassic (Newark); Massachusetts.

**Plesiornis pilulatus** E. Hitchcock.

- Hay, O. P. 1902 A, 550.  
 Lull, R. S. 1904 A, 521.  
     1915 A, 236, fig. 91.  
     1917 D, 121.  
 Lyman, B. S. 1894 A, 206.  
     Triassic (Newark); Massachusetts.  
**Plesiornis** sp. indet.  
 Hitchcock and Grier 1927 A, 197.  
     Triassic (Newark); Connecticut.

**POLEMARCHUS** E. Hitchcock. Type *Sauroidichnites polemarchius* E. Hitchcock = *P. gigas* E. Hitchcock.

- Hay, O. P. 1902 A, 550.  
 Abel, O. 1912 F, 272.  
     1926 B, 36.  
 Lull, R. S. 1904 A, 520.  
     1915 A, 235.  
     1917 D, 121.  
 Nopcsa, F. 1923 C, 464, fig. 3.

**Polemarchus gigas** E. Hitchcock.

- Hay, O. P. 1902 A, 550.

- Hitchcock, C. H. 1898 A, 402.  
 Lull, R. S. 1904 A, 520.  
     1915 A, 235, fig. 90 (*Sauroidichnites*).  
     1917 D, 121 (*P. polemarchius*).  
 Lyman, B. S. 1894 A, 211, 214.  
     Triassic (Newark); Massachusetts.

**Polemarchus** ? sp. indet.

- Mudge, B. F. 1874 A, 72.  
     Coal Measures; Kansas.

PSEUDOBADYPUS Matthew. Type *Sauropus unguifer* Dawson.

Matthew, G. F. 1903 C, 109.  
1903 D, 112.  
1904 A, 77.

**Pseudobradypus unguifer** (Dawson).

Hay, O. P. 1902 A, 548 (Palæosauropus).

Matthew, G. F. 1903 C, 109 (Sauropus. Made type of *Pseudobradypus*).  
1903 D, 110 (Sauropus).  
1904 A, 80 (Sauropus).  
Woodward, A. S. 1904 A, 145 (Sauropus).  
Pennsylvanian; Nova Scotia.

SAUROPLUS E. Hitchcock. Type *S. barratii* E. Hitchcock.

Hay, O. P. 1902 A, 550.  
Abel, O. 1926 B, 36.  
Heilmann, G. 1926 A, 207.  
Hitchcock, C. H. 1898 A, 401 (Chimærichnus).  
Lull, R. S. 1915 A, 216.  
1917 D, 118.  
Nopcsa, F. 1923 H, 145, 146.

**Sauropus barratii** E. Hitchcock.

Hay, O. P. 1902 A, 550.

Heilmann, G. 1926 A, 159, figs. 113, 116.  
Lull, R. S. 1915 A, 217, figs. 69-71.  
1917 D, 118 (S. barratii).  
Lyman, B. S. 1894 A, 206, 209, 210 (Chimæra).  
Triassic (Newark); Massachusetts.

**Sauropus ingens** (C. H. Hitchcock).

Hay, O. P. 1902 A, 550.  
Lyman, B. S. 1894 A, 214 (Chimærichnus).  
Triassic (Newark); New Jersey.

SELENICHNUS E. Hitchcock. Type *S. falcatus* E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Abel, O. 1912 F, 271.  
1926 B, 22, fig. 12.  
Lull, R. S. 1904 A, 498.  
1915 A, 206.  
1917 D, 117.

**Selenichnus brevisculus** E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Lull, R. S. 1904 A, 499.  
1915 A, 207, fig. 60.

Lull, R. S. 1917 D, 117.  
Triassic (Newark); Massachusetts.

**Selenichnus falcatus** E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Hitchcock, C. H. 1898 A, 402.  
Lull, R. S. 1904 A, 498.  
1915 A, 206, fig. 59.  
1917 D, 117.  
Triassic (Newark); Massachusetts.

SHEPARDIA E. Hitchcock. Type *S. palmipes* E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Abel, O. 1926 B, 37.  
Lull, R. S. 1904 A, 538.  
1915 A, 259.  
1917 D, 125.  
Nopcsa, F. 1923 H, 142 (Sheppardia).

**Shepardia palmipes** E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 538.  
1915 A, 260, fig. 120.  
1917 D, 126.  
Lyman, B. S. 1894 A, 206.  
Triassic (Newark); Massachusetts.

**Shepardia** sp. indet.

Thorpe, M. R. 1928 A, 39.  
Triassic (Newark); Connecticut.

SILLIMANIUS E. Hitchcock. Type *S. tetradactylus* E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Abel, O. 1912 F, 272.  
Hitchcock, C. H. 1898 A, 401 (Ornithopus).  
Lull, R. S. 1904 A, 522.  
1915 A, 236.  
1917 D, 121.

Reichenbach, L. 1852 A, xvi (Pelarganax. Type *Ornithichnites tetradactylus*).

**Sillimanus gracilior** E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Hitchcock and Grier 1927 A, 194.  
Lull, R. S. 1904 A, 523.  
1915 A, 237, fig. 93.

Lull, R. S. 1917 D, 121.  
Lyman, B. S. 1894 A, 209 (Ornithopus).  
Triassic (Newark); Connecticut, Massachusetts.

**Sillimanus tetradactylus** E. Hitchcock.

Hay, O. P. 1902 A, 551.  
Lull, R. S. 1904 A, 522.  
1915 A, 237, fig. 92.  
1917 D, 121.  
Lyman, B. S. 1894 A, 209, 211 (Ornithopus gallinaceus).  
Triassic (Newark); Massachusetts, Connecticut.

STENICHNUS Gilmore. Type *S. yakiensis* Gilmore.

Gilmore, C. W. 1927 D, 65.

**Stenichnus yakiensis** Gilmore.

Gilmore, C. W. 1927 D, 11, 66, pl. xix, fig. 2;  
text-fig. 34  
Permian (Supai); Arizona.

STENONYX Lull. Type *Leptonyx lateralis* E. Hitchcock.

- Lull, R. S. 1904 A, 493 (To replace *Leptonyx* Hitchcock, preoccupied).  
 Hay, O. P. 1902 A, 547 (*Leptonyx*).  
 Abel, O. 1912 F, 271.  
 Lull, R. S. 1915 A, 205.  
 1917 D, 117.

**Stenonyx lateralis** (E. Hitchcock).

- Hay, O. P. 1902 A, 547 (*Leptonyx*).  
 Hitchcock, C. H. 1893 A, 401 (*Leptonyx*).  
 Hitchcock and Grier 1927 A, 194.  
 Lull, R. S. 1904 A, 493.  
 1915 A, 205, fig. 53.  
 1917 D, 117.  
 Lyman, B. S. 1894 A, 205 (*Leptonyx*).  
 Triassic (Newark); Massachusetts.

STEROPOIDES E. Hitchcock. Type *E. elegans* E. Hitchcock. Type chosen by Lull.

- Hay, O. P. 1902 A, 551.  
 Abel, O. 1912 F, 272.  
 Hitchcock, C. H. 1898 A, 401 (*Tridentipes*).  
 Lull, R. S. 1904 A, 523.  
 1915 A, 238.  
 1917 D, 121.  
 Reichenbach, L. 1852 A, xvi (*Pelargides*; type *Ornithichnites danæ* Hitchcock).

**Steropoides elegans** E. Hitchcock.

- Hay, O. P. 1902 A, 551.  
 Hitchcock and Grier 1927 A, 194 (*S. diversus*).  
 Lull, R. S. 1904 A, 523.  
 1915 A, 238, pl. i; text-fig. 94 (*S. diversus*).  
 1917 D, 121 (*S. diversus*).  
 Lyman, B. S. 1894 A, 210, 211 (*Tridentipes*).  
 Triassic (Newark); Massachusetts.

**Steropoides infelix** Hay.

- Hay, O. P. 1902 A, 552.  
 Lull, R. S. 1904 A, 524.  
 1915 A, 240.  
 1917 D, 121.  
 Triassic (Newark); Massachusetts, Connecticut.

**Steropoides ingens** E. Hitchcock.

- Hay, O. P. 1902 A, 552.  
 Lull, R. S. 1904 A, 524.  
 1915 A, 239, fig. 95.  
 1917 D, 121.  
 Lyman, B. S. 1894 A, 205, 210, 211, 213 (*Tridentipes*).  
 Reichenbach, L. 1853 A, xvi (*Pelargides danæ*).  
 Triassic (Newark); Massachusetts, New Jersey.

**Steropoides loripes** (E. Hitchcock).

- Hay, O. P. 1902 A, 552.  
 Lull, R. S. 1904 A, 525.  
 1915 A, 240, fig. 97 (*S. divaricatus*).  
 1917 D, 121 (*S. divaricatus*).  
 Lyman, B. S. 1894 A, 209, 210, 211 (*Tridentipes insignis*).  
 Triassic (Newark); Massachusetts.

**Steropoides uncus** (E. Hitchcock).

- Hay, O. P. 1902 A, 552.  
 Lull, R. S. 1904 A, 525.  
 1915 A, 242, fig. 98.  
 1917 D, 122.  
 Lyman, B. S. 1894 A, 206 (*Tridentipes*).  
 Triassic (Newark); Massachusetts.

SUSTENODACTYLUS Lull. Type *Stenodactylus curvatus* E. Hitchcock.

- Lull, R. S. 1904 A, 537.  
 Hay, O. P. 1902 A, 551 (*Stenodactylus*, preoccupied).  
 Lull, R. S. 1915 A, 258.  
 1917 D, 125.

**Sustenodactylus curvatus** (E. Hitchcock).

- Hay, O. P. 1902 A, 551 (*Stenodactylus*).  
 Hitchcock, C. H. 1898 A, 402 (*Stenodactylus*).  
 Lull, R. S. 1904 A, 537.  
 1915 A, 258, fig. 118.  
 1917 D, 125.  
 Lyman, B. S. 1894 A, 206 (*Stenodactylus*).  
 Triassic (Newark); Massachusetts.

TARSODACTYLUS E. Hitchcock. Type *T. caudatus* E. Hitchcock.

- Hay, O. P. 1902 A, 552.  
 Hitchcock, C. H. 1898 A, 401.  
 Lull, R. S. 1904 A, 526.  
 1915 A, 243.  
 1917 D, 122.  
 Nopsca, F. 1923 H, 144.

**Tarsodactylus caudatus** E. Hitchcock.

- Hay, O. P. 1902 A, 552.  
 Lull, R. S. 1904 A, 527.  
 1915 A, 244, fig. 101.

- Lull, R. S. 1917 D, 122.  
 Lyman, B. S. 1894 A, 206.  
 Triassic (Newark); Massachusetts.

**Tarsodactylus expansus** C. H. Hitchcock.

- Hay, O. P. 1902 A, 552.  
 Hitchcock and Grier 1927 A, 195.  
 Lull, R. S. 1904 A, 527.  
 1915 A, 244.  
 1917 D, 122.  
 Triassic (Newark); Massachusetts.

THENAROPUS King. Type *T. leptodactylus* King.

Hay, O. P. 1902 A, 552.

Matthew, G. F. 1903 B, 103 (Theranopus. This genus?).

1903 D, 114.

1904 A, 99.

**Thenaropus leptodactylus** King.

Hay, O. P. 1902 A, 552.

Coal Measures; Pennsylvania.

**Thenaropus macnaughtoni** (Matthew).

Matthew, G. F. 1903 B, 103, pl. u, fig. 1 (Theranopus. This genus?).

Lambe, L. M. 1904 C, 38, 46 (This genus?).

Matthew, G. F. 1903 D, 112 (This genus?).

Carboniferous; Nova Scotia.

**Thenaropus ovoidactylus** King.

Hay, O. P. 1902 A, 552.

Coal Measures; Pennsylvania.

**Thenaropus pachydactylus** King.

Hay, O. P. 1902 A, 552.

Coal Measures; Pennsylvania.

**Thenaropus sphærodactylus** King.

Hay, O. P. 1902 A, 552.

Matthew, G. F. 1903 D, 115 (Sphæropezium thærodactylum).

Coal Measures; Pennsylvania.

THINOPUS Marsh. Type *T. antiquus* Marsh.

Hay, O. P. 1902 A, 552.

Osborn, H. F. 1917 B, 175.

**Thinopus antiquus** Marsh.

Hay, O. P. 1902 A, 552.

Abel, O. 1914 C, 365.

Barrell, J. 1915 B, 409.

Boulenger, G. A. 1902 F, 382 (Tinopus).

Dames, W. 1898 D, 149.

Gregory, W. K. 1915 D, 368.

1922 A, 506, 509.

Lull, R. S. 1917 B, 488, 490, fig. 142.

1918 C, 123, pl. iii.

Moodie, R. L. 1913 B, 32.

1915 F, 190.

1915 H, 639.

1916 A, 37, pl. xviii, fig. 4; text-fig. 12.

Morton, D. J. 1926 A, 409, 6 figs.

Osborn, H. F. 1916 E, 610.

Zittel and Broili 1911 A, 173.

1923 A, 197.

Devonian; Pennsylvania.

TOXICHNUS E. Hitchcock. Type *T. inæqualis* E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 541.

1915 A, 262.

1917 D, 126.

A genus of doubtful validity.

**Toxichnus inæqualis** E. Hitchcock.

Hay, O. P. 1902 A, 553.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 542.

1915 A, 263, fig. 124.

1917 D, 126.

Triassic (Newark); Massachusetts.

TRIENOPUS E. Hitchcock. Type *T. baileyanus* E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 539.

1915 A, 261.

1917 D, 126.

**Trienopus baileyanus** E. Hitchcock.

Hay, O. P. 1902 A, 553.

Hitchcock, C. H. 1898 A, 402 (*T. leptodactylus*).Hitchcock and Grier 1927 A, 195 (*T. baileyi*).

Lull, R. S. 1904 A, 539.

1915 A, 262, fig. 123 (*T. baileyi*).1917 D, 126 (*T. baileyi*).Lyman, B. S. 1894 A, 210 (*Brontozoum leptodactylus*).

Triassic (Newark); Connecticut.

**Trienopus** sp. indet.

Thorpe, M. R. 1928 A, 39.

Triassic (Newark); Connecticut.

TRIDENTICHNUS Gilmore. Type *T. supaiensis* Gilmore.

Gilmore, C. W. 1927 D, 70.

**Tridentichnus supaiensis** Gilmore.

Gilmore, C. W. 1927 D, 11, 70, pl. xxi; text-fig. 37.

Permian (Supai); Arizona.

**Tridentichnus** sp. indet.

Gilmore, C. W. 1927 D, 72, pl. ii, fig. 2 (This genus?). Permian (Supai); Arizona.

TRIHAMUS E. Hitchcock. Type *T. elegans* E. Hitchcock.

Hay, O. P. 1902 A, 553.

Hitchcock, C. H. 1898 A, 401.

Lull, R. S. 1904 A, 542.

A genus of doubtful validity.

**Trihamus elegans** E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 542.

Lyman, B. S. 1894 A, 205, 209.

Triassic (Newark); Massachusetts.

**Trihamus magnus** C. H. Hitchcock.

Hay, O. P. 1902 A, 553.

**Typopus** E. Hitchcock. Type *T. abnormis* E. Hitchcock.

Hay, O. P. 1902 A, 553.

Hitchcock, C. H. 1898 A, 402.

Lull, R. S. 1904 A, 542.

A genus of doubtful validity.

**Typopus abnormis** E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 543.

Lull, R. S. 1904 A, 542.

Lyman, B. S. 1894 A, 210.

Triassic (Newark); Connecticut.

Lyman, B. S. 1894 A, 205, 210.

Triassic (Newark); Massachusetts, Connecticut?

**Typopus gracilis** E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 543.

Lyman, B. S. 1894 A, 209.

Triassic (Newark); Connecticut.

**Xiphopeza** E. Hitchcock. Type *X. triplex* E. Hitchcock.

Hay, O. P. 1902 A, 553.

Lull, R. S. 1904 A, 526.

1915 A, 243.

**Xiphopeza triplex** Hitchcock.

Hay, O. P. 1902 A, 553.

Hitchcock, C. H. 1904 A, 526.

1915 A, 243, fig. 100.

Lyman, B. S. 1894 A, 205.

Triassic (Newark); Massachusetts.

## Class REPTILIA Laurenti.

*Laurenti, J. N.* 1768, Syn. Rept., 19.

Hay, O. P. 1902 A, 425.

Abel, O. 1909 F, 454 ("reptilien").

1910 B (185), ("reptilien").

1912 E, 223 ("reptilien").

1912 F, 292, 300, 356, 697.

1914 C, 341 ("reptilien").

1919 A, 333.

1920 A, 355.

1921 A, 143, 252, 265 ("reptilien").

Adams, L. A. 1919 A, 88, 138.

Adloff, P. 1903 A, 359 ("reptilien").

1904 B, 54 ("reptiles").

1907 A, 530 ("reptilien").

1910 B, 241 ("reptiles").

1913 B, 191 ("reptilien").

1913 C, 22 ("reptilien").

1915 A, 436 ("reptilien").

1918 A, 129 ("reptilien").

Agar, W. E. 1909 A, 379.

Agassiz, L. 1836 B, 24 ("reptiles").

1844 C, 253 ("reptiles").

1845 B, 299 ("reptiles").

Ahrens, H. 1912 B, 46 ("reptilien").

Aichel, O. 1917 A, 109 ("reptilien").

1919 A, 244 ("reptilien").

Alexander, G. 1904 A ("reptilien").

Alhs, E. P. 1918 A, 244.

1919 B, 80.

1919 D, 209.

Altmann, F. 1925 A, 87, 94 ("reptilien").

Anderson, R. J. 1902 C, 785 ("reptiles").

Anonymous 1912 A, 519.

Anthony, R. 1912 A ("reptiles").

1913 A, 243 ("reptiles").

Arlt, T. 1907 C, 677 ("reptilien").

1907 D, 678.

1907 E, 205 ("reptilien").

1908 A, 569, 585.

1909 B, 354 ("reptilien").

Arthaber, G. 1910 A, 552 ("reptilien").

Baird, S. F. 1876 A, 357 ("reptiles").

Baraldi, G. 1877 A, *passim* ("reptili").

Bardeleben, K. 1889 A, 107 ("reptilien").

1896 A, 114 ("reptilien").

1901 A ("reptilien").

1904 A, 109 ("reptilien").

1905 A, 16 ("reptilien").

1905 C, 156 ("reptilien").

1906 A, 140 ("reptilien").

1907 A, 35 ("reptilien").

Bardeleben, K. S. 1913 A, 69 ("reptiles")

Barrell, J. 1907 A, 474 ("reptiles").

Batelli, A. 1880 A, 346 ("reptilien").

Baur, G. 1886 O, 174.

1887 H, 47 ("sauropsiden").

1890 F, 156.

1894 B, 354.

1896 E, 569 ("reptilien").

1897 D, 47.

1897 E.

Beecker, A. 1903 A, 577 ("reptilien").

Beede, J. W. 1922 A, 620.

Beer, G. R. 1926 A, 312.

Bender, O. 1907 A, 40 ("reptilien").

1910 A, 122 ("reptilien").

1912 A, 3 ("reptilien").

Beyer, H. 1907 A, 265, 281 ("reptilien").

1908 B ("reptilien").

Bittner, F. 1912 A, 1 ("reptilien").

Blainville, H. M. D. 1835 A, 233.

1877 A, 107 ("reptiles").

Blanchard, E. 1861 A, 375 ("reptiles").

Blendinger, W. 1904 A, 453 ("sauropsiden").

Bluntschli, H. 1912 B, 385 ("reptilien").

Boas, J. E. V. 1914 B, 543, 555 ("reptilien").

Böker, H. 1927 A, 23, 52, fig. 15 ("urreptilien").

Bogoljubsky, S. 1914 A, 659.

Bolk, L. 1912 A, 58 ("reptilien").

1912 B, 950 ("reptiles").

1913 A ("reptilien").

1914 A ("reptilien").



- Bolk, L. 1915 A, 103 ("reptilien").  
 1916 A, 715.  
 1921 A, 346 ("reptilien").  
 1921 C, 219 ("reptiles").  
 1922 A, 107 ("reptiles").  
 1922 B, 55.  
 1923 B, 376.
- Bonaparte, C. L. 1832 A, 312.  
 1833 B, 1183.
- Boulenger, G. A. 1891 D, 113.  
 1917 C, 456 ("reptiles").  
 1917 D, 1045 ("reptiles").
- Branca, W. 1915 A, 6 ("reptilien").
- Brandt, J. F. 1865 A, 2, 18.
- Brauer, A. 1903 A, 83 ("saurier").  
 1914 A ("reptilien").
- Brauns, D. 1890 A.
- Braus, H. 1906 A ("reptilien").
- Brouh, F. 1904 D, 577.  
 1908 A, 6 ("reptilien").
- Bronn, H. G. 1838 A, 1333.  
 1849 A, 780, seq.
- Broom, R. 1890 A, 410.  
 1899 A, 749 ("reptiles").  
 1902 B, 163 ("reptile").  
 1903 I, 545.  
 1904 B, 94 ("reptiles").  
 1905 B, 213 ("reptiles").  
 1905 C, 269.  
 1905 D, 259.  
 1905 F, 40 ("reptiles").  
 1906 F, 373 ("reptiles").  
 1908 A, 1047 ("reptiles").  
 1908 E, 114 ("reptiles").  
 1909 B, 162.  
 1910 C, 473 ("reptiles").  
 1911 A, 919 ("reptiles").  
 1912 A, 625.  
 1912 B, 419 ("reptiles").  
 1921 A, 143 ("reptiles").  
 1922 A, 17.  
 1922 B, 455.  
 1924 B, 39.  
 1926 A, 257 ("reptiles").
- Brown, A. E. 1904 A, 464.
- Bruni, A. C. 1910 A, 750 ("reptilien").
- Burckhardt, R. 1903 A, 78 ("reptilien").  
 1906 A, 159 ("sauropsiden").
- Carter, J. T. 1905 A, 136.
- Cartier, O. 1874 A, 192 ("reptilien").  
 1875 A, 74 ("reptilien").
- Carus and Engelmann 1861 A, 1052-1065, 1673, 1703.
- Case, E. C. 1905 E, 180 ("reptiles").  
 1912 A, 200.  
 1915 A, 97.  
 1923 A, 517.  
 1924 B, 6.
- Chaine, J. 1918 A, 734 ("reptiles").
- Cleland, J. 1863 A, 118 ("reptiles").  
 1863 B, 303 ("reptiles").  
 1887 A, 391.
- Cope, E. D. 1885 BB, 67.  
 1885 EE, 614.  
 1891 N, 7, 33 (Monocondylia, Reptilia).
- Corning, H. K. 1891 A, 611 ("reptilien").
- Cunningham, J. T. 1897 A, 486 (Sauropsida).
- Cutler, I. E. 1924 A, 144 ("reptiles").
- Cuvier, G. 1805 A (Amphibia).  
 1812 A, 123 ("reptiles").  
 1815 A, 103 ("reptiles").  
 1825 A, v, 2, 1-333, pls. i-xxiii.
- Dablow, A. 1926 A, 95 ("sauropsiden").
- Dana, J. D. 1863 A, 1 ("reptiles").  
 1863 B, 315 ("reptiles").  
 1863 C, 334 ("reptiles").  
 1863 D, 130 ("reptiles").
- Day, H. 1915 A, 427.
- Delsman, H. C. 1913 A, 659 ("reptilien").
- Dendy, A. 1907 A, 298.
- Deninger, K. 1914 A, 186-214 ("reptilien").  
 1915 A, 183-186 ("reptilien").
- Dependorf, T. 1907 A, 542 ("reptilien").
- Diener, C. 1909 A, 32 ("reptilien").
- Diethelm, M. 1907 A, 3 ("reptilien").
- Döderlein, L. 1902 A, 399 ("reptilien").
- Dollo, L. 1883 G, 582.  
 1884 E, 66 (Sauropsida, in part).  
 1889 E, 146 ("reptiles").  
 1893 D, 2 ("reptiles").  
 1893 F, 165 ("reptiles").
- Dombrowski, B. A. 1925 A, 69 ("reptilien").
- Drüner, L. 1904 A, 266 ("reptilien").
- DuToit, P. J. 1911 A, 417 ("reptilien").  
 1913 A, 230 ("reptilien").
- Eastman, C. R. 1913 B, 678 ("reptiles").  
 1914 B, 688 ("reptiles").  
 1915 C, 658.  
 1916 A, 655 ("reptiles").  
 1917 B, 655 ("reptiles").
- Edgeworth, F. H. 1907 A, 530, 571 (Sauropsida).
- Eggeling, H. 1906 A, 102 ("reptilien").
- Eimer, G. H. T. 1901 A, 261 ("reptilien").
- Eisler, P. 1895 A ("reptilien").
- Emery, C. 1897 D, 601 ("reptilien").
- Fernandez, M. 1921 A, 506 ("reptilien").
- Filhol, H. 1889 A, 224 ("reptiles").
- Fischer, E. 1903 A, 387 ("reptilien").  
 1905 B, 400 ("reptiles").
- Fleishmann, A. 1910 A, 681.
- Foot, J. S. 1913 A ("reptiles").  
 1916 A, 19 ("reptiles").
- Forster, A. 1905 A, 89-138.
- Fraas, E. 1905 B, 347 ("reptilien").  
 1911 B, 28 ("reptilien").
- Frassetto, F. 1915 A ("reptilien").
- Frech, F. 1906 A, 491 ("reptilien").
- Freund, L. 1902 A, 66.
- Forriep, A. 1905 A, 156 ("reptiles").  
 1905 B, 111 (Lacerta, Anguis).
- Fuchs, H. 1906 A, 8 ("reptilien").  
 1907 A, 149 ("reptilien").  
 1907 C, 8, 19 ("reptilien").  
 1908 A, 352 ("sauropsiden").  
 1908 C, 154 ("reptilien").  
 1909 C, 98 ("reptilien").  
 1909 D, 61, 66 ("reptilien").  
 1910 A, 35 ("reptilien").  
 1910 C, 476 ("reptilien").  
 1911 A, 34 ("reptilien").  
 1911 B ("reptilien").  
 1912 B, 82 ("reptilien").  
 1914 A, 28 ("reptilien").  
 1920 A, 357 ("reptilien").

- Fuchs, H. 1926 B, 2 ("reptilien").  
 Furbringer, M. 1900 A.  
 1902 B, 603 ("reptilien").  
 1904 A ("reptilien").  
 Gadow, H. 1896 A, 20.  
 1901 A, 396.  
 1901 B, 277.  
 1902 B, 347.  
 1912 B, 216 ("reptiles").  
 1914 A, 508 ("reptiles").  
 Garbowski, T. 1895 A, 445 ("reptilien").  
 Gaskell, W. H. 1898 A, 553.  
 Gaupp, E. 1895 A, 57, seq. ("reptilien").  
 1898 B, 348 ("reptilien").  
 1899 A, 1004 ("reptilien").  
 1900 A, 568 ("reptilien").  
 1901 B, 974 ("reptilien").  
 1902 A, 178, 215 ("reptilien").  
 1905 A, 277 ("reptilien").  
 1905 C, 128 ("reptilien").  
 1905 D, 1008 ("reptilien").  
 1905 E, 159, 160 ("reptilien").  
 1906 B ("reptilien").  
 1908 A, 132 ("reptilien").  
 1908 C ("reptilien").  
 1910 A, 535 ("reptilien").  
 1910 B, 355 ("reptilien").  
 1910 C, 318, 403 ("reptilien").  
 1910 D, 86 ("reptilien").  
 1911 B, 98 ("reptilien").  
 1911 D, 620 ("reptilien").  
 1912 A, 563 ("reptilien").  
 1912 B, 218 ("reptilien").  
 1913 A ("reptilien").  
 Gegenbaur, C. 1862 B, pls.  
 1863 A, 465 ("reptilien").  
 1866 A, 122 ("reptilien").  
 1867 A, 57 ("reptilien").  
 1867 B, 369, 395 ("reptilien").  
 1870 C, 397 ("reptilien").  
 1871 A, 157 ("reptilien").  
 1880 A, 586 ("reptilien").  
 Gelderen, C. 1922 A, 221 ("reptiles").  
 1923 A, 15 ("reptiles").  
 Geoffroy St. Hilaire, E. F. 1817 A, 126 ("reptiles").  
 1817 B, 186 ("reptiles").  
 1825 B, 124 ("reptiles").  
 1832 A, 349 ("reptiles").  
 Gervais, P. 1852 A, 241 ("reptiles").  
 1853 B, 35 ("reptiles").  
 1859 A, 129 ("reptiles").  
 Gessner, I. 1921 A, 271 ("reptilien").  
 Giebel, C. G. 1855 A, 86 (Sauria).  
 Gill, T. 1873 E, 435.  
 1898 A, 696 ("reptiles").  
 1898 B, 697 ("reptiles").  
 1910 B, 959.  
 Goodrich, E. S. 1916 A, 261.  
 Goodsir, J. 1857 A ("reptiles").  
 1857 B ("reptiles").  
 Gray, J. E. 1825 A, 194.  
 1837 C, 131.  
 Greene, J. R. 1861 A, 218, 225.  
 Gregory, W. K. 1911 C, 404 ("reptiles").  
 1913 B, 241 ("reptiles").  
 1913 E, 13 ("reptiles").  
 Gregory, W. K. 1916 D, 105 ("reptiles").  
 1917 C, 974 ("reptiles").  
 1922 A, 545.  
 1926 B, 425 ("reptiles").  
 1927 C, 170 ("reptiles").  
 1927 G, 265 ("reptiles").  
 Gregory and Adams 1915 A, 763.  
 Gregory and Camp 1913 A.  
 Gregory and Noble 1924 A, 436 ("reptiles").  
 Haeckel, E. 1868 A, 436, 455.  
 1873 A, 331 ("reptilien").  
 Haller, G. 1924 A, 305 ("reptilien").  
 Hanson, F. B. 1919 B, 70.  
 1920 A, 310.  
 Hase, A. 1913 A ("reptilien").  
 Hasse and Schwarck 1870 A, 40 ("reptilien").  
 Haughton, S. H. 1920 A.  
 Hay, O. P. 1910 C, 3.  
 Hayek, H. 1924 A, 137, 154 ("reptilien").  
 Heilprin, A. 1887 A, 429.  
 1901 A, 21473 ("reptiles").  
 Hertwig, O. 1892 A.  
 Hertz, M. 1925 A ("reptilien").  
 Hilzheimer, M. 1913 A, 473, 512 ("reptilien").  
 Hoernes, R. 1856 A, 652.  
 1912 A, 660 ("reptilien").  
 Hoeven, J. v. d. 1866 A, 363 (Pholidota).  
 Hollard, H. 1864 C, 360 ("reptiles").  
 Hommes, J. H. 1924 A, 39 ("reptiles").  
 Howes, G. B. 1891 A, 153 ("reptiles").  
 1893 C, 587.  
 1894 A, 77.  
 1902 A, 524 ("reptiles").  
 Howes and Swinnerton 1901 A.  
 Hubrecht, A. A. W. 1897 A, 29.  
 1908 A, 153.  
 Huene, F. 1902 A ("reptilien").  
 1906 C, 336 ("reptilien").  
 1907 A, 152-154 ("reptilien").  
 1908 F, 401 ("reptilien").  
 1908 H, 157-175 ("reptilien").  
 1910 F, 148-163 ("sauropsiden").  
 1911 G, 147-161 ("sauropsiden").  
 1912 E, 472 ("reptilien").  
 1912 F, 522 ("reptilien").  
 1925 D, 229 ("reptilien").  
 1926 A, 262 ("reptilien").  
 1927 E, 819 ("reptilien").  
 Huxley, T. H. 1855 A, 82.  
 1859 D, 401, 447.  
 1862 A, xlviii.  
 1863 E, 443.  
 1863 F, 475.  
 1867 C, 240.  
 1868 D, 303 ("reptiles").  
 1869 J, 91 ("reptiles").  
 1869 K, 146.  
 1870 F, 528.  
 1870 G, 481.  
 1870 H, 492.  
 1875 E, 70.  
 1881 A, 454 ("reptiles").  
 Ihering, H. 1880 A, 307 ("reptilien").  
 Iwanzoff, N. 1894 A, 578 ("reptilien").  
 Jaeger, J. F. 1842 A, 441 ("reptilien").  
 Jaekel, O. 1901 B, 53 ("reptilien").  
 1902 C, 610 ("reptilien").

- Jaekel, O. 1902 D, 127 ("reptilien").  
 1902 E, 1115 ("reptilien").  
 1904 A, 30 ("reptilien").  
 1905 B, 60 ("reptilien").  
 1905 C, 134 ("reptilien").  
 1906 A, 28 ("reptilien").  
 1906 D, 188.  
 1908 A, 140 ("reptilien").  
 1909 A, 193, 211.  
 1909 B, 604.  
 1910 C, 324 ("reptilien").  
 1910 D, 123.  
 1911 A, 131.  
 1912 A, 610 ("reptilien").  
 1913 A, 88 ("reptilien").  
 1913 B, 194 ("reptilien").  
 Johnson, A. 1883 A, 404 ("reptiles").  
 Jordan, D. S. 1898 A, 176.  
 1922 C, 177 ("reptiles").  
 Juhn, M. 1923 A, 70 ("reptilien").  
 Julien, A. 1894 A, 174 ("reptiles").  
 Kampfen, P. N. van 1922 A, 57 ("reptilien").  
 Kehrer, F. A. 1896 A, 347 ("reptilien").  
 Kerth, A. 1911 A, 294 ("reptilia").  
 Kerbert, C. 1876 A, 205 ("reptilien").  
 Kerr, J. G. 1923 A, 114.  
 Kesteven, H. L. 1916 A, 303.  
 1918 A, 449, 450 ("reptiles").  
 Keyes, C. A. 1922 A, pl. iii.  
 Kingsley, J. S. 1900 A, 248.  
 1900 B, 187 ("reptiles").  
 1901 A, 194 ("reptiles").  
 1905 A, 59.  
 1912 A, 185 ("reptiles").  
 1912 B, 87 ("reptiles").  
 1925 A, 14, 42, 54, 55, 136, 248, 263, 280.  
 Kjellberg, K. 1904 A, 159 ("sauropsiden," in part).  
 Klaatsch, A. 1893 B, 651 ("sauropsiden," in part).  
 1913 A, 162 ("reptilien").  
 Köstlin, O. 1844 A, 224 ("reptilien").  
 Koken, E. 1893 B, 645 ("reptilien").  
 1898 B, 142.  
 1901 B, 221 ("reptilien").  
 Kravetz, L. P. 1906 A, 6 ("reptilien").  
 Laaser, P. 1903 A, 571 ("reptilien").  
 Laloy, L. 1907 A, 584 ("reptiles").  
 Langer, R. 1913 A, 702 ("reptiles").  
 Lavocat, A. 1883 A, 1316 ("reptiles").  
 1884 A, 1126 ("reptiles").  
 1885 A, 28, 34 ("reptiles").  
 Lebedinsky, N. G. 1913 A, 767 ("reptilien").  
 Leche, W. 1887 A ("reptilien").  
 1915 B, 527 ("reptilien").  
 LeDamany, P. 1903 A, 273 ("reptiles").  
 1903 B, 275 ("reptiles").  
 1903 D, 353 ("reptiles").  
 1903 G, 127 ("reptiles").  
 1906 A, 58 ("reptiles").  
 1906 B, 155 ("reptiles").  
 Ledouble, A. F. 1903 A, 645 ("reptiles").  
 1906 A, 589 ("reptiles").  
 Lemoine, V. 1889 A, 233 ("reptiles").  
 Leunis and Ludwig 1883 A, 519.  
 Leydig, F. 1873 B, 32 ("reptilien").  
 1890 A, 441, 453 ("reptilien").  
 Lindsay, B. 1885 A, 684 ("reptiles").  
 Lobley, J. L. 1908 A, 198.  
 Lorenz, L. E. F. 1807 A.  
 Lubosch, W. 1907 A, 614 ("reptilien").  
 1908 A, 203 ("reptilien").  
 1911 A, 325 ("reptilien").  
 1911 B, 748 ("reptilien").  
 1926 A, 103 ("reptilien").  
 Lull, R. S. 1917 B, 308, 322, 337, 494.  
 1919 A, 223 ("reptiles").  
 Lydekker, E. R. 1901 A, 646 ("reptiles").  
 1903 D, 75.  
 1912 C.  
 McMurrich, J. P. 1912 A, 168.  
 Major, C. J. F. 1901 A, 150.  
 Mantell, G. A. 1844 A, 686 ("reptiles").  
 Marsh, O. C. 1899 C, 71 ("reptiles").  
 Martins, C. 1857 A ("reptiles").  
 1872 A, 307 ("reptiles").  
 Matthes, E. 1921 C ("reptilien").  
 Matthew, W. D. 1915 A, 181, 185, 274.  
 1916 C, 519.  
 1916 H, 13 ("reptiles").  
 1923 C, 403.  
 Mead, C. S. 1904 A, 53 ("reptiles").  
 Meckel, J. F. 1825 A ("amphibien").  
 Meek, A. 1911 A, 375.  
 Meunier, S. 1903 A, 774 ("reptiles").  
 Meyer, H. 1845 C, 280 (Saurin).  
 Miner, R. W. 1925 A, 148 ("reptiles").  
 Mivart and Clarke 1879 A, 530 ("reptiles").  
 Mollier, S. 1895 B, 8 ("reptilien").  
 Montgomery, J. H. 1901 A, 21732 ("reptiles").  
 Moodie, R. L. 1908 D, 443 ("reptiles").  
 1909 F, 216.  
 1909 G, 362.  
 1911 H, 239.  
 1912 C, 337.  
 1915 I, 135 ("reptiles").  
 Mook, C. C. 1918 A, 465.  
 Muller, J. 1832 A, 507 (Amphibia squamata).  
 Nauck, E. T. 1923 A, 2 ("reptilien").  
 Nitzsch, C. L. 1822 A, 68 ("amphibien").  
 Nopcea, F. 1922 A, 107 ("reptilien").  
 1923 B, 353 ("reptilien").  
 1923 E, 1045.  
 1923 H ("reptilien").  
 1926 A, 644 ("reptiles").  
 1928 A, 163-188.  
 Osborn, H. F. 1899 J, 415.  
 1904 H, 93.  
 1904 M, 257.  
 1904 N, 308.  
 1905 N, 237 ("reptiles").  
 1910 B, 629 ("reptiles").  
 1916 E, 511, 602.  
 1917 B, 320.  
 1925 F, 962 ("reptiles").  
 Osburn, R. C. 1906 A, 447 ("reptiles").  
 Otto, H. 1908 A, 193 ("reptilien").  
 Owen, R. 1842 F, 65 ("reptiles").  
 1846 E ("reptiles").  
 1848 B.  
 1868 A, 905.  
 Packard, A. S. 1904 A, 221 ("reptiles").  
 Palacký, J. 1894 A, 129 ("reptilien").  
 Paramore, R. H. 1910 A, 1395 ("reptiles").

- Parker, W. K. 1864 B, 56 ("reptiles").  
 1869 A, 501 ("reptiles").  
 1887 B, 53 ("reptiles").  
 1888 C, 397 ("reptiles").  
 1888 D, 475 ("reptiles").  
 1890 A, 62 ("reptiles").
- Parker and Haswell 1897 A, 291, 315.
- Parsons, F. G. 1903 A, 315 ("reptiles").
- Perna, G. 1906 A, 135 ("reptilien").
- Pernier, E. 1920 A ("reptiles").
- Perrin, A. 1899 A, 524 ("reptiles").
- Petronievics, B. 1917 A, 288 ("reptiles").  
 1919 B, 206 ("reptiles").  
 1921 A, 104 ("reptiles").
- Pfeiffer, H. 1854 A, 33 ("amphibien").
- Philippi, Frech and Volz 1903 A, 14 ("reptilien").
- Pinkus, F. 1904 A, 150 ("reptilien").
- Plieninger, F. 1906 A, 405 ("reptilien").
- Pompeckj, J. F. 1925 A ("reptilien").
- Puccioni, N. 1908 A, 56 ("rettili").
- Pycraft, W. P. 1909 A, 204.  
 1910 A, 30.
- Rabl, C. 1901 A, 520 ("reptilien").  
 1903 A ("reptilien").
- Reis, E. L. 1920 A.
- Reis, O. M. 1893 A, 523 ("reptilien").
- Reynolds, S. H. 1897 A, 190-294.
- Röse, C. 1892 F ("reptilien").  
 1892 G, 127 ("reptilien").  
 1897 A, 60 ("reptilien").
- Rogenhofer, A. 1908 A (42) ("reptilien").
- Romer, A. S. 1922 A, 39, 41.  
 1922 B, *passim*.  
 1923 B, 533 ("reptiles").
- Rosenberg, A. 1873 A, 151 ("reptilien").
- Rosenberg, E. 1895 A, 298 ("reptilien").
- Rutland, J. 1901 A, 21032 ("reptiles").
- Ryder, J. 1887 A, 344 ("reptiles").
- Sabatier, A. 1897 A, 805 ("reptiles").  
 1897 B, 933 ("reptiles").  
 1902 A, 99 ("reptiles").
- Schauinsland, H. 1906 A, 514.
- Schlosser, M. 1898 D, 120 ("reptilien").  
 1899 C, 165 ("reptilien").  
 1903 G, 144 ("reptilien").
- Schmalhausen, J. J. 1923 B, 544.
- Schmidt, W. J. 1912 A, 75-104.  
 1912 B, 140 ("reptilien").
- Schoenichen, W. 1900 A, 501 ("reptilien").
- Schuchert, C. 1914 B, 283 ("reptiles").  
 1915 A, 754, 804.
- Schuchert and Barrell 1914 A, 24 ("reptiles").
- Schwarz, H. 1908 A, 326 ("reptilien").
- Scott, W. B. 1913 A, 689.  
 1917 A, 181 ("reptiles").  
 1928 A, 331 ("reptiles").
- Seeley, H. G. 1876 C, 155.  
 1887 D, 340.  
 1887 E, 187.  
 1888 I, 235.  
 1900 A, 231.  
 1901 A, 4 ("reptiles").  
 1908 B, 376.  
 1909 A, 714.
- Seemann, G. 1926 A, 105-135 ("reptilien").
- Sera, G. L. 1921 A, 47 ("rettili").
- Serres, M. 1852 A ("reptiles").  
 1852 B, 192 ("reptiles").
- Sewertzoff, A. N. 1904 A, 473 ("reptilien").  
 1908 A.
- Seydel, O. 1899 A ("reptilien").
- Shino, K. 1914 A, 373 ("reptilien").
- Shore, T. W. 1887 A, 363.
- Simpson, G. G. 1926 A, 548 ("reptiles").
- Sirena, S. 1872 A, 125, 136 ("reptilien").
- Sixta, V. 1899 A, 329 ("reptilien").  
 1900 A, 213 ("reptilien").  
 1900 B ("reptilien").  
 1901 A, 321 ("reptilien").  
 1905 A, 672 ("reptilien").
- Smith, G. E. 1911 A, 293.  
 1912 A, 425.
- Spencer, W. B. 1886 A, 170, 220.
- Spurrell, H. G. F. 1906 A, 119 ("reptilien").
- Stehli, G. 1910 A, 737 ("reptilien").
- Steiner, H. 1922 A ("reptilien").
- Steinmann, G. 1907 A, 427.  
 1908 A, 210 ("reptilien").  
 1909 A, 65 ("reptilien").  
 1912 B, 717 ("reptilien").
- Stejneger, L. 1907 C, 161.
- Stephan, P. 1900 A, 361, 411 ("reptiles").
- Strecker, C. 1887 A, 303 ("reptilien").
- Stremme, H. 1909 A, 504 ("reptilien").
- Stromer, E. 1912 A, 66, 125.
- Suschkín, P. P. 1910 A, 244 ("reptilien").  
 1927 A, 281, 287, 310 ("reptiles").
- Swinnerton and Howes 1901 A, 3.
- Taschenberg, O. 1894 A, 3575.
- Terra, P. 1911 A, 139, 227 ("reptilien").
- Terry, R. J. 1909 A, 526 ("reptiles").
- Thevenin, A. 1909 A, 1224 ("reptiles").  
 1910 A, 40 ("reptiles").
- Thilenius, G. 1897 A, 490 ("reptilien").
- Thyng, F. W. 1906 A, 48.
- Tms, H. W. M. 1902 A, 323.  
 1903 A, 131.
- Tomes, C. S. 1875 A, 93.  
 1875 B, 95.
- Tornier, G. 1894 A, 96 ("reptilien").  
 1909 C, 544 ("reptilien").  
 1913 A, 315.
- Van Gelderen, C. 1925 A, 497 ("reptilien").
- Van Straelen, V. 1928 A, 295 ("reptiles").
- Van Wijhe, J. W. 1922 A, 292 ("reptilien").
- Versluys, J. 1911 A, 141 ("reptilien").  
 1914 A, 69 ("reptilien").
- Vialleton, L. 1917 A, 192 ("reptiles").
- Virchow, H. 1914 A, 69 ("reptilien").
- Vitali, G. 1909 A, 210 ("rettili").
- Voeltzkow, A. 1899 A.
- Voeltzkow and Döderlein 1901 A, 313 ("reptilien").
- Vogt, C. 1879 A, 241 ("reptiles").
- Voit, M. 1909 B, 139 ("reptilien").
- Wagner, R. 1843 A, 146 ("amphibien").
- Wallace, A. R. 1878 A, 1, 501; II, 593.
- Wallisch, W. 1922 A, 534 ("reptilien").
- Wamich, P. 1913 A ("reptilien").
- Watkinson, G. B. 1906 A, 350 ("reptiles").
- Watson, D. M. S. 1911 A, 323 ("reptiles").  
 1913 D, 24 ("reptiles").  
 1916 A, 341, 351 ("reptiles").

- Watson, D. M. S. 1917 B, 54 ("reptiles").  
 1917 C, 171.  
 1919 B, 59, 60.  
 1919 C, 239 ("reptiles").  
 1926 A, 202 ("reptiles").
- Wegner, R. N. 1922 A, 413 ("reptilien").
- Weidenreich, F. 1926 A, 45 ("reptilien").
- Werner, F. 1904 A, 336.
- Wiedersheim, R. 1880 E, 493 ("reptilien").  
 1892 A, 50 ("reptilien").
- Williston, S. W. 1904 B, 175.  
 1911 B, 70.  
 1912 E, 259.  
 1912 F, 91.  
 1913 B, 625.  
 1914 A, 5, 15.  
 1914 D, 410 ("reptiles").  
 1916 B, 194, 211.  
 1916 D, 152 ("reptiles").  
 1917 C, 411 ("reptiles").
- Williston, S. W. 1917 D, 985.  
 1918 A, 75 ("reptiles").  
 1925 A, 1-300, figs. 1-191.
- Wiman, C. 1916 D, 413 ("reptiles").
- Windle, B. C. A. 1905 A, 1055 ("reptilien").
- Woodward, A. S. 1910 B, 464 ("reptiles").  
 1917 D, lxxiv ("reptiles").  
 1922 C, 1-44.
- Woodward, H. 1904 B, 142.
- Woodward and Sherborn 1891 A, 31.
- Wright, W. 1909 A, 873.
- Ziegler, H. E. 1901 A, 235 ("reptilien").  
 1924 A, lx ("reptilien").
- Zierler, F. E. 1905 A, 511 ("reptilien").
- Zittel, K. A. 1895 A, 306.  
 1897 A, 127 ("reptilien").  
 1901 A, 410 ("reptiles").
- Zittel and Broili 1911 A, 179.  
 1923 A, 209-383.
- Zittel, Eastman, etc. 1902 A, 140.

### Subclass ATREMATA, new name.

- The term Synapsida, as employed by the authors cited, includes much more than the Cotylosauria. The same is true of Williston's Anapsida.
- Abel, O. 1912 F, 221.
- Broom, R. 1904 B, 93.  
 1904 C, 111.  
 1906 F, 374.  
 1907 A, 37.  
 1908 A, 1048.  
 1922 A, 25.  
 1924 B, 40, 64.
- Fuchs, H. 1909 B, 140, 149, 150.  
 1911 B.
- Fürbringer, M. 1904 A, 581.
- Goodrich, E. S. 1916 A, 263.
- Huene, F. 1911 D, 58.
- Jaekel, O. 1905 B, 61.  
 1908 A, 140 (Synapsidia).  
 1908 B, 464.
- Nopcsa, F. 1928 A, 164 (Anapsida in part).
- Osborn, H. F. 1903 F, 276.  
 1903 H, 452, 455, 459, 465, 506.  
 1904 E, 99.  
 1904 L, 256.  
 1904 N, 308.  
 1904 S, 366 (Lynapida, err. typ.).  
 1905 C, 295.  
 1918 D, 684 (Anapsida).
- Plieninger, F. 1908 A, 406.
- Romer, A. S. 1922 B, 523 (Anapsida).
- Thevenin, A. 1909 A, 1224 ("synapsidés").
- Versluys, J. 1919 A, 2, 25.
- Williston, S. W. 1904 B, 175.  
 1907 A, 487.  
 1908 I, 629.  
 1911 B, 66.  
 1914 A, 15.  
 1917 C, 419, 420 (Anapsida, in part).  
 1925 B, 210, 215 (Anapsida, in part).
- Zittel and Broili 1923 A, 221.

### Order COTYLOSAURIA Cope.

- Hay, O. P. 1902 A, 426.
- Abel, O. 1912 F, 221.  
 1919 A, 338.  
 1920 A, 350, 357.  
 1922 C, 568 ("cotylosaurier").  
 1926 B, 205-214.
- Anonymous 1912 A, 520.
- Ardt, T. 1908 A, 571, 585.  
 1916 A, 101 ("cotylosaurier").
- Bluntschli, H. 1912 B, 387 ("cotylosaurier").
- Boas, J. E. V. 1914 B, 556 ("cotylosaurier").
- Boulenger, G. A. 1904 C, 476, 480.  
 1917 C, 456.  
 1917 F, 33.  
 1918 E, 516 ("cotylosauriens").
- Broili, F. 1904 A, 67, 68.  
 1904 C, 273 ("cotylosaurier").  
 1904 D, 577 ("cotylosaurier").  
 1905 A, 14 ("cotylosaurier").  
 1908 A, 8 ("cotylosaurier").  
 1924 A, 11 ("cotylosaurier").
- Broom, R. 1897 C, 279 (Theromora, in part).
- Broom, R. 1902 D, 556.  
 1903 D, 286.  
 1903 I, 556.  
 1904 B, 90.  
 1904 C, 109.  
 1905 B, 213.  
 1905 F, 40 ("cotylosaurians").  
 1907 A, 35 ("cotylosaurians").  
 1908 A, 1049.  
 1908 D, 565.  
 1909 B, 166.  
 1910 A, 214.  
 1910 C, 475.  
 1911 A, 917.  
 1912 A, 627 ("cotylosaurs").  
 1912 B, 421.  
 1913 B, 465 ("cotylosaurs").  
 1913 J, 361.  
 1913 L, 230 ("cotylosaurs").  
 1913 N, 87 ("cotylosaurs").  
 1914 C, 135.  
 1915 C, 8.

- Broom, R. 1918 A, 238 ("cotylosaurs").  
 1922 A, 19, 23, 25.  
 1924 B, 49, 63, fig. 13.  
 1925 A, 15 ("cotylosaurs").
- Broom and Haughton 1913 A, 19 ("cotylosaurs").
- Camp, C. L. 1923 A, 392.
- Case, E. C. 1903 A, 99.  
 1905 B, 127.  
 1905 C, 70.  
 1907 E, 137.  
 1908 C, 577.  
 1910 C, 192.  
 1911 A, 3, 9, 10, 63, 96, 115.  
 1912 A, 202 ("cotylosaurs").  
 1915 A, 97, 108, 123, 134.  
 1923 A, 517.
- Cope, E. D. 1891 N, 39.
- Diener, C. 1909 A, 36.
- DuToit, P. J. 1911 A, 420.
- Frassetto, F. 1915 A, 19.
- Fuchs, H. 1907 A, 161.  
 1909 B, 120 ("cotylosaurier").  
 1911 B, 398 ("cotylosaurier").  
 1920 A.  
 1920 B, 369.  
 1926 B, 4, 31.
- Fürbringer, M. 1904 A ("cotylosaurier").
- Gaupp, E. 1912 A, 867 ("cotylosaurier").  
 1913 A, 58 ("cotylosaurier").
- Geol. Magazine 1912 A, 520.
- Goodrich, E. S. 1916 A, 262, 266.
- Gregory, W. K. 1910 A, 114, 115.  
 1913 B, 242 ("cotylosaurs").  
 1913 E, 39 ("cotylosaurs").  
 1920 A, 228.  
 1922 A, 12, 80, 509, 518.
- Gregory and Adams 1915 A, 763 ("cotylosaurs").
- Hay, O. P. 1905 D, 125.  
 1905 H, 296.  
 1908 A, 28.  
 1912 C, 563, 564.
- Heilmann, G. 1926 A, 85.
- Hilzheimer, M. 1913 A, 474 ("cotylosaurier");  
 513 ("theromoren," in part).
- Huene, F. 1909 D, 334 ("cotylosaurier").  
 1910 B, 52 ("cotylosaurier").  
 1910 D, 313 ("cotylosaurier").  
 1911 D, 44, 55.  
 1911 E, 119 ("cotylosaurier").  
 1911 F, 81 ("cotylosaurier").  
 1912 A, 69 ("cotylosaurier").  
 1912 F, 524 ("cotylosaurier").  
 1913 G, 502.  
 1914 G, pl. vii.  
 1914 J, lxxxix ("cotylosaurier").  
 1916 A, 63 ("cotylosaurier").  
 1920 C, 211.  
 1920 D, 163 ("cotylosaurier").  
 1921 A, 236 ("cotylosaurier").  
 1922 B, 70, 72, 107 ("cotylosaurier").  
 1922 E, 25 ("cotylosaurians").  
 1922 G, 451 ("cotylosaurier").  
 1923 C, 464, 466.  
 1925 D, 229, 233.  
 1925 I, 249.  
 1926 A, 260, 266.  
 1926 I, 78 ("cotylosaurier").
- Jaekel, O. 1910 D, 114, 121.  
 1911 A, 121.  
 1914 A, 203 ("cotylosauriden").
- Lakjer, T. 1927 A ("cotylosaurier").
- Loomis, F. B. 1921 A, 193.
- Lull, R. S. 1924 A, chart.
- Lydekker, R. 1912 C, 4, 16.  
 1915 C, 636.
- Merriam, J. C. 1912 B, 222.
- Moodie, R. L. 1909 C, 121.  
 1909 F, 219.  
 1911 E, 250.  
 1913 A, 192.  
 1915 G, 371.
- Nauck, E. T. 1923 A, 2 ("cotylosaurien").
- Nopcsa, F. 1922 A, 109, 116, 117.  
 1923 E, 1049.  
 1923 F, 4, 10.  
 1923 H, *passim*.  
 1926 A, 635.  
 1928 A, 164.
- Osborn, H. F. 1899 J, 415 (Theromora, in part;  
 Cotylosauria).  
 1903 H, 452, 453, 456, 506.  
 1904 H, 99.  
 1904 N, 307.  
 1905 N, 237.  
 1912 J, 5 ("cotylosaurs").  
 1917 B, 185, 191.
- Pompeckj, J. F. 1912 A, 339 ("cotylosaurier").  
 1925 A, 23 ("cotylosaurier").
- Raymond, P. E. 1907 A, 835 ("theromorphs").
- Romer, A. S. 1922 B, 519, 523.  
 1925 B, 460.
- Schuchert, C. 1915 A, 809.
- Sewertzoff, A. N. 1908 A.
- Sollas, W. J. 1916 A, 115, 116.
- Stappenbeck, R. 1905 A, 387, 427 ("cotylosaurier"); 427 (Theromora, in part).
- Steiner, H. 1922 A, 339 ("cotylosaurier").
- Stenmann, G. 1908 A, 210.
- Stromer, E. 1912 A, 106 (Theromora, in part);  
 108 (Cotylosauria).
- Sushkin, P. P. 1925 A, 180.  
 1927 A, 313.
- Thevenin, A. 1910 A, 38, 41 ("cotylosauriens").
- Thyng, F. W. 1906 A, 49.
- Tornier, G. 1913 B, 338, 374.
- Versluys, J. 1912 A, 500 ("cotylosaurier").  
 1912 B, 548, 550, 606, 687.  
 1919 A, 4, 19, 26.
- Watson, D. M. S. 1912 B, 584.  
 1914 A, 308 ("cotylosaurs").  
 1914 B, 89 ("cotylosaurs").  
 1914 D, 168.  
 1914 E, 744.  
 1914 G, 1003 ("cotylosaurs").  
 1917 B, 1, 4.  
 1917 C, 171.  
 1918 A, 286 ("cotylosaurs").  
 1919 A, 286 ("cotylosaurians").  
 1926 A, 241.
- Williston, S. W. 1904 B, 175, 176.  
 1907 A, 489 (Chelydosauria).  
 1908 A, 139.  
 1908 B, 395, 400.  
 1909 A, 393.

Williston, S. W. 1910 B, 69 ("cotylosaurs").  
 1911 B, 15, 68.  
 1911 C, 631.  
 1911 F, 662.  
 1912 A, 463.  
 1912 B, 638, 645.  
 1912 F, 92 ("cotylosaurs").  
 1914 A, 16, 45.  
 1914 C, 63.  
 1914 E, 121.  
 1914 F, 777.

Williston, S. W. 1916 A, 165.  
 1916 B, 193, 211 (Cotylosauria); 196 (Theromora, in part).  
 1917 C, 415 (Cotylosauria); 419 (Chelydosauria).  
 1925 A, *passim*.  
 1925 B, 210, 215, 221.  
 Wiman, C. 1917 A, 236 ("cotylosaurier").  
 1921 A, 27.  
 Zittel and Broili 1911 A, 188.  
 1923 A, 216, 221, 223.

### Suborder CONODECTIFORMES, new name.

Gregory, W. K., in Williston, S. W. 1925 A, viii (Seymouriamorpha).  
 Nopcsa, F. 1923 H, 17, 121 (Seymouriamorpha).  
 1928 A, 164 (Seymouriamorpha, Seymouriamorphoidea).  
 Pearson, H. S. 1924 C, 343 (Seymouriamorpha).

Romer, A. S. 1925 B, 461 (Seymouriamorpha).  
 Sushkin, P. P. 1925 A, 179 (Seymouriamorpha).  
 1927 A, 309 (Seymouriamorpha).  
 Watson, D. M. S. 1917 C, 171 (Seymouriamorpha).

### CONODECTIDÆ, new name.

Hay, O. P. 1902 A, 429 (Otocelidæ, part).  
 Abel, O. 1919 A, 342 (Seymouridæ).  
 Arlitt, T. 1912 A, 656 (Seymouridæ).  
 Broili, F. 1927 A, 188 (Seymouridæ).  
 Case, E. C. 1911 A, 9, 50, 64, 66, 112 (Seymouridæ).  
 1915 A, 98 (Seymouridæ).  
 1926 B, 193 (Seymouridæ).  
 Case and Williston 1913 B, 24 (Seymouridæ).  
 Eastman, C. R. 1912 C, 657 (Seymouridæ).  
 Lakjer, T. 1927 A, 240 (Seymouridæ).

Nopcsa, F. 1923 H, 15, 121, 151 (Seymouridæ).  
 1928 A, 164 (Seymouridæ).  
 Sushkin, P. P. 1928 A, 266, 268 ("seymourians").  
 Versluys, J. 1912 B, 613 (Seymouridæ).  
 Williston, S. W. 1911 A, 237 (Seymouridæ).  
 1911 B, 48 (Seymouridæ).  
 1911 C, 631 (Seymouridæ).  
 1912 B, 647 (Seymouridæ).  
 1916 B, 215 (Seymouridæ).  
 1925 B, 217 (Seymouridæ).  
 Zittel and Broili 1923 A, 225 (Seymouridæ).

### CONODECTES Cope. Type *C. favosus* Cope.

Unless otherwise indicated the authors, as quoted, use for this genus the name *Seymouria*.

Hay, O. P. 1902 A, 430 (Conodectes).  
 Amalitsky, V. P. 1921 A, 9.  
 1921 B, 1.  
 1924 A, 58.  
 1924 B, 64.  
 Anonymous 1912 A, 520.  
 Boas, J. E. V. 1914 B, 556, fig. 11.  
 Broili, F. 1904 A, 68, 81 (Seymouria, type *S. baylorensis*); 100 (Conodectes).  
 1904 D, 580.  
 1924 A, 4.  
 1927 A, 185, fig. 1.  
 Broom, R. 1912 A, 627.  
 1915 C, 8.  
 1922 A, 25.  
 1922 B, 458 (Conodectes, Seymouria).  
 1924 B, 64, fig. 13.  
 Case, E. C. 1905 A, 298 (Conodectes).  
 1905 B, 127 (Conodectes).  
 1907 D, 558 (Conodectes).  
 1908 D, 565 (Conodectes).  
 1911 A, 9, 50, 66, 112 (Seymouria); 61 (Desmospondylus); 9, 52, 112 (Conodectes).  
 1911 B, 54, 59 (Conodectes).  
 1915 A, 137.  
 Case and Williston 1913 B, 22.  
 Eastman, C. R. 1915 C, 659.  
 Fuchs, H. 1909 B, 121.  
 Geol. Mag. 1912 A, 520.

Gregory, W. K. 1913 B, 242.  
 1919 B, 422, fig. 2.  
 1920 A, 120, figs. 26, 29.  
 1922 A, 509, 518, fig. 347.  
 1926 B, 425.  
 1927 G, 268, fig. 1.  
 Hanson, F. B. 1920 B, 333, 337.  
 Hay, O. P. 1912 C, 563.  
 Huene, F. 1912 F, 524.  
 1913 B, 368, 376 (Seymouria a syn.).  
 1923 D, 269.  
 1926 A, 264, fig. 1.  
 Kingsley, J. S. 1925 A, 143, fig. 152.  
 Lakjer, T. 1927 A, 224, fig. 118.  
 Lydekker, R. 1913 A, 17.  
 Mook, C. C. 1921 D, 101.  
 Morton, D. J. 1926 A, 413.  
 Nauck, E. T. 1923 A, 2.  
 Nopcsa, F. 1922 A, 109.  
 1923 E, 1047.  
 1923 H, 12-16, 20, 22, 70, 155-157, 160, 186, tab., pl. iv, fig. 2.  
 1926 A, 635.  
 1928 A, 164.  
 Osborn, H. F. 1917 B, 187, fig.  
 Pearson, H. S. 1924 C, 338, 343.  
 Romer, A. S. 1922 A, 41, fig. 1.  
 1922 B, *passim*.  
 1925 A, 181.  
 1925 B, 461.  
 1926 A, 59.  
 1927 B, 680.

- Romer, A. S. 1928 C, 248 (Seymouria); 253 (Conodectes).
- Stappenbeck, R. 1905 A, 401, 403 (Seymouria); 430 (Conodectes).
- Sushkin, P. P. 1925 A, 179 (Conodectes, Seymouria).
- 1928 A, 277.
- Thevenin, A. 1910 A, 41.
- Tornier, G. 1913 B, 339.
- Versluys, J. 1909 A, 236.
- 1912 B, 564, 585.
- 1919 A, 4, fig. 1.
- Watson, D. M. S. 1912 A, 9.
- 1913 F, 955.
- 1914 B, 84.
- 1914 D, 166-170.
- 1914 G, 1004.
- 1914 I, 532.
- 1914 M, 348.
- 1916 C, 618, 630, 632.
- 1917 B, 6, 49, 59.
- 1917 C, 171.
- 1919 A, 267.
- 1921 B, 98.
- Williston, S. W. 1908 A, 148.
- 1910 A, 281 (Seymouria); 250, 280 (Desmospondylus, type *D. anomalus*).
- 1910 D, 534 (Conodectes).
- 1910 F, 586 (Desmospondylus).
- 1911 B, 42, 48.
- 1911 C, 631 (Conodectes, Desmospondylus).
- 1911 F, 662.
- 1912 E, 260.
- 1914 A, 21, figs. 4, 5, 25.
- 1914 E, 121.
- 1916 B, 217, figs. 59-61 (Seymouria, Conodectes).
- 1916 C, 291.
- 1917 A, 309.
- 1918 A, 76, fig. 1.
- 1925 A, *passim*, figs. 1, 2, 21, 76, 96, 130.
- 1925 B, 210, 215, 217, fig. 162.
- Zittel and Broili 1911 A, 189.
- 1923 A, 225.
- Conodectes favosus** Cope.
- Hay, O. P. 1902 A, 430.
- Abel, O. 1912 F, 386, fig. 272 (Desmospondylus anomalus); 388 (Seymouria baylorensis).
- 1919 A, 345, fig. 265 (S. baylorensis).
- 1920 A, 359, fig. 564 (S. baylorensis).
- 1922 C, 570, fig. 477 (S. baylorensis).
- Beede, J. W. 1907 A, 120.
- Broili, F. 1904 A, 81, pl. xiii, figs. 1-3 (Seymouria baylorensis).
- 1904 D, 530, figs. 2, 6 (S. baylorensis).
- Broili, F. 1917 A, 564, fig. 3 (S. baylorensis).
- Broom, R. 1921 A, 146, fig. 6 (Seymouria baylorensis).
- 1922 B, 457, fig. 7.
- Case, E. C. 1911 A, 50, 112, pl. xiii, figs. 1-5 (Seymouria baylorensis); 61, pl. xi, figs. 4, 5 (Desmospondylus anomalus); 52, 112 (C. favosus).
- 1911 B, 100, pl. xix, fig. 3 (Desmospondylus anomalus); 58, text-fig. 11 (C. favosus).
- 1915 A, 98, 137, text-fig. 23 (Seymouria baylorensis); 98 (C. favosus).
- Cummins, W. F. 1908 A, 744.
- Fuchs, H. 1909 B, 121, fig. 6 (Seymouria baylorensis).
- Hay, O. P. 1912 C, 562 (Seymouria baylorensis).
- Hilzheimer, M. 1913 A, 513, fig. 9 (Seymouria baylorensis).
- Huene, F. 1912 F, 523, fig. 5 (Seymouria baylorensis).
- 1913 B, 368, fig. 52 (Seymouria=Conodectes).
- 1922 B, 71 (Seymouria baylorensis).
- Lakjer, T. 1927 A, 225, fig. 85 (Seymouria baylorensis).
- Nauck, E. T. 1923 A, 6 (Seymouria baylorensis).
- Osborn, H. F. 1918 D, 686 (Seymouria baylorensis).
- Romer, A. S. 1928 C, 249, figs. 1-4 (Seymouria baylorensis).
- Stappenbeck, R. 1905 A, 425 (Seymouria baylorensis).
- Versluys, J. 1912 B, 591, 613, figs. 1<sup>1</sup>, x<sup>1</sup> (S. baylorensis).
- Watson, D. M. S. 1914 D, 170, 172 (S. baylorensis).
- 1916 C, 618.
- 1919 A, 267, figs. 1-15 (S. baylorensis).
- Williston, S. W. 1910 A, 280, pl. xvi (Desmospondylus anomalus).
- 1910 F, 596, text-fig. 3 (Desmospondylus anomalus).
- 1911 A, 232, fig. (S. baylorensis).
- 1911 B, 48, pl. xiii, figs. 4-8, pls. xxvi-xxix; text-figs. 18-22 (S. baylorensis).
- 1914 C, 66, fig. 8 (S. baylorensis).
- 1925 A, 33, figs. 19, 20 (S. baylorensis).
- Zittel and Broili 1911 A, 190, fig. 320 (S. baylorensis).
- 1923 A, 225, fig. 323 (Seymouria baylorensis).
- Permian (Clear Fork); Texas: (Enid); Oklahoma.
- Conodectes** sp. indet.
- Romer, A. S. 1927 A, 232.
- Permian (Clear Fork); Texas.

## Suborder SAURAVIFORMES, new name.

Nopcsa, F. 1923 H, 16 (Rhizosauria).

## SAURAVIDÆ Williston.

Williston, S. W. 1916 B, 217.

Huene, F. 1908 B, 378 (Sauravus).

Moodie, R. L. 1909 B, 13 (Sauravus).

Nopcsa, F. 1923 H, 16, 121, 151 (Sauravidae, Datheosauridae).

Romer, A. S. 1925 B, 461 (Sauravus).

Williston, S. W. 1911 B, 54 (Sauravus).

1916 B, 217.

1925 B, 217.

Zittel and Broili 1923 A, 253 (Datheosaurus).

Zittel and Schlosser 1923 A, 202 (Sauravus).



EOSAUROVUS Williston. Type *E. copei* Williston.

- Williston, S. W. 1910 A, 272.  
 Abel, O. 1919 A, 245.  
 Arldt, T. 1912 A, 650.  
 Beede, J. W. 1922 A, 680.  
 Case, E. C. 1911 A, 9, 31.  
 Gregory, W. K. 1915 D, 363, fig. 11.  
 1922 A, 509.  
 Miner, R. W. 1925 A, 189.  
 Moodie, R. L. 1915 A, 510.  
 Nopcea, F. 1922 A, 109.  
 1923 H, 15, 16, 137, pl. vi, fig. 5.  
 Romer, A. S. 1925 B, 461, 462.  
 Watson, D. M. S. 1919 A, 294.  
 Williston, S. W. 1911 B, 54.  
 1912 B, 659.  
 1915 B, 247.  
 1916 B, 217, fig. 62.  
 1925 A, 1, 169, 183, 185, 199.  
 1925 B, 216, 217, fig. 161.  
 Zittel and Broili 1923 A, 230.

**Eosaurus copei** Williston.

- Williston, S. W. 1908 B, 395, 399, text-figs. 1, 2 (Isodectes).  
 Hay, O. P. 1902 A, 415 (Tuditanus punctulatus, in part).  
 Abel, O. 1912 F, 216, fig. 148 (Isodectes).  
 Beede, J. W. 1922 A, 682.  
 Broili, F. 1904 A, 27 (Tuditanus punctulatus).  
 Broom, R. 1921 A, 146, fig. 5.

- Case, E. C. 1911 A, 31, text-fig. 8.  
 1915 A, 80, 94, 155.  
 1917 B, 818.  
 Cope, E. D. 1897 C, 88 (Isodectes punctulatus).  
 1898 B, 61 (Isodectes punctulatus).  
 Jaekel, O. 1909 B, 602, fig. 12 (Isodectes).  
 Kukuk, P. 1926 A, 613 (Isodectes punctulatus).  
 Lydekker, R. 1909 C, 468 (Isodectes).  
 1910 F, 672 (Isodectes punctatus).  
 Merrill, G. P. 1907 A, 73 (Isodectes punctulatus).  
 Moodie, R. L. 1909 B, 11, pls. iv, v (Isodectes punctulatus).  
 1909 F, 217 (Isodectes).  
 1909 G, 362 (Isodectes punctulatus).  
 1911 C, 383.  
 1911 H, 241, pl. ii, fig. 2 (Isodectes).  
 1915 A, 510, fig. 1.  
 1916 A, v, 86, 174, pl. xx, fig. 3.  
 Watson, D. M. S. 1919 A, 294.  
 1926 A, 240.  
 Williston, S. W. 1910 A, 272.  
 1910 F, 599 (=Isodectes punctulatus Moodie).  
 1911 B, 40, text-fig. 44.  
 1912 B, 656 (Isodectes).  
 1914 A, 52.  
 Pennsylvanian (Linton); Ohio.  
 See *Tuditanus punctulatus*.

## Suborder GYMNAETHRIFORMES, new name.

- Case, E. C. 1910 A, 177 (Gymnarthria).  
 1911 B, 69, 84 (Gymnarthria).

- Case, E. C. 1915 A, 97, 102 (Gymnarthria).

## GYMNAETHRIDÆ Case.

- Case, E. C. 1910 A, 177.  
 Abel, O. 1919 A, 345.  
 Arldt, T. 1912 A, 656.  
 1916 A, 99, 142 ("gymnarthren").

- Case, E. C. 1911 B, 14, 69, 84.  
 1915 A, 97.  
 Huene, F. 1913 B, 375.  
 Williston, S. W. 1916 B, 217.  
 1925 B, 217.

GYMNAETHRUS Case. Type *G. willoughbyi* Case.

- Case, E. C. 1910 A, 177.  
 Arldt, T. 1916 A, 99.  
 Broom, R. 1910 A, 219, fig. 15.  
 Case, E. C. 1911 B, 14, 84, 144.  
 1915 A, 102, 132.  
 Huene, F. 1913 B, 375, 377.  
 Moodie, R. L. 1911 C, 382.  
 1915 G, 373.  
 Nopcea, F. 1922 A, 109.  
 Williston, S. W. 1916 B, 217.  
 1925 B, 218.

**Gymnarthus willoughbyi** Case.

- Case, E. C. 1910 A, 177, text-fig. 8.  
 Broili, F. 1913 A, 100 (Cardiocephalus).  
 Case, E. C. 1911 B, 69, 144, text-figs. 16, 49.  
 1915 A, 97.  
 Huene, F. 1913 B, 326, figs. 11-14.  
 Moodie, R. L. 1911 C, 379.  
 1914 A, 19.  
 Permian (Clear Fork); Texas.

CARDIOCEPHALUS Broili. Type *C. sternbergi* Broili.

- Broili, F. 1904 A, 45, 49.  
 1913 A, 98.  
 Case, E. C. 1911 B, 14, 70, 84, 145.  
 Williston, S. W. 1910 A, 281 (Cardiocephalus).  
 1910 D, 535 (Cardiocephalus).  
 1916 B, 219, fig. 63.  
 1925 B, 218.

**Cardiocephalus sternbergi** Broili.

- Broili, F. 1904 A, 45, pl. vi, fig. 5.  
 1913 A, 100.  
 Case, E. C. 1911 B, 70, text-fig. 17.  
 1915 A, 97.  
 Moodie, R. L. 1914 A, 16.  
 Sternberg, C. H. 1909 C, 255 (Cardiocephalus).  
 Williston, S. W. 1910 D, 535.  
 Permian (Clear Fork); Texas.

## Suborder DIALECTIFORMES. new name.

- Hay, O. P. 1902 A, 429 (Otocaulidae, in part).  
 Case, E. C. 1905 A, 298 (Chelydosauria, in part).  
     1905 B, 126 (Chelydosauria, in part).  
     1907 E, 157 (Chelydosauria).  
     1908 D, 565 (Chelydosauria).  
     1911 A, 9, 10, 63, 85 (Diadectosauria).  
 Gregory, W. K. 1920 A, 228 (Diadectomorpha).  
 Hay, O. P. 1905 D, 125 (Chelydosauria).  
     1905 D, 125 (Chelydosauria).  
     1905 H, 296 (Chelydosauria).  
     1908 A, 28 (Chelydosauria).  
 Huene, F. 1913 B, 375 (Diadectosauria).  
 Schuchert, C. 1910 A, 570 (Chelydosauria).  
 Sushkin, P. P. 1927 A, 312 ("diadectids").  
 Watson, D. M. S. 1917 C, 171 (Diadectomorpha).  
     1919 A, 256 (Diadectomorpha).  
 Williston, S. W. 1914 A, 16, 45 (Diadectosauria).  
     1916 B, 195 (Diadectosauria).  
     1925 B, 210, 218 (Diadectosauria).  
 Zittel and Broili 1923 A, 229 (Diadectosauria).

## DIALECTIDÆ Cope.

- Hay, O. P. 1902 A, 426.  
 Abel, O. 1919 A, 339.  
 Arldt, T. 1907 D, 650.  
     1912 A, 656 (Diadectidæ, Nothodontidæ).  
 Boulenger, G. A. 1904 C, 479.  
 Broili, F. 1904 A, 69, 100.  
 Broom, R. 1903 D, 288, 292.  
     1908 A, 1050.  
     1925 A, 15 ("diadectids").  
 Case, E. C. 1903 A, 99.  
     1903 C, 400, figs. 3, 6-10.  
     1905 A, 298.  
     1905 B, 126.  
     1908 B, 236.  
     1911 A, 9, 10, 64, pl. ix (Diadectidæ); 9, 30, 65 (Nothodontidæ).  
     1915 A, 97, 102.  
     1926 B, 193.  
     1928 A, 178.  
 Case and Williston 1912 A, 348.  
     1913 B, 23.  
 Cope, E. D. 1885 BB, 70.  
     1891 N, 36.  
 Gregory, W. K. 1910 A, 114.  
 Hay, O. P. 1908 A, 28.  
 Huene, F. 1913 B, 375.  
 Jaekel, O. 1911 A, 123.  
 Nopcea, F. 1923 E, 1052.  
     1923 F, 4, 5.  
     1923 H, 18, 20, 21, 22, 40, 70, 121, 136, 151, 165, 193.  
     1925 A, 164.  
 Romer, A. S. 1925 B, 452 ("diadectids").  
 Sushkin, P. P. 1923 A, 278.  
 Tornier, G. 1913 B, 340.  
 Versluys, J. 1912 B, 535, 617, 637.  
 Watson, D. M. S. 1917 B, 5.  
     1917 C, 171.  
     1919 A, 295.  
 Williston, S. W. 1908 A, 140.  
     1911 B, 16.  
     1911 C, 631.  
     1912 A, 458.  
     1916 B, 213.  
     1925 A, 34.  
     1925 B, 218.  
 Zierler, F. E. 1905 A, 512 ("diadectiden").  
 Zittel and Broili 1911 A, 192.  
     1923 A, 229.  
 Zittel, Eastman, etc. 1902 A, 182.

DIALECTES Cope. Type *D. sideropelicus* Cope.

- Hay, O. P. 1902 A, 427 (Diadectes); 428 (Nothodon).  
 Abel, O. 1909 F, 455.  
     1912 F, 531, 668.  
     1919 A, 340.  
     1920 A, 358.  
 Boulenger, G. A. 1904 C, 478.  
 Broili, F. 1904 A, 100.  
     1904 D, 685.  
 Broom, R. 1903 D, 292.  
     1905 B, 214.  
     1908 A, 1050.  
     1910 A, 215, 231.  
     1910 C, 475.  
     1911 A, 920.  
     1913 G, 339.  
     1914 A, 109.  
     1914 C, 137.  
     1914 G, 304.  
     1915 C, 8, 30.  
     1922 A, 19, 25.  
     1924 B, 64, fig. 13.  
     1925 A, 15.  
     1926 A, 263.  
 Broom and Haughton 1913 A, 19.  
 Case, E. C. 1905 A, 298.  
     1907 D, 557, figs. 1, 2.  
     1908 B, 237, fig. 5.  
     1908 D, 565, fig. 11.  
     1910 C, 192, 195.  
     1911 A, 9, 11, 64, 67, pl. i, fig. 3; pl. iv, figs. 1, 3; pl. v; pl. vi, figs. 1-3; pl. vii, figs. 2, 3, 7; text-figs. 19, 23, 24, 26, 28, 29, 31, 34 (Diadectes); 9, 30, 65 (Nothodon).  
     1914 C, 213, figs. 1, 2.  
     1915 A, 105, 106, 108, 110, 134.  
     1921 A, 135.  
 Case and Williston 1912 A, 343.  
 Cope, E. D. 1878 LL, 482.  
     1880 U, 145 (Diadectes, Empedocles).  
 Cummins, W. F. 1908 A, 745.  
 Diener, C. 1909 A, 52.  
 Douthitt, H. 1917 A, 239.  
 Gadow, H. 1901 B, 308.  
 Gaudry, A. 1896 A, 118, fig. 96.  
 Gregory, W. K. 1910 B, 52, fig. 19.  
     1912 F, 524.

- Gregory, W. K. 1913 B, 245  
1920 A, 121, fig. 30.  
1926 A, 245.
- Gregory and Noble 1924 A, 439, fig. 1.
- Hanson, F. B. 1920 B, 336.
- Heilprin, A. 1887 A, 154 (*Diadectes*, *Empedocles*).
- Hoffmann, C. K. 1890 B, 1302.
- Huene, F. 1910 B, 52, fig. 19.  
1910 D, 314.  
1911 F, 81.  
1912 A, 74, 93.  
1912 F, 524.  
1913 B, 331, figs. 16 a, 18, 23, 24, 26, 29  
(*Diadectes*); 375 (*Nothodon*).
- Jaekel, O. 1916 A, 200.
- Lakjer, T. 1927 A, 224, fig. 89.
- Matthew, W. D. 1909 G, 94.
- Mook, C. C. 1921 D, 101 (*Nothodon*).
- Nopcsa, F. 1922 A, 109.  
1923 E, 1047, fig. 9.  
1923 H, 14, 18, 20-22, 40, 90, 153, 156, pl. iv,  
fig. 5.  
1923 A, 164 (*Diadectes*, *Nothodon*).
- Osborn, H. F. 1917 B, 187, fig. (*Diadectes*); 7,  
8 (*Empedocles*).
- Pompeckj, J. F. 1925 A, 23.
- Romer, A. S. 1922 B, *passim*, pls. xxviii-xxxi,  
xxxv, xxxvi, xxxviii, xl-xlvi.  
1924 A, 131, figs. 5, 10.  
1925 B, 450, 453.  
1927 B, 680.  
1928 C, 257, 258.
- Schuchert, C. 1910 A, 570.
- Shaner, R. F. 1926 A, 362.
- Stappenbeck, R. 1905 A, 385.
- Steiner, H. 1922 A, 340.
- Sushkin, P. P. 1927 A, 287, 307, figs. 19-22.  
1928 A, 269.
- Tornier, G. 1913 B, 340.
- Versluys, J. 1912 B, 617, figs. a<sup>2</sup>, b<sup>2</sup>.
- Watson, D. M. S. 1914 D, 166, 173.  
1914 E, 746.  
1914 G, 1004.  
1916 C, 613, 630, figs. 5-7.  
1917 B, 6.  
1917 C, 171 (*Diadectes*, *Nothodon*).  
1919 A, 295.  
1926 A, 202, fig. 5.
- Williston, S. W. 1910 F, 586.  
1911 B, 16 (*Nothodon*).  
1911 D, 379 (*Nothodon*).  
1911 F, 662.  
1912 B, 645.  
1915 A, 573.  
1916 A, 170.  
1916 B, 213, figs. 56, 57.  
1917 A, 315.  
1918 B, 91.  
1925 A, 31, 91, 112, 115, 124, 162, 167, 180,  
figs. 17, 22, 74, 95, 96.  
1925 B, 215, 218.
- Zittel and Broili 1911 A, 192.  
1923 A, 229.
- Diadectes biculminatus* Cope.**  
Hay, O. P. 1902 A, 427.  
Beede, J. W. 1907 A, 120.  
Case, E. C. 1911 A, 17, pl. i, fig. 4.
- Case, E. C. 1915 A, 97.  
Cummins, W. F. 1908 A, 744.  
Permian (Clear Fork); Texas.
- Diadectes fissus* Cope.**  
Hay, O. P. 1902 A, 427 (*Empedias*).  
Beede, J. W. 1907 A, 119 (*Empidens*).  
Broom, R. 1914 A, 110, 114.  
Case, E. C. 1911 A, 17, pl. i, figs. 1, 2.  
1915 A, 97.  
Cope and Matthew 1915 A, pl. xix, figs. 5, 6  
(This species?).  
Cummins, W. F. 1908 A, 741 (*Empedias*).  
Permian (Wichita); Texas.
- Diadectes huenei* Broom.**  
Broom, R. 1914 A, 110, figs. 2, 4.  
Locality and level not given.
- Diadectes latibuccatus* Cope.**  
Hay, O. P. 1902 A, 427.  
Beede, J. W. 1907 A, 118.  
Broom, R. 1914 A, 110, 114.  
Case, E. C. 1911 A, 19, text-fig. 2.  
1915 A, 97.  
Cummins, W. F. 1908 A, 743.  
Permian (Wichita); Texas.
- Diadectes lentus* Marsh.**  
Hay, O. P. 1902 A, 428 (*Nothodon*).  
Broom, R. 1914 A, 110, 114.  
Case, E. C. 1911 A, 30, text-fig. 7 (*Nothodon*).  
1915 A, 97 (*Diadectes* (*Nothodon*)).  
Case and Williston 1912 A, 339, figs. 1, 2.  
1913 B, 18.  
Huene, F. 1913 B, 334, fig. 19 (*Nothodon*. This  
species?).  
Romer, A. S. 1925 B, 451.  
Williston, S. W. 1911 B, 16, pl. xxxiv, figs. 5-7;  
pl. xxxv, figs. 1-4; pl. xxxvi, fig. 2; text-  
figs. 1, 2 (*Nothodon*).  
1925 A, 117, fig. 93 (*Nothodon*).  
Williston and Case 1913 A, 6 (*Diadectes*).  
Permian; New Mexico.
- Diadectes maximus* Case.**  
Case, E. C. 1910 A, 174.  
1911 A, 20, text-fig. 3.  
1915 A, 97 (*Nothodon*); 157 (*Diadectes*).  
Permian (Wichita?, Clear Fork?); Texas:  
(Enid); Oklahoma.
- Diadectes molaris* Cope.**  
Hay, O. P. 1902 A, 427 (*Empedias*).  
Beede, J. W. 1907 A, 119 (*Empedocles*).  
Broom, R. 1914 A, 109, 110, fig. 3.  
Case, E. C. 1911 A, 15, pl. i, fig. 5; text-fig. 1.  
1915 A, 97.  
Cope and Matthew 1915 A, pl. xix, figs. 1-4  
(*Empedocles*, *Diadectes*).  
Cummins, W. F. 1908 A, 743 (*Empedias*).  
Gadow, H. 1901 B, 308 (*Empedias*).  
Huene, F. 1913 B, 331, figs. 15, 16b, 17, 20, 21.  
Perrier, E. 1920 A, 308 (*Empedias*).  
Permian (Wichita); Texas.
- Diadectes phaseolinus* Cope.**  
Hay, O. P. 1902 A, 427.

Abel, O. 1912 F, 529, figs. 400-402.

1919 A, 333, figs. 253-260.

1920 A, 353, fig. 563.

Beede, J. W. 1907 A, 119.

Broili, F. 1912 A, 153.

Broom, R. 1910 A, 216, figs. 11, 12.

1914 A, 109, 110.

Case, E. C. 1910 A, 163, text-figs. 1-6.

1911 A, 15, 84, pl. i, fig. 6; pls. ii, iii, fig. 2; pl. vi, figs. 4-9; pl. vii, fig. 1; pl. viii, fig. 1; pl. xiv, text-figs. 20, 22, 25, 27, 30.

1912 B, 681.

1915 A, 97, 134, pl. xx, fig. 3.

Case and Williston 1912 A, 340.

1913 B, 18, 21.

Cummins, W. F. 1908 A, 743, 745.

Heilmann, G. 1914 A, 74.

Hilzheimer, M. 1913 A, 516.

Huene, F. 1913 B, 331, figs. 22, 25.

Römer, A. S. 1925 B, 459.

Permian (Wichita, Clear Fork); Texas: (Enid); Oklahoma.

### **Diadectes sideropelicus Cope.**

Hay, O. P. 1902 A, 427.

Beede, J. W. 1907 A, 113.

Case, E. C. 1911 A, 14.

1915 A, 97.

Cummins, W. F. 1908 A, 744.

Permian (Wichita); Texas.

### **Diadectes sp. indet.**

Phillips, W. B. 1912 A, 41. Permian (Wichita); Texas.

Wegman, C. H. 1915 A, 26, 27. Permian (Wichita); Oklahoma.

### **EMPEDIAS Cope. Type *E. alatus* Cope.**

Hay, O. P. 1902 A, 427.

Broili, F. 1904 A, 100.

1904 D, 531.

Broom, R. 1903 D, 286, 292.

1908 A, 1050.

Case, E. C. 1907 D, 557.

1908 B, 237, fig. 5.

1911 A, 13.

Case and Williston 1912 A, 344.

Cummins, W. F. 1908 A, 745.

Huene, F. 1912 A, 98.

Jaekel, O. 1911 A, 123.

Mivart, St. G. 1888 A, 373.

Schuchert, C. 1910 A, 570.

Stappenbeck, R. 1905 A, 428.

Versluys, J. 1912 B, 564, 617.

Williston, S. W. 1904 B, 180.

Zittel and Broili 1923 A, 229 (Syn. of *Diadectes*).

Zittel, Eastman, etc. 1902 A, 182.

Apparently an unidentifiable genus.

### **Empedias alatus Cope.**

Hay, O. P. 1902 A, 427.

Beede, J. W. 1907 A, 119.

Case, E. C. 1911 A, 18.

Cummins, W. F. 1908 A, 740.

Permian; Texas.

### **BOLBODON Cope. Type *B. tenuitectus* Cope.**

Hay, O. P. 1902 A, 427.

Broili, F. 1904 A, 100.

Case, E. C. 1905 B, 128.

1908 B, 236, text-fig. 5.

1911 A, 9, 22, 64, text-fig. 34.

1915 A, 134.

Cummins, W. F. 1908 A, 745.

Nopcsa, F. 1923 H, 18.

1928 A, 164.

Schuchert, C. 1910 A, 570.

Stappenbeck, R. 1905 A, 429.

Williston, S. W. 1916 B, 214.

1925 B, 218.

### **Bolbodon tenuitectus Cope.**

Hay, O. P. 1902 A, 427.

Beede, J. W. 1907 A, 120.

Case, E. C. 1911 A, 22, 87, pl. x, fig. 1; text-fig. 33.

1915 A, 97.

Cummins, W. F. 1908 A, 744.

Huene, F. 1913 B, 334, fig. 30.

Permian (Clear Fork); Texas.

### **CHILONYX Cope. Type *Bolosaurus rapidens* Cope.**

Hay, O. P. 1902 A, 427.

Ardt, T. 1908 A, 571.

Broili, F. 1904 A, 100 (Chilonix).

Broom, R. 1903 D, 292.

1903 E, 135.

Case, E. C. 1905 B, 128.

1911 A, 9, 23, 65, pl. x, fig. 2; text-figs. 5, 32.

1915 A, 111, 134, 135.

Case and Williston 1913 B, 27.

Cummins, W. F. 1908 A, 745.

Nopcsa, F. 1923 H, 18.

1928 A, 164.

Osborn, H. F. 1917 B, 137.

Schuchert, C. 1910 A, 570.

Stappenbeck, R. 1905 A, 429.

Watson, D. M. S. 1917 C, 171.

Williston, S. W. 1915 A, 578.

1916 B, 214.

1925 A, 9.

1925 B, 218.

### **Chilonyx rapidens Cope.**

Hay, O. P. 1902 A, 428.

Beede, J. W. 1907 A, 118, 119.

Broom, R. 1914 A, 110, fig. 1.

Case, E. C. 1911 A, 24, 86, text-fig. 32.

1915 A, 98.

Cummins, W. F. 1908 A, 742.

Huene, F. 1913 B, 345, fig. 31.

Permian (Wichita?, Clear Fork?); Texas.

ANIMASAUROS Case and Williston. Type *A. carinatus* Case and Williston.

- Case and Williston* 1912 A, 345.  
*Case, E. C.* 1915 A, 135.  
*Nopcea, F.* 1923 H, 18, 55, 188.  
 1928 A, 164.  
*Watson, D. M. S.* 1917 C, 171.  
*Williston, S. W.* 1915 A, 578.  
 1916 B, 214.

**Animasaurus carinatus** Case and Williston.

- Case and Williston* 1912 A, 345, fig. 3.  
*Broom, R.* 1914 A, 114.  
*Case, E. C.* 1915 A, 97.  
*Case and Williston* 1913 B, 18.  
*Williston and Case* 1913 A, 6.  
 Permian; New Mexico.

DIASPARACTUS Case. Type *D. zenos* Case.

- Case, E. C.* 1910 A, 174.  
 1911 A, 9, 21, 64.  
 1915 A, 135.  
*Eastman, C. R.* 1913 B, 678.  
*Nopcea, F.* 1923 H, 18, 40, 139, pl. vi, fig. 2a  
 (Disparactus).  
 1928 A, 18, 40 (Disparactus).  
*Watson, D. M. S.* 1917 C, 171.  
*Williston, S. W.* 1911 D, 379.  
 1912 A, 463.  
 1914 C, 63.  
 1914 E, 121.  
 1915 A, 578.  
 1916 B, 213, fig. 58.

- Williston, S. W.* 1925 B, 217, 218, fig. 162.  
*Zittel and Broili* 1923 A, 229.

**Diasparactus zenos** Case.

- Case, E. C.* 1910 A, 174, text-fig. 7.  
*Abel, O.* 1919 A, 341, fig. 261.  
*Case, E. C.* 1911 A, 21, 97, text-fig. 4.  
 1915 A, 97.  
*Case and Williston* 1913 B, 17, figs. 8-22.  
*Williston, S. W.* 1914 C, 63, fig. 5 (*D. xenos*).  
*Williston and Case* 1913 A, 6.  
*Zittel and Broili* 1923 A, 229, fig. 332.  
 Permian; New Mexico.

DESMATODON Case. Type *D. hollandi* Case.

- Case, E. C.* 1908 B, 236, text-fig. 5.  
 1911 A, 9, 26, 65, text-fig. 34.  
 1915 A, 102, 134.  
*Nopcea, F.* 1923 H, 18.  
 1928 A, 164.  
*Romer, A. S.* 1925 B, 452.  
*Watson, D. M. S.* 1917 C, 171.  
*Williston, S. W.* 1916 B, 214.  
 1925 B, 218.

**Desmatodon hollandi** Case.

- Case, E. C.* 1908 B, 236, pl. lix, fig. 1; text-fig. 4.  
 1911 A, 26, 88, pl. viii, figs. 2, 3; text-fig. 33.  
 1915 A, 98.  
 Pennsylvanian (Upper); Pennsylvania.

DIADECTOIDES Case. Type *D. cretin* Case.

- Case, E. C.* 1911 A, 9, 26, 65.  
 1915 A, 134, 135.  
*Case and Williston* 1913 A, 27.  
*Nopcea, F.* 1928 A, 164.  
*Romer, A. S.* 1922 B, 560.  
*Watson, D. M. S.* 1917 C, 171.  
*Williston, S. W.* 1915 A, 578.  
 1916 B, 214.

- Williston, S. W.* 1925 B, 215, 218.  
*Zittel and Broili* 1923 A, 230.

**Diadectoides cretin** Case.

- Case, E. C.* 1911 A, 26, text-fig. 6.  
 1915 A, 98, 135.  
 Permian (Clear Fork); Texas.

## PROCOLOPHONIDÆ Nicholson and Lydekker.

- Nicholson and Lydekker* 1889 A, 1065.  
*Case, E. C.* 1928 B, 177.  
*Lydekker, R.* 1890 A, 13.  
*Nopcea, F.* 1923 H, 207.  
*Owen, R.* 1876, Cat. Foss. Rept. S. Africa, 25,  
 pl. xx (Procolophon).

- Woodward, A. S.* 1898 B, 148, fig. 94 (Procolophon).  
*Zittel, K. A.* 1890 A (1889), 581 (Procolophon).  
*Zittel and Broili* 1923 A, 230.

TRILOPHOSAURUS Case. Type *T. buettneri* Case.

- Case, E. C.* 1928 B, 177.

**Trilophosaurus buettneri** Case.

- Case, E. C.* 1928 B, 177, fig. 1.  
 Upper Triassic; Texas.

## BOLOSAURIDÆ Cope.

- Hay, O. P.* 1902 A, 434.  
*Abel, O.* 1919 A, 349.  
*Arlt, T.* 1908 A, 585.

- Arlt, T.* 1912 A, 656.  
*Broili, F.* 1904 A, 103.  
*Broom, R.* 1913 D, 512.

- Case, E. C. 1907 A, 653.  
 1911 A, 9, 23, 64, 65.  
 1915 A, 93, 102.  
 Huene, F. 1913 B, 375.  
 Lydekker, R. 1914 A, 649.  
 Nopcsa, F. 1923 A, 171.

- Watson, D. M. S. 1917 C, 174, 194  
 Williston, S. W. 1913 C, 745.  
 1914 D, 377.  
 1916 B, 214.  
 1925 B, 213.

### BOLOSARUS Cope. Type *B. striatus* Cope.

- Hay, O. P. 1902 A, 434.  
 Abel, O. 1919 A, 349.  
 Broili, F. 1904 A, 103.  
 Broom, R. 1913 D, 509.  
 Case, E. C. 1908 B, 237, text-fig. 5.  
 1911 A, 9, 29, 65, text-figs. 34, 35.  
 1915 A, 102, 136.  
 Cope, E. D. 1878 LL, 432.  
 1880 U, 145.  
 Cummins, W. F. 1908 A, 745.  
 Gregory, W. K. 1920 A, 230.  
 Huene, F. 1913 B, 353, 375.  
 1926 F, 471.  
 Lakjer, T. 1927 A, 225.  
 Lydekker, R. 1914 A, 649.  
 Nopcsa, F. 1922 A, 109.  
 1923 H, 18.  
 1928 A, 171.  
 Schuchert, C. 1910 A, 570.  
 Versluys, J. 1912 B, 585, fig. C.  
 1919 A, 11.  
 Watson, D. M. S. 1917 C, 175.

- Williston, S. W. 1913 A, 826.  
 1913 C, 745.  
 1914 D, 377.  
 Zittel and Broili 1911 A, 192.  
 1923 A, 235.

### *Bolosaurus major* Broom.

- Broom, R. 1913 D, 510.  
 Permian; Texas.

### *Bolosaurus striatus* Cope.

- Hay, O. P. 1902 A, 434.  
 Beede, J. W. 1907 A, 113.  
 Broom, R. 1913 D, 509, 510, figs. 1, 4.  
 Case, E. C. 1907 A, 654, pl. xlviii; text-figs. 1-5.  
 1911 A, 29, 89, pl. vii, figs. 4-6.  
 1915 A, 98, 157.  
 Huene, F. 1913 B, 353.  
 Versluys, J. 1919 A, 9, fig. 6.  
 Williston, S. W. 1913 C, 746.  
 1914 D, 377.  
 Permian (Wichita, Brier Creek); Texas.

### OPHIDEIRUS Broom. Type *O. casei* Broom.

- Broom, R. 1913 D, 510.  
 Case, E. C. 1915 A, 102 (Ophideirus).  
 Watson, D. M. S. 1914 G, 1005.  
 Williston, S. W. 1913 A, 825.  
 1913 C, 746.  
 1914 D, 377.

### *Ophideirus casei* Broom.

- Broom, R. 1913 D, 510, figs. 2, 3.  
 Case, E. C. 1915 A, 98.  
 Williston, S. W. 1914 D, 377 (Syn. of *Aræoscelis gracilis*).  
 Permian (Wichita); Texas.

## Suborder PAREIASAURIFORMES, new name.

- Unless otherwise indicated the writers, as cited, use for this order the name *Pareiasauria*.  
 Hay, O. P. 1902 A, 426 (Cotylosauria, in part).  
 Arlitt, T. 1907 D, 671 (Pareiosauria).  
 1908 A, 571, 585.  
 1916 A, 101 ("pareiasaurier").  
 Beddard, F. E. 1902 A, 91 (Pareiasauri).  
 Boulenger, G. A. 1904 C, 476, 480 (Pariosauria).  
 1917 C, 456 ("paréiosauriens").  
 Broom, R. 1901 A, 185 ("pariasaurians").  
 1903 D, 286, 292.  
 1903 I, 554.  
 1905 B, 213.  
 1908 A, 1048.  
 1909 C, 136.  
 1912 C, 323 ("pareiasaurian").  
 1913 I, 353 (Pareiasaurus).  
 1913 J, 361.  
 1924 B, 64, fig. 13.  
 Case, E. C. 1911 A, 9, 33, 63, 64.  
 1915 A, 98.  
 Du Toit, P. G. 1911 A, 417.  
 Gadow, H. 1901 B, 304 (Pareiasauri).  
 Goodrich, E. S. 1916 A, 263.

- Gregory, W. K. 1910 A, 115.  
 1920 A, 120, 229, figs. 28, 35 (Pariosauria);  
 228 (Captorhinomorpha, 'Seymouriomorpha').  
 1926 A, 185.  
 Houghton, S. H. 1920 A, 12.  
 Howes and Swinnerton 1901 A, 3.  
 Huene, F. 1910 D, 313 ("pareiasaurier").  
 1911 D, 44 ("pareiasaurier").  
 1913 B, 376.  
 Jaekel, O. 1904 C, 188.  
 1905 B, 62.  
 1909 B, 613.  
 1911 A, 122 (Pareiasauri).  
 Lydekker, R. 1912 C, 4.  
 Nopcsa, F. 1923 E, 1049.  
 1923 H, 5, 99.  
 1928 A, 164 (Pareiasauroides).  
 Osborn, H. F. 1899 J, 415.  
 1903 H, 453 (Syn. of *Cotylosauria*).  
 1917 B, 185, 191.  
 Perrier, E. 1920 A, 307 ("paréiasauriens").  
 Pompeckj, J. F. 1925 A, 22 ("pareiasaurier").  
 Ridewood, W. G. 1897 D, 195 (Pariasaurus).

- Romer, A. S. 1922 B, 523, 538.  
 Seeley, H. G. 1837 D, 340.  
 1859 A, 181 (Pareiosauria).  
 1905 A, 220.  
 Stappenbeck, R. 1905 A, 427 ("pareiasaurier").  
 Sushkin, P. P. 1927 A, 312, 319 ("pareiasaurians").  
 Watson, D. M. S. 1917 C, 171 (Pariasauria);  
 172 (Capitorhinomorpha).

- Williston, S. W. 1908 B, 400.  
 1909 A, 393 ("pareiasaurs").  
 1916 B, 199.  
 1925 B, 210, 215, 220 (Pariasauria).  
 Woodward, A. S. 1922 C, 30 (Pariasauria).  
 Zittel and Broili 1923 A, 225.  
 Zittel, Eastman, etc. 1902 A, 180.

## PAREIASAURIDÆ Lydekker.

- Lydekker, R. in Nicholson and Lydekker 1889  
 A, 1055 (Pariasauridæ).  
 Hay, O. P. 1902 A, 429.  
 Abel, O. 1919 A, 348.  
 Amalitzky, V. P. 1922 A, 334.  
 Arldt, T. 1907 D, 180, 335 (Pariasauridæ).  
 1912 A, 662.  
 Boulenger, G. A. 1917 C, 456 ("pariosauriens").  
 Broili, F. 1904 A, 66, 68, 99.  
 Broom, R. 1916 B, 347.  
 Case, E. C. 1926 B, 193.  
 Cope, E. D. 1896 G, 439, 440 (Pariasauridæ).  
 Fuchs, H. 1909 B, 121.  
 Lancaster, E. R. 1905 A, 210, figs. 151, 157, 158  
 (Pariasaurus).  
 Lydekker, R. 1890 A, 112 (Pariasauridæ).  
 1915 C, 636 (Pariasaurus).  
 Nopcsa, F. 1923 E, 1053.  
 1923 H, 18, 21, 121, 151 (Pariasauridæ,  
 Pariasaurinæ).  
 1928 A, 164 (Pariasauridæ, Pariasaurinæ).  
 Steinmann, G. 1907 A, 444 (Pariasauria).  
 Sushkin, P. P. 1927 A, 309 ("pareiasaurians").  
 Tornier, G. 1913 B, 339, figs. 1, 2.  
 Versluys, J. 1912 B, 612.  
 Watson, D. M. S. 1912 B, 429, fig. 5 (Pariasaurus).  
 1914 L, 98 ("pariasaurians").  
 1917 B, 6.  
 1917 C, 172.  
 1919 A, 295 (Pariasauridæ).  
 Williston, S. W. 1925 A, 140 (Pariasauridæ).  
 1925 B, 220 (Pariasauria).  
 Zittel and Broili 1911 A, 189.  
 1923 A, 227.  
 Zittel, Eastman, etc. 1902 A, 180.

## PAREIASAURUS Owen.

- Owen, R. 1876, Cat. Foss. Rept. S. Africa, 6.  
 Abel, O. 1909 F, 457.  
 1920 A, 360, fig. 566.  
 1922 C, 574, fig. 480.  
 Amalitzky, V. 1922 A, 334, figs. 8, 9.  
 1924 A, 58.  
 1924 B, 74.  
 Boas, J. E. V. 1914 C, 259.  
 Boulenger, G. A. 1917 C, 458 (Pariosaurus).  
 Broili, F. 1904 D, 580.  
 1908 C, 65.  
 1912 B, 421.  
 Broom, R. 1899 A, 766.  
 1902 D, 554.  
 1903 E, 123, pls. xv, xvi.  
 1903 G, 145.  
 1904 B, 92.  
 1905 F, 40.  
 1906 C, 437.  
 1907 A, 35.  
 1907 C, 796.  
 1908 B, 351.  
 1909 E, 402.  
 1910 C, 475.  
 1913 G, 339.  
 1913 L, 236.  
 1914 G, 304.  
 1915 C, 22.  
 1916 B, 347.  
 1922 A, 18, fig. 1.  
 1924 A, 499, figs. 1-8.  
 1925 A, 15.  
 1926 A, 263.  
 Broom and Haughton 1913 A, 17.  
 1913 B, 26.  
 Case, E. C. 1926 B, 193.  
 Du Toit, P. J. 1911 A, 417.  
 Gregory, W. K. 1926 A, 225.  
 Haughton, S. H. 1920 A, 1, figs. 1-4.  
 Hennig, E. 1924 A, 144.  
 Huene, F. 1902 A, 14 (Pariasaurus).  
 1909 D, 336, fig. 12.  
 1911 F, 83.  
 1912 A, 98.  
 Hutchinson, H. N. 1910 A, 116, pl. xii.  
 Kingsley, J. S. 1925 A, 253, fig. 268.  
 Lakjer, T. 1927 A, 224, figs. 87, 88.  
 Nopcsa, F. 1922 A, 109.  
 1923 H, 12-14, 17-21, 157, 197.  
 1928 A, 164.  
 Owen, R. 1876 D, 6, pls. vi-xii.  
 1876 E, 43.  
 Reynolds, S. H. 1897 A, 273, 283, 289, 292 (Pariasaurus).  
 Romer, A. S. 1928 C, 258.  
 Schmalhausen, J. 1917 A, 96, 107, fig. m.  
 Seeley, H. G. 1887 D, 337 (Pariasaurus).  
 1895 D, 1, pl. i.  
 1896 B, 184.  
 1899 A, 181 (Pariasaurus).  
 1908 C, 605.  
 Stappenbeck, R. 1905 A, 400, 403.  
 Sushkin, P. P. 1927 A, 287, 293, figs. 23-26.  
 Thevenin, A. 1910 A, 41.  
 Versluys, J. 1912 B, 564, 574, 612.  
 Watson, D. M. S. 1910 A, 582.  
 1914 D, 155 (Pariasaurus).  
 1914 L, 100 (Pariasaurus).  
 1916 C, 633 (Pariasaurus).  
 1917 C, 172.

- Hay, O. P. 1919 A, 286 (*Pariasaurus*).  
 Williston, S. W. 1917 A, 320.  
     1925 A, 162, 187, 197, 198, 200 (*Pariasaurus*).  
 Woodward, A. S. 1898 B, 145, figs. 92, 93  
     (*Pariasaurus*).  
     1922 C, 30, pl. iv (*Pariasaurus*).  
 Zittel and Broili 1911 A, 191, fig. 325.  
     1923 A, 226, figs. 326, 327.
- Pareiasaurus? henneni* White.  
 White, I. C. 1917 A, 823.  
 Case, E. C. 1917 B, 517 ("Pareiasaurus-like  
 reptile"); p. 8. xxvii, xxix (P.? henneni).  
     1918 A, 504 ("Pareiasaurus").  
 Tilton, J. L. 1926 B, 357.  
 White, I. C. 1909 A, 194 ("pareiasaurian").  
     Permian-Carboniferous (Conemaugh); West  
     Virginia.

## Suborder CAPTORHINIFORMES, new name.

- Romer, A. S. 1922 B, 523, 543, 587 (*Captorhinomorphia*).  
     1925 A, 181, 182 (*Captorhinomorphia*).  
 Sushkin, P. P. 1927 A, 313, 319 ("captorhinomorphs").
- Watson, D. M. S. 1917 C, 172 (*Capitiorhinomorphia*).  
     1919 A, 256 (*Captorhinomorphia*).

## CAPTORHINIDÆ Case.

- Case, E. C. 1911 A, 9, 38, 64, 65.  
 Abel, O. 1919 A, 346.  
 Arldt, T. 1912 A, 656.  
 Broili, F. 1924 A, 9.  
 Case, E. C. 1915 A, 98, 102 (*Captorhinidæ*,  
     *Labidosauridæ*).  
     1926 B, 193.  
 Case and Williston 1913 B, 22.  
 Huene, F. 1913 B, 376.  
     1922 E, 24.  
 Jaekel, O. 1915 A, 126 ("labidosauriden").  
 Lakjer, T. 1927 A, 240.  
 Lull, R. S. 1924 A, chart (*Cotylosauridæ*).  
 Nopcsa, F. 1923 H, 23, 121, 151.  
     1928 A, 164.  
 Sushkin, P. P. 1928 A, 279.
- Versluys, J. 1912 B, 681, 687.  
 Watson, D. M. S. 1914 A, 308.  
     1914 G, 1003.  
     1916 A, 346.  
     1917 B, 5.  
     1917 C, 172 (*Captorhinidæ*, *Captorhininæ*).  
     1919 A, 296 ("captorhinids").  
     1921 B, 75 ("captorhinids").  
 Williston, S. W. 1914 A, 16, 45.  
     1916 B, 195 (*Labidosaurina*); 219 (*Captorhinidæ*).  
     1917 A, 321.  
     1925 A, 119.  
     1925 B, 218.  
 Zittel and Broili 1923 A, 228, 231.

CAPTORHINUS Cope. Type *C. angusticeps* Cope.

- Hay, O. P. 1902 A, 429.  
 Abel, O. 1919 A, 347.  
 Broili, F. 1904 A, 101.  
 Broom, R. 1910 C, 474.  
     1915 C, 8.  
     1922 A, 19.  
     1925 A, 15.  
 Broom and Haughton 1913 A, 19.  
 Case, E. C. 1910 C, 194, 195.  
     1911 A, 9, 38, 40, 65, 93, 98, 100, text-figs.  
     43, 45.  
     1915 A, 105, 136, text-fig. 21.  
 Eastman, C. R. 1912 C, 657.  
 Gregory, W. K. 1913 B, 242.  
     1922 A, 13, 506, 518.  
 Huene, F. 1912 A, 98.  
     1912 F, 524.  
     1913 B, 376.  
     1925 I, 249.  
 Lakjer, T. 1927 A, 224, figs. 86, 119.  
 Nopcsa, F. 1923 H, 21, 23, 157.  
     1928 A, 164.  
 Romer, A. S. 1927 B, 680.  
     1928 C, 255, 258.  
 Stappenbeck, R. 1905 A, 431.  
 Sushkin, P. P. 1925 A, 180.  
     1927 A, 289, fig. 36.  
     1928 A, 263, figs. 8, 9.  
 Versluys, J. 1912 B, 610, fig. v<sup>1</sup>.
- Watson, D. M. S. 1914 A, 308.  
     1914 D, 171.  
     1914 G, 996, 1004.  
     1916 A, 346.  
     1916 C, 623, 635, fig. 8.  
     1919 A, 286, 296, fig. 15.  
 Williston, S. W. 1909 C, 253.  
     1910 A, 272.  
     1911 D, 54, 68.  
     1914 A, 49, fig. 26.  
     1914 D, 413.  
     1914 E, 121.  
     1915 A, 575, 578.  
     1916 A, 165, 172, 186.  
     1916 B, 219, fig. 64.  
     1917 A, 311.  
     1925 B, 218.  
 Zittel and Broili 1923 A, 228.
- Captorhinus aduncus* (Cope).  
 Hay, O. P. 1902 A, 428 (*Pariotichus*).  
 Beede, J. W. 1907 A, 120 (*Pariotichus*).  
 Broili, F. 1904 A, 86 (*Pariotichus*).  
 Case, E. C. 1911 A, 40, 44.  
     1915 A, 98.  
 Williston, S. W. 1909 C, 255 (*Pariotichus*).  
     Permian (Clear Fork); Texas.



**Captorhinus aguti (Cope).**

- Hay, O. P. 1902 A, 428 (Pariotichus).  
 Abel, O. 1919 A, 346, fig. 266 (Pariotichus).  
 Beede, J. W. 1907 A, 119 (Pariotichus).  
 Branson, E. B. 1911 A, 135, pl. i, figs. 1, 2 (Pariotichus).  
 Broili, F. 1904 A, 85 (Pariotichus).  
 Broom, R. 1922 A, 18, fig. 1.  
 Case, E. C. 1911 A, 40, 41, pl. xi, fig. 3; text-fig. 38.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 743 (Pariotichus).  
 Huene, F. 1910 B, 52, fig. 18 (Pariotichus).  
 Sushkin, P. P. 1927 A, 290, figs. 17, 18.  
 1928 A, 263, figs. 2, 3, 6, 7, 10.  
 Thyng, F. W. 1906 A, 48, fig. E (Pariotichus).  
 Williston, S. W. 1909 C, 255 (Pariotichus).  
 1914 D, 415, fig. 16.  
 1925 A, 39, fig. 25.  
 Permian (Clear Fork); Texas.

**Captorhinus angusticeps Cope.**

- Hay, O. P. 1902 A, 429.  
 Broom, R. 1910 A, 218, figs. 13, 14 (Pariotichus).  
 Case, E. C. 1910 C, 194, text-fig. 5.  
 1911 A, 38, 40, 93, pl. xi, fig. 1; text-figs. 39, 42.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 743.  
 Gregory, W. K. 1922 A, 13, fig. 7.

- Huene, F. 1912 F, 523, fig. 4.  
 1913 B, 347, figs. 32-35.  
 Sushkin, P. P. 1928 A, 264.  
 Permian (Clear Fork); Texas: (Enid?); Oklahoma.

**Captorhinus illinoiensis Williston.**

- Williston, S. W. 1911 B, 69, pl. xxiv, figs. 5-7.  
 Case, E. C. 1915 A, 98, 169.  
 Pennsylvanian (Upper); Illinois.

**Captorhinus isolomus (Cope).**

- Hay, O. P. 1902 A, 428 (Pariotichus).  
 Beede, J. W. 1907 A, 119 (Pariotichus).  
 Broili, F. 1904 A, 85, 86 (Pariotichus).  
 Case, E. C. 1911 A, 40, 43, 94, 99, pl. xi, fig. 2; text-figs. 40, 41, 44.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 744 (Pariotichus).  
 Huene, F. 1913 B, 347 (Syn. of *Pariotichus incisivus*).  
 Sushkin, P. P. 1927 A, 290, 304, fig. 35.  
 1928 A, 263, figs. 1, 5.  
 Williston, S. W. 1909 C, 255 (Pariotichus).  
 Permian (Clear Fork); Texas.

**Captorhinus sp. indet.**

- Watson, D. M. S. 1919 A, 298, fig. 15.  
 Williston, S. W. 1911 B, 68, pl. xxx, figs. 6, 7 (This genus?).

**HYPOPOUS Cope. Type *H. squaliceps* Cope.**

- Hay, O. P. 1902 A, 429.  
 Broili, F. 1904 A, 101.  
 Broom, R. 1903 D, 292.  
 Case, E. C. 1911 A, 48 (Syn.? of *Captorhinus*).  
 Cummins, W. F. 1908 A, 745.  
 Schuchert, C. 1910 A, 570.  
 Stappenbeck, R. 1905 A, 431.  
 Williston, S. W. 1909 C, 253.

**Hypoponous squaliceps Cope.**

- Hay, O. P. 1902 A, 429.  
 Beede, J. W. 1907 A, 120.  
 Case, E. C. 1911 A, 47, text-fig. 11.  
 Cummins, W. F. 1908 A, 744.  
 Type of the species is the larger skull of Case's figure.  
 Permian (Clear Fork); Texas.

**PLEURISTION Case. Type *P. brachycoelus* Case.**

- Case, E. C. 1902 B, 63, 67.  
 Arldt, T. 1912 A, 656.  
 Case, E. C. 1911 B, 14.  
 Mehl, M. G. 1912 C, 409.  
 Nopcsa, F. 1923 H, 54.  
 Romer, A. S. 1922 B, 557.  
 Schuchert, C. 1910 A, 570.  
 Williston, S. W. 1910 F, 589.  
 1916 B, 221.  
 1925 B, 218.

**Pleuristion brachycoelus Case.**

- Case, E. C. 1902 B, 63, 67.  
 Beede, J. W. 1907 A, 139.  
 Case, E. C. 1907 E, 29, pl. i, figs. 14, 15.  
 1915 A, 98.  
 Huene, F. 1925 I, 249, text-fig. 28.  
 Williston, S. W. 1910 F, 600, pl. i, figs. 1, 2.  
 Permian (Enid); Oklahoma.

**LABIDOSAURUS Cope. Type *Pariotichus hamatus* Cope.**

- Hay, O. P. 1902 A, 429.  
 Abel, O. 1909 F, 455.  
 1919 A, 347.  
 Adams, L. A. 1919 A, 130, pl. xiii.  
 Amalitsky, V. P. 1921 B, 9.  
 1924 B, 66, 67.  
 Arldt, T. 1908 A, 571.  
 Boas, J. E. V. 1914 C, 262.  
 Boulenger, G. A. 1917 C, 457, 458.  
 1918 E, 516.

- Branson, E. B. 1911 A, 136.  
 Broili, F. 1904 A, 51, 64.  
 1904 C, 273.  
 1904 D, 579.  
 1905 A, 15.  
 1908 C, 66.  
 1912 A, 150.  
 1927 A, 186.  
 Broom, R. 1908 A, 1050, 1053, 1059.  
 1922 A, 18.

- Case, E. C. 1910 C, 194.  
 1911 A, 9, 45, 65, 101, 102, 105-111, pl. viii,  
 figs. 4-8; text-figs. 46-50.  
 1915 A, 105, 137.  
 1924 B, 6.
- Cummins, W. F. 1908 A, 745.
- Fuchs, H. 1909 B, 121.
- Gregory, W. K. 1913 E, 23.  
 1920 A, 121, fig. 31.
- Huene, F. 1910 B, 53.  
 1910 D, 314.  
 1912 A, 79, 98, fig. 11.  
 1912 F, 524.  
 1913 B, 349, 351, 376.  
 1916 A, 63.
- Jaekel, O. 1909 B, 610, fig. 18.
- Lakjer, T. 1927 A, 224.
- Moodie, R. L. 1909 B, 14.
- Nopcsa, F. 1922 A, 109.  
 1923 E, 1047, fig. 8.  
 1923 H, 12, 14, 21, 22, 156, 157, 160, pl. i,  
 fig. 2.  
 1928 A, 164.
- Osborn, H. F. 1917 B, 187, fig.
- Romer, A. S. 1928 C, 257, 258.
- Schuchert, C. 1910 A, 570.
- Stappenbeck, R. 1905 A, 387, 401, 403.
- Steiner, H. 1922 A, 340.
- Sternberg, C. H. 1909 C, 257.  
 1917 A, 192.
- Sushkin, P. P. 1927 A, 289.  
 1928 A, 276.
- Thevenin, A. 1910 A, 41.
- Tornier, G. 1913 B, 339.
- Versluys, J. 1912 A, 500.  
 1912 B, 564, 607.  
 1919 A, 4, fig. 1.
- Watson, D. M. S. 1914 A, 308.  
 1914 D, 166.  
 1914 E, 744, 746.  
 1914 H, 1011.  
 1914 M, 348.  
 1916 A, 346.  
 1916 C, 623.  
 1919 A, 286.
- Williston, S. W. 1908 A, 140.  
 1909 C, 247, 251, fig. 4.  
 1910 A, 272.  
 1910 B, 69, pls. i-iii.  
 1910 D, 530.  
 1911 A, 237.  
 1911 B, 32, 142, pl. xxiv, figs. 8-10.  
 1911 F, 662.  
 1913 B, 625.  
 1914 A, 22, figs. 6, 10, 27.  
 1914 D, 413.  
 1915 A, 578.  
 1916 A, 172, 186.  
 1916 B, 221, fig. 65.  
 1917 A, 309, figs. 2-9.  
 1925 A, 26, 183.  
 1925 B, 215, 217, 218, fig. 163.
- Zittel and Broili 1911 A, 190.  
 1923 A, 228.

**Labidosaurus broilii Case.**

- Case, E. C. 1911 A, 47.  
 1915 A, 93.
- Williston, S. W. 1917 A, 313.  
 Permian (Clear Fork); Texas.
- Labidosaurus hamatus Cope.**
- Hay, O. P. 1902 A, 429.
- Abel, O. 1919 A, 345, fig. 263.
- Arlt, T. 1903 A, 571.
- Beede, J. W. 1907 A, 120.
- Broili, F. 1904 A, 51, pl. vii, fig. 1; pls. viii, ix;  
 pl. x, fig. 1; text-fig. 3.  
 1904 D, 534, figs. 6, 10, 11.  
 1905 A, 16.  
 1908 A, 9.  
 1908 C, 63, pl. iii.  
 1924 A, 9.
- Case, E. C. 1911 A, 46, pl. xii.  
 1915 A, 95, 137, text-fig. 22.
- Cummins, W. F. 1908 A, 743.
- Huene, F. 1905 A, 352, fig. 44.  
 1913 B, 352, figs. 36, 37.
- Jaekel, O. 1911 A, 125, fig. 40.
- Moodie, R. L. 1909 C, 121.
- Sternberg, C. H. 1909 C, 253.
- Tornier, G. 1913 B, 339, figs. 3, 8.
- Versluys, J. 1912 B, 573, figs. z, j<sup>1</sup>, t<sup>1</sup>.
- Williston, S. W. 1909 C, 246.  
 1910 B, 72.  
 1911 B, 31, text-fig. 7.  
 1914 C, 65, fig. 7.  
 1914 D, 414, fig. 15.  
 1917 A, 311.  
 1925 A, 22, 30, 39, figs. 8, 9, 16, 27, 28, 29.
- Zittel and Broili 1911 A, 190, figs. 321-323.  
 1923 A, 228, figs. 329, 330, 331.  
 Permian (Clear Fork); Texas; (Enid); Oklahoma.

**Labidosaurus incisivus (Cope).**

- Hay, O. P. 1902 A, 428 (Pariotichus).
- Beede, J. W. 1907 A, 120 (Pariotichus).
- Broili, F. 1904 A, 85 (Pariotichus).
- Case, E. C. 1900 A, 720 (Pariotichus).
- Cummins, W. F. 1908 A, 744 (Pariotichus).
- Gould, C. N. 1901 A, 339 (Pariotichus incisivorus.)
- Huene, F. 1910 B, 57, fig. 24.  
 1910 D, 313, fig. 18.  
 1911 D, 51.  
 1912 A, 80, fig. 14.
- Lydekker, R. 1909 C, 469.
- Moodie, R. L. 1909 C, 121.
- Osborn, H. F. 1918 D, 685.
- Sushkin, P. P. 1928 A, 262 (Syn. of Captorhinus aguti).
- Williston, S. W. 1902 N, 60 (Pariotichus incisivorus).  
 1908 A, 141, text-figs. 1-6 (Labidosaurus).  
 1908 D, 239, text-fig. 5.  
 1909 C, 255.  
 1917 A, 311, fig. 1.  
 Permian; Texas.

HELODECTES Cope. Type *H. paridens* Cope.

- Hay, O. P. 1902 A, 429.  
 Broili, F. 1904 A, 101.  
 Case, E. C. 1911 A, 9, 48.  
 Nopcsa, F. 1923 H, 21.  
 Williston, S. W. 1909 C, 253.  
 1916 B, 222.  
 1925 B, 218.

**Helodectes isaaci** Cope.

- Hay, O. P. 1902 A, 429.  
 Beede, J. W. 1907 A, 120.

- Case, E. C. 1911 A, 48.  
 1915 A, 98.  
 Permian (Wichita?, Clear Fork?); Texas.

**Helodectes pariens** Cope.

- Hay, O. P. 1902 A, 429.  
 Beede, J. W. 1907 A, 119.  
 Case, E. C. 1911 A, 49, text-fig. 12.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 744 (*H. pandius*).  
 Permian (Clear Fork); Texas.

## PARIOTICHIDÆ Cope.

- Hay, O. P. 1902 A, 428.  
 Abel, O. 1919 A, 346.  
 Arldt, T. 1907 D, 671 (*Pariotichidæ*).  
 1908 A, 585.  
 1912 A, 656.  
 Boulenger, G. A. 1904 C, 478, 479.  
 Broili, F. 1904 A, 62, 66, 69, 101.  
 Broom, R. 1903 D, 282.  
 1908 A, 1050.  
 Case, E. C. 1908 C, 578.  
 1909 A, 195.  
 1911 A, 9, 33, 64, 65.  
 1915 A, 98.  
 Fuchs, H. 1909 B, 121.  
 1920 A, 363.  
 Gregory, W. K. 1910 A, 115.

- Stappenbeck, R. 1905 A, 387 ("pariotichiden").  
 Stromer, E. 1912 A, 108.  
 Tornier, G. 1913 B, 340.  
 Versluys, J. 1912 B, 681.  
 Watson, D. M. S. 1917 C, 172.  
 Williston, S. W. 1909 E, 194 ("Pariotichus group").  
 1911 B, 68.  
 1911 C, 631.  
 1911 D, 379.  
 1916 B, 219.  
 1925 B, 218.  
 Zierler, F. E. 1905 A, 512 ("pariotychiden").  
 Zittel and Broili 1911 A, 192.  
 1923 A, 229.  
 Zittel, Eastman, etc. 1902 A, 181.

PARIOTICHUS Cope. Type *P. brachyops* Cope.

- Hay, O. P. 1902 A, 428.  
 Arldt, T. 1908 A, 571.  
 Branson, E. B. 1911 A, 135, pl. i, figs. 3, 4.  
 Broili, F. 1904 A, 85, 101, pl. xii, figs. 13-28.  
 1904 D, 581.  
 1905 A, 15.  
 Broom, R. 1901 A, 183.  
 1903 D, 286, 292.  
 1903 E, 135.  
 1905 B, 214.  
 1908 A, 1050.  
 1910 A, 216, 232.  
 1910 C, 474 (Syn. of *Captorhinus*).  
 1911 A, 919.  
 Case, E. C. 1908 C, 576.  
 1911 A, 9, 34, 65.  
 1915 A, 136.  
 Cope, E. D. 1880 U, 145.  
 Cummins, W. F. 1908 A, 745.  
 Fuchs, H. 1909 B, 121, fig. 7.  
 1920 A, 361.  
 Huene, F. 1910 B, 58.  
 1910 D, 314.  
 1912 A, 98.  
 1913 B, 376.  
 1925 I, 249.  
 Kesteven, H. L. 1919 A, 235, fig. 20.  
 Nopcsa, F. 1922 A, 109.  
 1923 H, 21, 23, 30.  
 1923 A, 164.  
 Schuchert, C. 1910 A, 570.  
 Stappenbeck, R. 1905 A, 430.  
 Steiner, H. 1922 A, 340.  
 Sushkin, P. P. 1928 A, 277.  
 Versluys, J. 1912 A, 500.

- Versluys, J. 1912 B, 554, 564.  
 Watson, D. M. S. 1914 D, 171.  
 1917 C, 172.  
 Williston, S. W. 1908 A, 140.  
 1908 B, 400.  
 1909 C, 241.  
 1909 E, 194.  
 1910 B, 71.  
 1916 B, 219.  
 1925 B, 218.  
 Woodward, A. S. 1898 B, 150.  
 Zittel and Broili 1911 A, 192.  
 1923 A, 229.

**Pariotichus brachyops** Cope.

- Hay, O. P. 1902 A, 428.  
 Beede, J. W. 1907 A, 118.  
 Broili, F. 1904 A, 85.  
 Case, E. C. 1911 A, 34, 91, text-fig. 36.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 743.  
 Huene, F. 1913 B, 353, fig. 38.  
 Williston, S. W. 1909 C, 255.  
 Permian (Wichita); Texas.

**Pariotichus laticeps** Williston.

- Williston, S. W. 1909 C, 242, figs. 1-3, 5, 6.  
 Branson, E. B. 1911 A, 135, 136.  
 Huene, F. 1910 B, 58, fig. 25.  
 1911 D, 46, 55, fig. 60.  
 1912 A, 79, fig. 10.  
 Jaekel, O. 1911 A, 124, fig. 139.  
 Osborn, H. F. 1918 D, 686.  
 Williston, S. W. 1910 B, 83.  
 Permian; Texas.

ISOSECTES Cope. Type *Pariotichus megalops* Cope.

Hay, O. P. 1902 A, 428.  
 Broili, F. 1904 A, 101.  
 Case, E. C. 1902 A, 46.  
     1902 C, 257.  
     1908 C, 576.  
     1911 A, 9, 36, 65, text-fig. 37.  
     1915 A, 136.

Cummins, W. F. 1908 A, 745.

Huene, F. 1913 B, 376, 377.

Jaekel, O. 1911 A, 126.

Moodie, R. L. 1909 B, 12.

    1909 D, 240.

    1909 F, 219.

Nopcsa, F. 1923 H, 14 (Syn. of *Conodectes*).

Schuchert, C. 1910 A, 570.

Stappenbeck, R. 1905 A, 431.

Watson, D. M. S. 1917 C, 172.

Williston, S. W. 1909 C, 253.

Williston, S. W. 1916 A, 176 fig. 32.

    1916 B, 219.

    1925 B, 218.

Zittel and Broili 1911 A, 193.

    1923 A, 229.

*Isosectes megalops* Cope.

Hay, O. P. 1902 A, 425.

Beede, J. W. 1907 A, 119.

Branson, E. B. 1911 A, 136 (*Pariotichus*).

Case, E. C. 1902 A, 46.

    1902 C, 257 [I. (*Pariotichus*)].

    1911 A, 36, 92.

    1915 A, 98.

Cummins, W. F. 1908 A, 744.

Huene, F. 1913 B, 353, fig. 39.

Williston, S. W. 1909 C, 253.

    Permian (Clear Fork); Texas.

ECTOCYNODON Cope. Type *E. ordinatus* Cope.

Hay, O. P. 1902 A, 428 (*Pariotichus*, in part).

Case, E. C. 1911 A, 9, 35, 65.

    1915 A, 136.

Williston, S. W. 1916 B, 219.

    1925 B, 218.

*Ectocynodon ordinatus* Cope.

Hay, O. P. 1902 A, 428 (*Pariotichus*).

Beede, J. W. 1907 A, 118, 139 (*Pariotichus*).

Broili, F. 1904 A, 85 (*Pariotichus*).

Case, E. C. 1902 B, 67 (*Pariotichus*).

    1911 A, 35, text-fig. 10.

    1915 A, 98.

Cummins, W. F. 1908 A, 744 (*Pariotichus*).

Williston, S. W. 1909 C, 255 (*Pariotichus*).

    Permian (Wichita); Texas, Oklahoma.

PUERCOSAURUS Williston. Type *P. obtusidens* Williston.

Williston, S. W. 1916 A, 189.

Nopcsa, F. 1928 A, 171.

Watson, D. M. S. 1917 C, 172.

Williston, S. W. 1916 B, 221.

    1925 B, 218.

*Puercosaurus obtusidens* Williston.

Williston, S. W. 1916 A, 189, fig. 37.

    Permian; New Mexico.

## LIMNOSCELIDÆ Williston.

Williston, S. W. 1911 D, 380.

Abel, O. 1919 A, 338.

Broili, F. 1924 A, 9.

Case, E. C. 1911 A, 66.

    1915 A, 98, 102.

Eastman, C. R. 1912 C, 657.

Nopcsa, F. 1923 E, 1053.

    1923 H, 23, 121, 160.

Nopcsa, F. 1928 A, 165.

Versluys, J. 1912 B, 611.

Watson, D. M. S. 1917 C, 173 ("superfamily").

Williston, S. W. 1911 B, 23.

    1911 C, 631.

    1916 B, 212.

    1925 B, 218.

Zittel and Broili 1923 A, 226.

LIMNOSCELIS Williston. Type *L. paludis* Williston.

Williston, S. W. 1911 D, 380.

Abel, O. 1920 A, 358.

Amalitsky, V. P. 1921 B, 9.

    1924 B, 64.

Broili, F. 1914 C, 29.

Broili and Fischer 1917 A, 409.

Broom, R. 1913 I, 357.

    1915 C, 8.

Case, E. C. 1915 A, 108, 109, 135.

Eastman, C. R. 1913 B, 768.

Gregory, W. K. 1913 B, 242.

    1920 A, 121, 229, fig. 32.

Hay, O. P. 1912 C, 563.

Huene, F. 1916 A, 60, text-fig. 94.

    1920 F, 461.

    1925 I, 246.

Kingsley, J. S. 1925 A, 267, fig. 290.

Lakjer, T. 1927 A, 225.

Lydekker, R. 1913 A, 17.

Miner, R. W. 1925 A, 189.

Mook, C. C. 1921 D, 101.

Nopcsa, F. 1922 A, 109.

    1923 E, 1049.

    1923 H, 14, 22, 56, pl. v, fig. 2.

    1923 A, 165.

Romer, A. S. 1922 B, *passim*.

    1927 B, 680.

    1928 C, 257, 258.

Steiner, H. 1922 A, 340.

Sushkin, P. P. 1928 A, 269, 276.

Versluys, J. 1912 B, 555, 611.

Watson, D. M. S. 1914 D, 166.

    1914 E, 746.

    1916 C, 630.

    1917 C, 173.

    1919 A, 286, 294.

Williston, S. W. 1911 A, 237.

1911 B, 23, 42.

1911 D, 379.

1911 E, 699, fig. 2.

1912 A, 457, 466.

1914 A, 20, figs. 3, 24.

1914 C, 58, fig. 1.

1914 D, 413.

1914 E, 121.

1915 A, 578.

1916 B, 213, fig. 55.

1917 A, 315.

1925 A, 115, 165, 170, 179, figs. 95, 133.

1925 B, 219, fig. 163.

Zittel and Broili 1923 A, 226.

*Limnoscelis paludis* Williston.

Williston, S. W. 1911 D, 380, figs. 1-7.

Abel, O. 1912 F, 387.

1919 A, 335, figs. 255-257.

Broom, R. 1921 A, 146, fig. 4.

Case, E. C. 1915 A, 98, 136, text-fig. 20.

Hay, O. P. 1912 C, 563.

Lebedinsky, N. G. 1917 A, 336, fig. 26.

Lull, R. S. 1917 B, 499, fig. 150.

Versluys, J. 1912 B, 560, fig. O.

Williston, S. W. 1911 A, 237.

1911 B, 23, text-figs. 3-16.

1912 A, 457, figs. 1-32.

1914 C, 64, fig. 6.

1925 A, 37, 144, figs. 23, 24, 26, 27, 115, 116.

Williston and Case 1913 A, 6.

Permian; New Mexico.

### Suborder PANTYLIFORMES, new name.

The authors below cited use *Pantylosauria*.

Arlt, T. 1912 A, 656.

Broom, R. 1913 E, 532.

Case, E. C. 1911 A, 58, 63, 64.

1915 A, 98, 138.

Huene, F. 1913 B, 377.

Moodie, R. L. 1913 A, 189.

Nopcsa, F. 1923 A, 164 (Labidosauroides).

Romer, A. S. 1925 B, 461.

Williston, S. W. 1914 A, 16, 45.

1916 A, 165.

1916 B, 195.

1925 B, 210, 220.

### PANTYLIDÆ Case.

Case, E. C. 1911 A, 58, 64, 113.

Abel, O. 1919 A, 341.

Nopcsa, F. 1923 H, 23, 121, 151, 160.

1928 A, 165 (Pantylloidea, Pantylidæ).

Watson, D. M. S. 1917 C, 173 (As superfamily).

Williston, S. W. 1911 C, 631.

1912 B, 647.

1916 B, 215.

1925 B, 220.

### PANTYLUS Cope. Type *P. cordatus* Cope.

Hay, O. P. 1902 A, 429.

Broili, F. 1904 A, 101.

Broom, R. 1903 D, 286, 292.

1903 E, 135.

1910 A, 217.

1913 E, 527.

1922 A, 18, 19, 25.

1924 A, 507.

1924 B, 64, fig. 13.

1925 A, 15.

Camp, C. L. 1923 A, 474, fig. 82.

Case, E. C. 1911 A, 59, 66.

1912 A, 202.

1915 A, 102, 106, 138.

Cummins, W. F. 1908 A, 745.

Eastman, C. R. 1917 B, 655.

Eastman, Gregory and Matthew 1917 A, 118.

Gregory, W. K. 1920 A, 120, 229, figs. 27, 34.

1926 A, 245.

Huene, F. 1913 B, 377.

Kingsley, J. S. 1925 A, 143, fig. 152.

Lakjer, T. 1927 A, 225.

Lydekker, R. 1914 A, 649.

Mehl, M. G. 1912 A, 21.

Nopcsa, F. 1922 A, 109.

1923 H, 23.

1928 A, 165.

Osborn, H. F. 1917 B, 187.

1918 D, 687.

Romer, A. S. 1925 B, 461.

1928 C, 258.

Schuchert, C. 1910 A, 570.

Watson, D. M. S. 1914 D, 171.

1917 C, 173.

Williston, S. W. 1909 C, 253.

1911 C, 631.

1914 C, 66.

1915 A, 575.

1915 B, 253.

1915 C, 554, 559 (Ostodolepis a syn.).

1916 A, 165, figs. 20-30.

1916 B, 215.

1917 A, 311.

1917 C, 419.

1917 D, 986.

1918 B, 91.

1925 A, 14, 20, 31, 34, 131, figs. 4-6, 12, 13,

18, 105.

1925 B, 215, 217, 220.

### *Pantylus coicodius* Cope.

Hay, O. P. 1902 A, 429.

Beede, J. W. 1907 A, 119.

Case, E. C. 1907 A, 658.

1911 A, 60, text-fig. 18.

Cummins, W. F. 1908 A, 743.

Mehl, M. G. 1912 A, 26.

Permian (Clear Fork); Texas.

### *Pantylus cordatus* Cope.

Hay, O. P. 1902 A, 429.

Abel, O. 1919 A, 343, figs. 263, 264.

Beede, J. W. 1907 A, 119.  
 Broom, R. 1913 E, 527, figs. 1-4.  
 Case, E. C. 1911 A, 59, 113, 114, text-figs. 51, 52.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 743.  
 Huene, F. 1913 B, 354, figs. 40, 41.  
 Lydekker, R. 1914 A, 649, fig. 6.  
 Mehl, M. G. 1912 A, 21, figs. 1, 2.

Moodie, R. L. 1913 A, 159.  
 Williston, S. W. 1909 C, 253.  
 Permian (Clear Fork, Wichita); Texas.

**Pantylus tryptychus** Cummins.

Cummins, W. F. 1905 A, 743 (No description).  
 Permian (Clear Fork); Texas.

**OSTODOLEPIS** Williston. Type *O. brevispinatus* Williston.

Williston, S. W. 1913 D, 363.  
 Watson, D. M. S. 1917 A, 979.  
 Williston, S. W. 1915 C, 559 (Syn. of *Pantylus*).  
 1916 A, 165, 174, fig. 31.  
 1916 B, 215.  
 1925 B, 220.

**Ostodolepis brevispinatus** Williston.

Williston, S. W. 1913 D, 262, figs. 1, 2.  
 Case, E. C. 1915 A, 98, 110 (*Pantylus*).  
 Permian (Clear Fork); Texas.

**COTYLOSAURIA INCERTÆ SEDIS.**

**CHAMASAURUS** Williston. Type *C. dolichognathus* Williston.

Williston, S. W. 1915 A, 577.  
 1916 B, 221.  
 1925 B, 218.

**Chamasaurus dolichognathus** Williston.

Williston, S. W. 1915 A, fig. 2.  
 Case, E. C. 1915 A, 98.  
 Permian; New Mexico.

**ARCHERIA** Case. Type *A. robinsoni* Case.

Case, E. C. 1915 A, 170.  
 Romer, A. S. 1922 B, 523, 537, 557, pl. xxxvii.  
 Williston, S. W. 1916 B, 221.  
 1925 B, 218.

**Archeria robinsoni** Case.

Case, E. C. 1915 A, 98, 157, 169, 170, pl. xxiii,  
 figs. 7, 8; text-fig. 44.  
 Permian (Clear Fork); Texas.

**BATHYGLYPTUS** Case. Type *B. theodori* Case.

Case, E. C. 1911 A, 9, 32.  
 Arldt, T. 1912 A, 656.  
 Case, E. C. 1915 A, 134, 135.  
 Williston, S. W. 1916 B, 222.  
 1925 B, 218.

**Bathyglyptus theodori** Case.

Case, E. C. 1911 A, 32.  
 1915 A, 98.  
 Permian (Clear Fork); Texas.

**TOMICOSAURUS** Case. Type *T. casei*, sp. nov.

Case, E. C. 1907 E, 64, pl. xxvii, figs. 8, 9.  
 Williston, S. W. 1910 F, 590.  
 1916 B, 234.  
 1925 B, 236.  
 A genus of uncertain ordinal position.

**Tomicosaurus casei** sp. nov.

Case, E. C. 1915 A, 98 (*T. sp.*).  
 Permian (Clear Fork?, Wichita?); Texas.

**HYPISOGNATHEUS** Gilmore. Type *H. fenneri* Gilmore.

Gilmore, C. W. 1928 E, 2.

**Hypsognathus fenneri** Gilmore.

Gilmore, C. W. 1928 E, 2, pls. i-iii; text-figs.  
 1-3.  
 Triassic (Brunswick shale); New Jersey.

**Subclass PÆCIOLOGLYPTICA**, new name.

The term Synapsida, as employed by the authors cited, includes also the group called in the present work the Atremata.

Abel, O. 1912 F, 221.  
 Arldt, T. 1908 A, 585.  
 Broom, R. 1904 B, 93.  
 1904 C, 111.  
 1906 F, 374.  
 1907 A, 37.  
 1908 A, 1048.  
 Fuchs, H. 1909 B, 140, 149, 150.  
 1911 B.

Fürbringer, M. 1904 A, 581.  
 Goodrich, E. S. 1916 A, 263.  
 Huene, F. 1911 D, 58.  
 Jaekel, O. 1905 B, 61.  
 1908 A, 140 (*Synapsidia*).  
 1908 B, 464.  
 Osborn, H. F. 1903 F, 276.  
 1903 H, 452, 455, 459, 465, 506.  
 1904 H, 99.  
 1904 L, 256.  
 1904 N, 308.  
 1904 S, 366 (*Lynapsida*, err. typ.).

Osborn, H. F. 1905 C, 295.  
 Plieninger, F. 1906 A, 406.  
 Romer, A. S. 1922 B, 523.  
 Thevenin, A. 1909 A, 1224 ("synapsidés").  
 Versluys, J. 1919 A, 2, 25.

Williston, S. W. 1904 B, 175.  
 1907 A, 487.  
 1908 I, 629.  
 1911 B, 66.  
 1914 A, 15.  
 1917 C, 415.

### Superorder *ELPIDOSAURIA*, new name.

#### Order SPHENACODONTOMORPHI, new name.

The ordinal terms *Theromorpha* and *Theromora* are employed by the authors, as quoted, in widely varying senses. They are not here adopted.

- Hay, O. P. 1902 A, 430 (*Pelycosauria*).  
 Abel, O. 1912 F, 509 ("theromorphen").  
 Adloff, P. 1904 B, 55 ("theromorphen").  
 Arldt, T. 1907 D, 635.  
 1907 E, 206.  
 Beddard, F. E. 1902 A, 90.  
 Bluntschli, H. 1912 B, 387 ("theromorphen").  
 Boulenger, G. A. 1917 C, 457.  
 1918 E, 517 ("théromores").  
 Broili, F. 1904 A, 68.  
 1904 D, 578 ("theromorphen").  
 Broom, R. 1903 D, 287.  
 1910 C, 473.  
 1924 B, 64, fig. 13 (*Pelycosauria*).  
 Case, E. C. 1915 A, 93, 122 (*Theromora*).  
 Cope, E. D. 1878 CC, 829 (*Theromorpha*).  
 1880 U, 162 ("théromorphs").  
 1885 EE, 611.  
 Döderlein, L. 1900 A, 335.  
 Du Toit, P. J. 1911 A, 420.  
 Fuchs, H. 1907 A, 149 ("theromorphen").  
 1907 B, 415 ("theromorphen").  
 1909 B, 141.  
 1911 B ("theromorphen").  
 Fürbringer, M. 1902 B, 727 ("theromorphen").  
 Gadow, H. 1901 B, 300.  
 1902 B, 359.  
 Hay, O. P. 1912 C, 562, 563.  
 Huene, F. 1911 D, 58 ("pelycosaurier").  
 1912 F, 522 ("theromorphen").  
 1922 G, 451 ("theromorphen").  
 1925 D, 229 (*Theromorpha*).  
 1925 I ("pelycosaurier").  
 1926 A, 267 ("pelycosaurier").  
 1926 I, 52, 62 ("pelycosaurier").  
 Kingsley, J. S. 1900 A, 248 ("theromorphs").  
 1912 A, 185 ("theromorphs").  
 Kingsley, J. S. 1912 B, 89 ("theromorphs").  
 Koken, E. 1893 B, 279.  
 Laloy, L. 1907 A, 584 ("theromorphs").  
 Leche, W. 1887 A, 609.  
 Lydekker, R. 1912 C, 4, 16, 26.  
 Nopcsa, F. 1902 A, 186 ("theromorphen").  
 1923 H, *passim*.  
 1926 A, 633.  
 1928 A, 171 (*Pelycosauria*).  
 Osborn, H. F. 1898 U, 686.  
 1903 H, 452, 453.  
 Palacký, J. 1902 B, 140 ("theromorphen").  
 Parker and Haswell 1897 A, 313.  
 Rabi, C. 1903 A, 172 ("theromorphen").  
 Sixta, V. 1905 A, 671.  
 Stappenbeck, R. 1905 A, 427.  
 Steinmann, G. 1907 A, 444.  
 1912 B, 717 ("theromorphen").  
 Sushkin, P. P. 1923 A, 278 (*Pelycosauria*).  
 Versluys, J. 1912 B, 660, 687.  
 1919 A, 5, 22.  
 Watson, D. M. S. 1914 F, 778.  
 Wilkens, O. 1911 A, 706 ("theromorphen").  
 Williston, S. W. 1911 B, 70.  
 1911 C, 631.  
 1911 F, 662.  
 1912 B, 645, 649.  
 1914 A, 16, 45.  
 1914 C, 66.  
 1916 B, 193, 196, 198, 222.  
 1917 C, 414.  
 1918 A, 79.  
 1925 A, *passim*.  
 1925 B, 211, 228.  
 Woodward, A. S. 1897 C, 379 ("anomodonts").  
 1923 A, 32 ("theromorph reptiles").  
 Zierler, F. E. 1905 A, 512.  
 Zittel and Broili 1911 A, 183 (*Theromora*).  
 1923 A, 222 (*Theromorpha*).  
 Zittel, Eastman, etc. 1902 A, 179.

### Suborder POLIOSAURIFORMES, new name.

Williston, S. W. 1925 B, 233 (*Poliosauria*).

#### GLAUCOSAURIDÆ Huene.

Huene, F. 1925 I, 245.

Nopcsa, F. 1928 A, 171 (*Glaucosaurinæ*).

#### MYCOTEROSAURUS Williston. Type *M. longiceps* Williston.

Williston, S. W. 1915 C, 554, 559.  
 Abel, O. 1919 A, 363.  
 Gregory, W. K. 1919 B, 422, fig. 3.  
 1920 A, 122, 123, fig. 38.  
 1922 A, 506, 510, 518, fig. 348.  
 1926 B, 408, 426, fig. 1.  
 1927 G, 268, fig. 1.

Huene, F. 1925 I, 245.  
 Nopcsa, F. 1923 H, 54.  
 1928 A, 171.  
 Osborn, H. F. 1918 D, 687.  
 Watson, D. M. S. 1917 C, 173.  
 Williston, S. W. 1916 A, 165.  
 1916 B, 233, figs. 82, 83.

- Williston, S. W. 1917 C, 415, fig. 3.  
 1918 B, 91.  
 1925 A, 48, 64, figs. 35, 39, 53.  
 1925 B, 236.

Zittel and Broili 1923 A, 232.

A genus of somewhat uncertain position.

#### GLAUCOSAURUS Williston.

- Williston, S. W. 1915 A, 575.  
 Huene, F. 1925 I, 245.  
 Nopcsa, F. 1923 H, 54, 55, 193.  
 Watson, D. M. S. 1917 C, 175.  
 Williston, S. W. 1916 A, 165.  
 1916 B, 233.  
 1925 B, 236.

The systematic position of this genus is not certain.

#### *Mycterosaurus longiceps* Williston.

- Williston, S. W. 1915 C, 554, figs. 1, 2.  
 Abel, O. 1919 A, 364, fig. 253.  
 Case, E. C. 1915 A, 99.  
 Huene, F. 1925 I, 245, text-fig. 23.  
 Osborn, H. F. 1918 D, 656.  
 Permian (Wichita); Texas.

#### Type *G. megalops* Williston.

#### *Glaucosaurus megalops* Williston.

- Williston, S. W. 1915 A, 575, fig. 1.  
 Case, E. C. 1915 A, 99.  
 Huene, F. 1925 I, 245, text-fig. 22.  
 Williston, S. W. 1925 A, 48, fig. 34.  
 Permian (Wichita); Texas.

#### POLIOSAURIDÆ Case.

- Case, E. C. 1907 E, 18, 71, 77, 157.  
 Anonymous 1912 A, 520.  
 Arldt, T. 1908 A, 570 ("poliosauriden").  
 1912 A, 656, 662.  
 Broili and Fischer 1917 A, 409.  
 Case, E. C. 1908 C, 576, 578.  
 1915 A, 98, 102, 107, 122, 151.  
 1926 B, 193.  
 Geol. Mag. 1912 A, 520.  
 Huene, F. 1908 A, 434 ("poliosauriden").  
 1913 B, 377.  
 1925 I, 238, 245.  
 Gregory, W. K. 1913 E, 39 ("poliosaurs").  
 Nopcsa, F. 1923 H, 60, 123, 151, 168.  
 1925 A, 171 (Poliosauridæ, Poliosaurinæ).

- Romer, A. S. 1922 B, 590.  
 Watson, D. M. S. 1914 G, 1004.  
 1917 B, 16, 49.  
 1917 C, 173.  
 Williston, S. W. 1910 F, 592.  
 1911 B, 71, 80.  
 1911 C, 631.  
 1912 B, 649.  
 1915 C, 559.  
 1916 A, 186.  
 1916 B, 225.  
 1925 B, 230, 233.  
 Zittel and Broili 1911 A, 194.  
 1923 A, 232, 270.

#### POLIOSAURUS Case. Type *Theropleura uniformis* Cope.

- Case, E. C. 1907 E, 18, 72, 77, pl. i, figs. 9-13.  
 Abel, O. 1919 A, 363.  
 Arldt, T. 1908 A, 570.  
 Broom, R. 1913 D, 515.  
 Case, E. C. 1908 D, 559.  
 1915 A, 136, 171, text-fig. 45.  
 Romer, A. S. 1925 A, 182.  
 Watson, D. M. S. 1917 C, 173.  
 Williston, S. W. 1915 C, 559.  
 1916 B, 226.  
 1925 B, 233.

Zittel and Broili 1911 A, 194.

#### *Poliosaurus uniformis* Cope.

- Hay, O. P. 1902 A, 433 (Theropleura).  
 Beede, J. W. 1907 A, 119 (Theropleura).  
 Case, E. C. 1903 A, 87 (Theropleura).  
 1907 E, 18, 19, pl. i, figs. 1-8.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 743 (Paleosaurus).  
 Permian (Wichita); Texas: (Enid); Oklahoma.

#### VARANOSAURUS Broili. Type *V. acutirostris* Broili.

- Broili, F. 1904 C, 71, 79, 103, text-fig. 4.  
 Abel, O. 1919 A, 352, 362.  
 Anonymous 1912 A, 520.  
 Arldt, T. 1908 A, 570.  
 Broili, F. 1904 C, 270.  
 1914 C, 27.  
 1916 A, 485.  
 1917 A, 386, 391.  
 Broom, R. 1912 A, 626.  
 1913 D, 515.  
 Case, E. C. 1907 E, 20, 72, 79.  
 1915 A, 107, 123, 138.  
 Eastman, C. R. 1912 C, 657.  
 Geol. Mag. 1912 A, 520.

- Gregory, W. K. 1913 B, 242.  
 1913 E, 39.  
 1926 A, 196, 244.  
 Hanson, F. B. 1920 B, 333, 337.  
 Hay, O. P. 1912 C, 563.  
 Huene, F. 1916 A, 62, figs. 95, 96.  
 1925 I, 17, 24.  
 Nopcsa, F. 1922 A, 116.  
 1923 E, 1047, 1053.  
 1923 H, 51-55, 57-59, 70, 74, 85-88, 170.  
 Romer, A. S. 1922 B, 552.  
 Steiner, H. 1922 A, 341.  
 Tornier, G. 1913 B, 341.  
 Versluys, J. 1912 B, 580, 663.  
 1919 A, 10.



- Watson, D. M. S. 1914 A, 306.  
 1914 B, 85.  
 1914 D, 179.  
 1914 F, 776.  
 1914 G, 1004.  
 1914 H, 1015.  
 1916 A, 346.  
 1916 D, 646.  
 1917 B, 15, figs. 5, 26.  
 1917 C, 173.  
 1919 A, 299.  
 1921 B, 65, 70, 73, 79.  
 Wegner, R. N. 1922 A, 464.  
 Williston, S. W. 1910 A, 252.  
 1910 D, 530.  
 1910 F, 592.  
 1911 B, 54, 80, 85, 109.  
 1911 E, 698, 703, fig. 4.  
 1913 C, 744.  
 1914 D, 386, 387.  
 1914 E, 121.  
 1915 C, 559.  
 1916 B, 226.  
 1925 A, 108, fig. 84.  
 1925 B, 231, 233.

- Williston and Case 1913 B, 46.  
 Zittel and Broili 1911 A, 194.  
 1923 A, 232.

#### **Varanosaurus acutirostris Broili.**

- Broili, F. 1904 A, 71, pl. x, fig. 2; pl. xi; pl. xii, figs. 29-32.  
 Abel, O. 1920 A, 362, fig. 571.  
 Broili, F. 1914 C, 26, fig. 1.  
 1917 A, 563, fig. 3.  
 Case, E. C. 1907 E, 20, 79, pl. u.  
 1915 A, 98.  
 Huene, F. 1905 A, 338.  
 1925 I, 236, text-figs. 9, 10.  
 1926 I, 53.  
 Sternberg, C. H. 1909 C, 254.  
 Watson, D. M. S. 1914 A, 297, figs. 1-5.  
 1914 D, 179.  
 1919 A, 298, fig. 15.  
 1921 B, 71, fig. 21.  
 Williston, S. W. 1911 B, 85, 91, text-fig. 27.  
 1914 D, 387.  
 1925 A, 49, fig. 38.  
 Zittel and Broili 1923 A, 232, fig. 333.  
 Permian (Clear Fork); Texas.

#### **VARANOOPS Williston. Type *Varanosaurus brevirostris* Williston.**

- Williston, S. W. 1914 D, 387.  
 Abel, O. 1919 A, 362 (Varanops).  
 Case, E. C. 1915 A, 107, 138.  
 Huene, F. 1925 I, 229.  
 Nopcsa, F. 1923 E, 1049 (Varanops).  
 1923 H, 54-57, 85, pl. iv, fig. 6 (Varanops).  
 Osborn, H. F. 1917 B, 186, fig. (Varanops).  
 Romer, A. S. 1927 B, 680.  
 1928 C, 257, 258 (Varanops).  
 Watson, D. M. S. 1917 B, 16, 59 (Varanops).  
 1917 C, 173.  
 1918 A, 281.  
 Williston, S. W. 1914 A, 53, fig. 29 (Varanops).  
 1915 C, 559 (Varanops).  
 1916 B, 225, fig. 72 (Varanops).  
 1918 B, 91 (Varanops).  
 1925 A, 125, 133, 143, 167, 172, figs. 96, 114, 135.  
 1925 B, 233.  
 Zittel and Broili 1923 A, 232.

#### **Varanoöps brevirostris Williston.**

- Williston, S. W. 1911 B, 85, frontispiece, pls. i-xii; pl. xiii, figs. 1-3; text-figs. 25, 26 (Varanosaurus).  
 Abel, O. 1919 A, 362.  
 Broom, R. 1912 A, 629, fig. 12 (Varanosaurus).  
 1921 A, 149, fig. 10 (Varanops).  
 Case, E. C. 1915 A, 98, 138, text-fig. 24 (Varanoops).  
 Hay, O. P. 1912 C, 562 (Varanosaurus).  
 Huene, F. 1925 I, 237, text-figs. 11, 12.  
 Osborn, H. F. 1918 D, 686 (Varanosaurus).  
 Watson, D. M. S. 1914 A, 303, 306 (Varanosaurus).  
 Williston, S. W. 1914 A, 53, fig. 29 (Varanops).  
 1914 C, 67, fig. 9 (Varanosaurus).  
 1914 D, 387, 398 (Varanoops).  
 1915 C, 387, 398 (Varanops).  
 1925 A, 48, figs. 36, 37 (Varanosaurus).  
 Permian (Clear Fork); Texas.

#### **PÆCILOSPONDYLUS Case. Type *P. francisi* Case.**

- Case, E. C. 1910 B, 183.  
 Broom, R. 1913 D, 515.  
 Case, E. C. 1915 A, 107, 138.  
 Romer, A. S. 1922 B, 560.  
 Watson, D. M. S. 1914 G, 1008.  
 1917 C, 173.  
 Williston, S. W. 1910 F, 596.  
 1911 B, 80.

- Williston, S. W. 1915 C, 387.  
 1916 B, 226.  
 1925 B, 233.

#### **Pæcilospondylus francisi Case.**

- Case, E. C. 1910 B, 183, figs. 1-3.  
 1915 A, 98.  
 Permian (Clear Fork); Texas.

#### **ARRIBASAURUS Williston. Type *Dimetrodon navajovicus* Case.**

- Williston, S. W. 1914 D, 408.  
 Case, E. C. 1915 A, 99.  
 Nopcsa, F. 1923 H, 54.  
 Watson, D. M. S. 1917 C, 175.

- Williston, S. W. 1915 C, 559.  
 1916 B, 226.  
 1925 B, 233.  
 Put by Williston in the Poliosauridæ; by Case in the Sphenacodontidæ.

**Arribasaurus navajovicus** (Case).

- Case, E. C. 1907 E, 56, 75, 137, pl. xxvii, figs 1-5, 7; pl. xxxiii, figs. 3, 5, 12 (Dimetrodon).  
 Abel, O. 1912 F, 387, fig. 275 (Dimetrodon).  
 Case, E. C. 1915 A, 99, 139.

Huene, F. 1925 I, 241.

Williston, S. W. 1911 D, 379 (Dimetrodon navajovicus).

1914 D, 405, fig. 11 (D. navajovicus).

Williston and Case 1913 A, 6 (Dimetrodon).  
 Permian; New Mexico.**Scoliomus** Williston and Case. Type *S. paucercensis* Williston and Case.

Williston and Case 1913 C, 60.

Nopcsa, F. 1923 H, 54.

Williston, S. W. 1916 B, 226, 234.

1925 B, 233.

The systematic position of this genus is doubtful.

**Scoliomus paucercensis** Williston and Case.

Williston and Case 1913 C, 60, fig. 37.

Case, E. C. 1915 A, 93.

Permian; New Mexico.

**OPHIACODONTIDÆ** Williston and Case.

Williston and Case 1913 B, 59.

Abel, O. 1919 A, 364.

Case, E. C. 1926 B, 193.

Huene, F. 1925 I, 245.

Nopcsa, F. 1928 A, 171.

Romer, A. S. 1922 B, 590.

1925 A, 182.

Watson, D. M. S. 1917 B, 16.

1917 C, 174.

Williston, S. W. 1915 C, 559.

1916 B, 226.

1925 B, 230, 233.

Zittel and Broili 1923 A, 232.

**OPHIACODON** Marsh. Type *O. mirus* Marsh.

Hay, O. P. 1902 A, 434.

Abel, O. 1919 A, 355, 360, 364.

Brauns, D. 1890 A, 152.

Broili and Fischer 1917 A, 386, 409.

Case, E. C. 1915 A, 107, 138, 139.

Eastman, C. R. 1913 B, 678.

Huene, F. 1914 G, pl. vii.

1916 A, 63.

1922 B, 72.

1922 G, 451.

1925 I, 226.

Nopcsa, F. 1922 A, 109, 110.

1923 E, 1047, 1049.

1923 H, 33, 51, 54, 55, 58, 68, 70, 74, 82,

90, pl. v, fig. 8.

1928 A, 171.

Osborn, H. F. 1917 B, 186.

Romer, A. S. 1922 B, *passim*, pls. xxxiii, xxxvii, xlv.

1925 A, 173, 181.

Steiner, H. 1921 A, 537.

1922 A, 341.

Versluys, J. 1919 A, 10, 11, 24.

Watson, D. M. S. 1914 A, 304.

1914 D, 179.

1914 G, 1005.

1916 D, 643.

1917 B, 16.

1917 C, 174.

1921 B, 72.

Williston, S. W. 1911 B, 21, 80, 81, 110, pl. xxxiv, figs. 4, 10?, 11?; pl. xxxv, figs. 5?,

6, 7?, 8-11; pl. xxxvii, figs. 3?, 4, 5.

1911 D, 379.

1911 E, 698, fig. 3.

1912 A, 463.

1912 B, 641, fig. 1.

1912 E, 260.

1914 A, 30, figs. 13, 15, 20-23.

1914 C, 69.

1914 D, 398.

Williston, S. W. 1914 E, 121.

1915 C, 559.

1916 A, 182, 183.

1916 B, 227, figs. 73-78.

1917 B, 650.

1917 C, 415.

1925 A, 101, 104, 127, 133, 135, 144, 165,

183, 187, figs. 78, 97, 117, 134, 152.

1925 B, 232, 233, fig. 168.

Williston and Case 1913 B, 37.

Zittel and Broili 1923 A, 233.

**Ophiacodon mirus** Marsh.

Hay, O. P. 1902 A, 434.

Abel, O. 1919 A, 365, figs. 284-287.

Brauns, D. 1890 A, 152.

Broili and Fischer 1917 A, 410, fig. 14.

Broom, R. 1912 A, 629, fig. 11.

1914 C, 140, fig. 6.

1921 A, 147, fig. 8.

Case, E. C. 1915 A, 98, 139, 170, text-fig. 25.

Huene, F. 1925 I, 26, text-fig. 13.

Lydekker, R. 1914 A, 650.

Mehl, M. G. 1912 C, 409.

Moody, R. L. 1923 B, pl. xiv.

Osborn, H. F. 1918 D, 686.

Romer, A. S. 1925 A, 175.

Steiner, H. 1922 A, 341.

Williston, S. W. 1911 B, 81, pl. xxxiv, fig. 3;

pl. xxxvii, fig. 1.

1914 C, 69, fig. 11.

1925 A, 46, 106, 160, figs. 32b, 82, 131.

Williston and Case 1913 A, 6.

1913 B, 37, pl. i; text-figs. 23-24, 36.

Zittel and Broili 1923 A, 219, fig. 324.

Permian; New Mexico.

**Ophiacodon** sp. indet.

Case, E. C. 1916 B, 709 (This genus?).

Permian-carboniferous; New Mexico.

THEROPLEURA Cope. Type *T. retroversa* Cope.

- Hay, O. P. 1902 A, 433.  
 Arldt, T. 1908 A, 570.  
 Broili, F. 1904 A, 80, 102.  
 Camp, C. L. 1923 A, 392.  
 Case, E. C. 1903 A, 86.  
 1907 E, 22, 73, 81, pl. v, fig. 8; pl. xxvii, fig. 4; pl. xxxiii, fig. 8; text-fig. 24.  
 1908 D, 559, fig. 2.  
 1915 A, 107, 139, 173, text-fig. 47 (This genus?).  
 Cummins, W. F. 1908 A, 745.  
 Gregory, W. K. 1926 A, 244.  
 Heilprin, A. 1887 A, 154.  
 Huene, F. 1905 A, 339.  
 1911 D, 29, 33, 33.  
 1911 E, 119, fig. 36.  
 1914 E, 499.  
 1925 I, 236.  
 Nopcsa, F. 1923 E, 1053.  
 1923 H, 54, 55, 59, 85.  
 1928 A, 171.  
 Osborn, H. F. 1917 B, 186.  
 1918 D, 687.  
 Romer, A. S. 1922 B, 560.  
 1925 A, 177, 182.  
 Schuchert, C. 1910 A, 570.  
 Thevenin, A. 1910 A, 56.  
 Watson, D. M. S. 1916 C, 625, 634.  
 1916 D, 643.  
 1917 B, 49.  
 1917 C, 174.  
 Williston, S. W. 1911 B, 80, 110.  
 1911 D, 379.

- Williston, S. W. 1914 C, 70.  
 1915 A, 575, 578.  
 1915 C, 559.  
 1916 A, 165, 178, 188, figs. 33-35.  
 1916 B, 227.  
 1925 A, 120, fig. 94.  
 1925 B, 233, fig. 169.  
 Williston and Case 1913 B, 59.  
 Zittel and Broili 1911 A, 194.  
 1923 A, 233 (Syn. of *Diopæus*).

**Theropleura grandis** Case.

- Case, E. C. 1907 E, 28, 88, text-fig. 26.  
 1915 A, 98.  
 Permian (Wichita, Clear Fork?); Texas.

**Theropleura retroversa** Cope.

- Hay, O. P. 1902 A, 433 (*T. retroversa*, *T. triangulata*).  
 Beede, J. W. 1907 A, 119 (*T. retroversa*, *T. triangulata*).  
 Broom, R. 1914 C, 137, fig. 1.  
 Case, E. C. 1907 E, 25, 26, 81, pl. iii; pl. xiii, fig. 1; text-figs. 21-23, 25.  
 1915 A, 98, 139, text-figs. 26.  
 Cummins, W. F. 1908 A, 742.  
 Huene, F. 1911 D, 33, figs. 33, 34.  
 Thevenin, A. 1910 A, 57, fig. 32.  
 Watson, D. M. S. 1916 D, 643, figs. 6, 7 ("Theropleura").  
 Williston, S. W. 1911 B, 82.  
 Williston and Case 1913 B, 43.  
 Permian (Wichita); Texas.

WINFIELDIA Romer. Type *W. hilli* Romer.

- Romer, A. S. 1925 A, 174, 182.

**Winfieldia hilli** Romer.

- Romer, A. S. 1925 A, 174, 183, figs. 1-3.  
 Permian (Wichita); Kansas.

DIOPEUS Cope. Type *D. leptoccephalus* Cope.

- Cope, E. D. 1892 Z, 11.  
 Hay, O. P. 1902 A, 431 (Clepsydraps, in part).  
 Case, E. C. 1903 A, 86, 98.  
 1907 E, 22 (Syn. of *Theropleura*).  
 Huene, F. 1925 I, 239.  
 1926 I, 52.  
 Nopcsa, F. 1923 H, 53, 58, 170 (*Diopæus*, *Diopæus*).  
 1928 A, 171 (*Diopæus*).  
 Watson, D. M. S. 1916 D, 643.  
 1917 C, 174 (*Deiopeus*).  
 1921 B, 70, 72 (*Deiopeus*).  
 Williston, S. W. 1916 A, 179 (*Diopæus*).  
 1925 B, 233.  
 Zittel and Broili 1911 A, 194 (*Diopæus*; syn. of *Theropleura*).  
 1923 A, 233 (*Diopæus*).

**Diopæus leptoccephalus** Cope.

- Hay, O. P. 1902 A, 431 (Clepsydraps).  
 Beede, J. W. 1907 A, 119 (Clepsydraps).  
 Camp, C. L. 1923 A, 349.  
 Case, E. C. 1900 A, 720 (Clepsydraps).  
 1903 A, 88, figs. 1-3.  
 1907 E, 26, 81 (Syn. of *Theropleura retroversa*).  
 Cummins, W. F. 1908 A, 742 (Clepsydraps).  
 Gill, T. 1886 C, 809 (Clepsydraps leptoccephalus).  
 Huene, F. 1925 I, 239, text-fig. 14.  
 Watson, D. M. S. 1916 C, 625, 651, figs. 9-11 (To *Theropleura*).  
 1919 A, 298, fig. 15 (*Deiopeus*).  
 1921 A, 431 (*Deiopeus*).  
 Williston, S. W. 1916 A, 179 (*Diopæus*).  
 A doubtful species.  
 Permian (Wichita); Texas.

ELCABROSAURUS Case. Type *E. baldwini* Case.

- Case, E. C. 1907 E, 28, 73.  
 1915 A, 138.  
 Nopcsa, F. 1923 H, 54.

- Williston, S. W. 1911 B, 80.  
 1911 D, 379 (Elcabrosaurus, Elcabrosaurus).  
 1915 C, 559 (Elcabrosaurus).  
 A genus of uncertain affinities.

**Elcabrosaurus baldwini** Case.

Case, E. C. 1907 E, 28, 89, pl. iv, figs. 1-5.  
1915 A, 98.

Williston and Case 1913 A, 6 (Elcabrosaurus).  
Permian; New Mexico.

## Suborder SPHENACODONTIFORMES, new name.

Unless otherwise indicated the authors, as cited, use for this group the name Pelycosauria.

- Hay, O. P. 1902 A, 430.  
Abel, O. 1908 D, (217).  
1909 F, 455.  
1912 F, 691 ("pelycosaurier").  
1919 A, 352.  
1920 A, 361.  
Ameghino, F. 1889 A, 1021.  
1893 E, 731 ("pelycosauriens").  
Ardt, T. 1908 A, 570 ("pelycosaurier").  
Bardeleben, K. 1901 A, 37 ("pelycosaurier").  
Baur, G. 1886 O, 174.  
1887 H, 55.  
1894 B, 354.  
Boas, J. E. V. 1914 B, 557 ("pelycosaurier").  
1914 C, 262 ("pelycosaurier").  
Boulenger, G. A. 1903 A, 357.  
1904 C, 480.  
1917 C, 459 ("pelycosauriens").  
Brauns, D. 1890 A, 162 ("pelycosaurier").  
Broili, F. 1904 A, 67 ("pelycosaurier"); 69, 101 (Syn. of Theriodontia).  
1904 C, 273 ("pelycosaurier").  
1904 D, 585 ("pelycosaurier").  
1905 A, 16 ("pelycosaurier").  
1917 A, 564.  
1924 A, 11 ("pelycosaurier").  
Broom, R. 1897 C, 279 (Theromora, in part).  
1901 A, 188.  
1902 D, 554.  
1903 D, 286, 289, 291.  
1903 E, 136 ("pelycosaurians").  
1903 I, 554.  
1906 B, 559.  
1906 C, 438 ("pelycosaurs").  
1907 A, 37.  
1908 A, 1049.  
1909 B, 166.  
1910 A, 220, 228.  
1910 C, 473.  
1911 A, 917 ("pelycosaurians").  
1912 B, 421.  
1913 G, 335.  
1913 I, 355.  
1913 K, 12.  
1913 L, 31 ("pelycosaurs").  
1913 P, 226-228 ("pelycosaurians").  
1914 C, 135 ("pelycosaurs").  
1914 E, 143 ("pelycosaurs").  
1914 G, 303 ("pelycosaurs").  
1915 C, 9.  
1921 A, 148 ("pelycosaurs").  
Broom and Houghton 1913 B, 30 ("pelycosaurs").  
Case, E. C. 1899 C, 622.  
1902 A, 47, pl. ix, figs. 3-5; pl. x, figs. 6, 7 ("pelycosaurian").  
1902 C, 258.  
1903 A, 85, 86.  
1903 B, 6, fig. 2.

- Case, E. C. 1904 A, 304.  
1904 C, 253.  
1905 C, 6.  
1907 E, 5, 17, 71, 157.  
1908 B, 240.  
1908 D, 565 ("pelycosaurs").  
1908 E, 255.  
1909 B, 979.  
1910 C, 195.  
1911 A, 116.  
1912 A, 203.  
1915 A, 98, 122.  
1923 A, 517.  
1924 B, 9.  
1926 B, 193 (Pelycosauria).  
Cummins, W. F. 1908 A, 745.  
Dollo, L. 1885 C, 301.  
Frassetto, F. 1915 A, 19.  
Fuchs, H. 1906 A, 13, 51, 73 ("pelycosaurier").  
1907 A, 149.  
1911 B.  
Geol. Mag. 1912 A, 520.  
Gill, T. 1886 C, 809.  
Goodrich, E. S. 1916 A, 263, 267.  
Gregory, W. K. 1910 A, 115.  
1913 E, 14, 39 ("pelycosaurs").  
1920 A, 230.  
1922 A, 543.  
1926 A, 184, 243, 245.  
Hanson, F. B. 1920 B, 337.  
Houghton, S. H. 1918 A, 214.  
Hay, O. P. 1912 C, 562.  
Heilmann, G. 1926 A, 85.  
Hilzheimer, M. 1913 A, 513 ("theromoren," in part).  
Hoffmann, C. K. 1890 B, 1301.  
Howes and Swinnerton 1901 A, 32.  
Huene, F. 1905 A, 321 ("pelycosaurier").  
1908 A, 431 ("pelycosaurier").  
1908 B, 387 ("pelycosaurier").  
1910 B, 39, 51 ("pelycosaurier").  
1910 D, 313 ("pelycosaurier").  
1911 D, 29, 55, 58.  
1913 B, 377, 378.  
1914 E, 499 ("pelycosaurier").  
1914 G, pl. vii.  
1920 B, 208 ("pelycosaurier").  
1921 A, 232 ("pelycosaurier").  
1922 B, 75 ("pelycosaurier").  
1923 D, 269 ("pelycosaurier").  
1925 D, 229, 238.  
1926 A, 260.  
1927 E, 322.  
Jaekel, O. 1903 A, 192 ("pelycosaurier").  
1910 B, 527.  
Kingsley, J. S. 1901 A, 193 ("theriomorphs").  
Koken, E. 1893 C, 323.  
Lambe, L. M. 1912 A, 6.  
Lydekker, R. 1912 C, 4, 26.  
Matthew, W. D. 1908 B, 184.  
1908 D, 816.

- Merrim, J. C. 1908 C, 57.  
 Moodie, R. L. 1911 E, 250.  
 Noack, T. 1880 A, 76 ("eidechsen").  
 Nopcsa, F. 1922 A, 109, 110, 116, 117.  
     1923 E, 1049 ("pelycosaurians").  
     1923 H, 3-187, tab.  
     1926 A, 636, 638.  
     1928 A, 171 (Dimetrodontoides).  
 Osborn, H. F. 1898 U, 686.  
     1899 J, 415 (Theromora, in part).  
     1903 H, 453, 456, 467, 474.  
     1904 H, 110.  
     1905 C, 295.  
     1905 N, 238.  
 Pinkus, F. 1904 A, 162.  
 Rabl, C. 1903 A, 172 ("pelycosaurier").  
 Romer, A. S. 1922 B, 519, 523, 538.  
     1924 C, 98 ("pelycosaurs").  
     1925 B, 460.  
 Schuchert, C. 1915 A, 809.  
 Sewertzoff, A. N. 1908 A.  
 Sixta, V. 1905 A, 671.  
 Stappenbeck, R. 1905 A, 338, 427 (Pelycosauria);  
     427 (Theromora, in part).  
 Steiner, H. 1922 A, 339, 341, fig. 5.  
 Steinmann, G. 1903 A, 210 ("pelycosaurier").  
 Stromer, E. 1912 A, 106 (Theromora, in part).  
 Sushkin, P. P. 1925 A, 180.  
 Thevenin, A. 1910 A, 53 ("pelycosauriens").  
 Thyng, F. W. 1906 A, 53, fig. K.  
 Tornier, G. 1913 B, 340, 374.
- Versluys, J. 1912 B, 548, 550, 660, 687.  
     1919 A, 6, 8.  
 Wamich, P. 1913 A, 23 ("pelycosaurier").  
 Watson, D. M. S. 1912 B, 574.  
     1913 A, 74.  
     1914 A, 306 ("pelycosaurs").  
     1914 F, 776.  
     1917 B, 10, 53.  
     1917 C, 173, 184.  
     1921 B, 65, 75, 96, 98.  
 Wegner, R. N. 1922 A, 471.  
 Williston, S. W. 1908 B, 400.  
     1908 I, 628.  
     1909 A, 393, 395 ("pelycosaurs").  
     1910 B, 69.  
     1911 C, 631.  
     1911 F, 661.  
     1912 B, 639, 649.  
     1914 A, 16, 45.  
     1914 C, 66.  
     1914 D, 400.  
     1914 E, 121.  
     1916 B, 195, 197, 198 (Pelycosauria); 196  
         (Theromora, in part).  
     1917 B, 195, 197, 198.  
     1917 C, 414.  
     1925 B, 211, 233.  
 Zittel and Broili 1911 A, 193.  
     1923 A, 217, 231.  
 Zittel, Eastman, etc. 1902 A, 143.

## SPHENACODONTIDÆ Marsh.

- Unless otherwise indicated, the authors, as cited, use for this family the name Clepsydropsidæ. Sphenacodontidæ has priority.  
 Marsh, O. C. 1875 C, 410 (Sphenacodontidæ).  
 Hay, O. P. 1902 A, 431.  
 Abel, O. 1919 A, 356 (Sphenacodontidæ).  
 Arlitt, T. 1912 A, 656, 662.  
 Broili, F. 1904 A, 80, 101.  
 Broili and Fischer 1917 A, 412.  
 Case, E. C. 1903 B, 1.  
     1907 E, 36, 71 (Clepsydropsidæ); 37, 72,  
     73 (Clepsydropsinæ).  
     1908 C, 576, 578.  
     1915 A, 98, 102, 122.  
     1926 B, 193 (Sphenacodontidæ).  
 Case and Williston 1913 C, 70.  
 Cope, E. D. 1884 I, 38.  
 Hay, O. P. 1912 C, 562.  
 Huene, F. 1902 A, 69.  
     1925 I, 245.
- Jaekel, O. 1905 A, 192 ("naosauriden").  
 Lydekker, R. 1912 C, 110.  
 Nopcsa, F. 1922 A, 109 ("sphenacodontiden").  
     1923 H, 60, 63, 99, 123, 151 (Clepsydropsidæ,  
     with subfams. Clepsydropsinæ, Dimetro-  
     dontinæ, Sphenacodontinæ).  
     1928 A, 171 (Sphenacodontinæ, Clepsydropsinæ).  
 Osborn, H. F. 1903 D, 468.  
 Romer, A. S. 1922 B, 590.  
 Watson, D. M. S. 1917 C, 174.  
 Williston, S. W. 1910 F, 592.  
     1911 B, 71, 72 (Sphenacodontidæ).  
     1912 B, 649.  
     1915 C, 538 (Sphenacodontidæ).  
     1916 B, 224 (Sphenacodontidæ).  
 Zierler, F. E. 1905 A, 512 ("clepsydropsiden").  
 Zittel and Broili 1911 A, 194.  
     1923 A, 233.  
 Zittel, Eastman, etc. 1902 A, 148.

## SPHENACODON Marsh.

- Hay, O. P. 1902 A, 434.  
 Abel, O. 1919 A, 356.  
 Brauns, D. 1890 A, 152.  
 Case, E. C. 1915 A, 140.  
 Eastman, C. R. 1913 B, 678.  
 Gregory, W. K. 1920 A, 122, 230, fig. 39.  
 Hay, O. P. 1912 C, 562.  
 Huene, F. 1925 I, 221.  
 Matthew, W. D. 1908 D, 818.  
 Nopcsa, F. 1923 E, 1053.  
     1923 H, 52-54.  
 Romer, A. S. 1928 C, 257, 258.

Type *S. ferox* Marsh.

- Watson, D. M. S. 1917 C, 174.  
 Wegner, R. N. 1922 A, 456, 471, fig. 36.  
 Williston, S. W. 1911 B, 21, 78, pl. xxxv, fig. 5;  
     pl. xxxvii, fig. 3 (Sphenacodon or Ophiacodon).  
     1911 D, 379.  
     1914 D, 386.  
     1915 A, 578.  
     1915 C, 558.  
     1916 B, 225, fig. 71.  
     1917 B, 650.  
     1917 C, 416.  
     1918 B, 91, 104, pl. iv; text-figs. 15, 17, 18.

- Williston, S. W. 1925 A, 47, 101, figs. 33, 79.  
1925 B, 228, fig. 164b.  
Zittel and Broili 1923 A, 235.  
**Sphenacodon ferox** Marsh.  
Hay, O. P. 1902 A, 434.  
Brauns, D. 1890 A, 152.  
Broom, R. 1914 C, 141, fig. 7.  
Case, E. C. 1907 E, 66.  
1915 A, 98.  
Case and Williston 1913 C, 61, figs. 38-45.
- Huene, F. 1925 I, 236, text-fig. 8.  
Watson, D. M. S. 1921 B, 71, fig. 21.  
Williston, S. W. 1911 B, 78, pl. xxxiv, figs. 1, 2;  
pl. xxxvii, fig. 2.  
1917 B, 650, fig. 1.  
Williston and Case 1913 A, 6.  
Permian; New Mexico.  
**Sphenacodon** sp. indet.  
Case, E. C. 1916 B, 709. Permian-Carboniferous;  
New Mexico.

CLEPSYDROPS Cope. Type *C. collettii* Cope.

- Hay, O. P. 1902 A, 431.  
Abel, O. 1919 A, 356.  
Arlt, T. 1908 A, 570.  
Beede, J. W. 1922 A, 681.  
Broili, F. 1904 A, 80, 101.  
Broom, R. 1903 D, 286.  
Case, E. C. 1898 C, 624.  
1907 E, 21, 37, 73, pl. v, figs. 9, 10; pl. vii,  
figs. 4, 5, 9-13, 18, 19; pl. xxxiii, fig. 14.  
1908 C, 576.  
1908 D, 560, fig. 3.  
1915 A, 107, 111, 140.  
Cope, E. D. 1878 LL, 482.  
1880 U, 144, 162.  
Cummins, W. F. 1908 A, 745.  
Douthitt, H. 1917 A, 239.  
Gadow, H. 1901 B, 308.  
Hay, O. P. 1912 C, 562.  
Heilprin, A. 1887 A, 154.  
Huene, F. 1914 E, 499.  
1919 A, 180.  
1925 I, 245.  
Kingsley, J. S. 1900 A, 254.  
Koken, E. 1898 C, 328.  
Lydekker, R. 1912 C, 110.  
Matthew, W. D. 1908 B, 185.  
Nopsca, F. 1923 H, 52, 53, 70-82, 85.  
Osborn, H. F. 1903 D, 476.  
1917 B, 188.  
Perrier, E. 1920 A, 308.  
Romer, A. S. 1925 A, 180.  
1927 B, 682.  
Schuchert, C. 1910 A, 570.  
Thevenin, A. 1910 A, 56.  
Watson, D. M. S. 1917 C, 174.  
Williston, S. W. 1911 B, 72, pl. xxx, figs. 1-5,  
10, 11?; pls. xxxi, xxxii, figs. 1, 9?.  
1915 A, 578.  
1915 C, 558.  
1916 B, 225.  
1925 B, 233.  
Zittel and Broili 1911 A, 194.  
1923 A, 233.  
Zittel, Eastman, etc. 1902 A, 148.
- Clepsydrops collettii** Cope.  
Hay, O. P. 1902 A, 431.  
Case, E. C. 1900 A, 711, pl. ii, figs. 1-3.  
1907 E, 37, 40, pl. vii, figs. 1-3, 6-8.  
Dames, W. 1899 C, 366.  
Romer, A. S. 1925 A, 181.  
Williston, S. W. 1897 K, 395.  
Permian; Illinois.
- Clepsydrops natalis** Cope.  
Hay, O. P. 1902 A, 431.  
Beede, J. W. 1907 A, 118.  
Case, E. C. 1903 A, 92, figs. 6, 7.  
1907 E, 42, 90, 96, pl. iv, figs. 7, 8; pl. v,  
figs. 1-5, 7; pl. vi; text-fig. 26a.  
1915 A, 98, 140, 157, text-fig. 27.  
Cope, E. D. 1878 LL, 482.  
Cummins, W. F. 1908 A, 743.  
Huene, F. 1911 D, 36, fig. 42.  
Thevenin, A. 1910 A, 58, fig. 33.  
Williston, S. W. 1910 F, 586.  
1911 B, 72, 73.  
Pennsylvanian (Upper); Illinois: Permian  
(Wichita, Clear Fork); Texas: (Garrison?);  
Kansas.
- Clepsydrops pedunculatus** Cope.  
Hay, O. P. 1902 A, 432.  
Case, E. C. 1900 A, 713, pl. ii, figs. 4, 5.  
1907 E, 41, pl. vii, figs. 14, 15.  
Cope and Matthew 1915 A, pl. iii, fig. 26 (This  
species?).  
Permian; Illinois.
- Clepsydrops vinslovii** Cope.  
Hay, O. P. 1902 A, 432.  
Case, E. C. 1900 A, 714, pl. ii, fig. 7.  
1907 E, 42, pl. vii, figs. 16, 17.  
Permian; Illinois.
- Clepsydrops** sp. indet.  
Phillips, W. B. 1912 A, 41 (Clepsydrops).  
Permian (Wichita); Texas.

DIMETRODON Cope. Type *D. incisivus* Cope.

- Hay, O. P. 1902 A, 432.  
Abel, O. 1919 A, 356.  
Ameghino, F. 1909 A, 49, fig. 33.  
Anonymous 1905 F, 7, fig. 2.  
1912 A, 519.  
Arlt, T. 1908 A, 570.  
Beede, J. W. 1922 A, 681.  
Boas, J. E. V. 1914 C, 262.  
Broili, F. 1904 A, 62, 102.
- Broili, F. 1904 C, 270.  
1926 C, 36, fig. 10 (Naosaurus).  
Broom, R. 1901 A, 183.  
1903 D, 286, 291.  
1906 B, 594.  
1908 A, 1056.  
1910 A, 224, fig. 20.  
1910 C, 473.  
1913 K, 12.

- Broom, R. 1914 C, 136, 137, figs. 3, 4, 5.  
 1915 C, 9.  
 1922 B, 458.
- Case, E. C. 1897 C, 594.  
 1898 C, 623.  
 1902 A, 48.  
 1902 C, 258.  
 1903 B, 3.  
 1903 C, 398.  
 1904 A, 304.  
 1904 B, 312, fig. 1.  
 1905 C, 5.  
 1907 E, 43, 74, 95, pl. xiv, fig. 8; pl. xv, figs. 1, 4; pl. xxvii, figs. 11-13; pl. xxxiii, figs. 6, 10, 15; text-figs. 25, 41.  
 1908 D, 560, figs. 4-6.  
 1914 B, 117.  
 1914 C, 213, fig. 4.  
 1915 A, 107, 108, 111-113, 115, 141.  
 1919 B, 200.  
 1924 B, 7.
- Case and Williston 1913 C, 62, 68.
- Cummins, W. F. 1908 A, 745.
- Fejérváry, G. J. 1921 C, 9.
- Fuchs, H. 1906 A, 13, 73.  
 1909 B, 130.  
 1911 B, 377, fig. 10.
- Gadow, H. 1901 B, 308.
- Geol. Mag. 1912 A, 519.
- Gilmore, C. W. 1918 B, 58 ("Dimetrodon").  
 1919 B, 20.  
 1919 D, 525.  
 1920 C, 278.  
 1926 A, 29.
- Gregory, W. K. 1913 E, 28.  
 1915 D, 375, fig. 15.  
 1920 B, 230.  
 1926 A, 206.
- Gregory and Camp 1918 A, 522.
- Hanson, F. B. 1920 B, 338, 337.
- Haughton, S. H. 1918 A, 205, 214.
- Healprin, A. 1887 A, 154.
- Heim, A. 1905 A, 194.
- Hoffmann, C. K. 1890 B, 1802.
- Huene, F. 1902 A, 35.  
 1905 A, 538, fig. 34.  
 1911 D, 30, fig. 31.  
 1913 B, 356, 373.  
 1913 D, 519, figs. 1-4.  
 1919 A, 178.  
 1925 I, 221.  
 1926 I, 52 (Dimetrodon); 55 (Naosaurus).
- Jaekel, O. 1905 A, 193, fig. 1.  
 1910 B, 526.  
 1910 C, 332.  
 1911 A, 144, fig. 157 (Embolophorus).
- Kingsley, J. S. 1925 A, 144, 253, figs. 153, 268 (Dimetrodon); 45, fig. 51 (Naosaurus).
- Koken, E. 1898 C, 328.
- Lakjer, T. 1927 A, 317.
- Lankester, E. R. 1905 A, 210, fig. 152.
- Lydekker, R. 1915 A, 237.  
 1915 C, 635.
- Matthew, W. D. 1907 E, 36, figs. 1, 2 ("Naosaurus").  
 1908 B, 184.  
 1908 D, 817, 818.
- Matthew, W. D. 1909 G, 91, fig. 1.  
 1923 C, 404.
- Miner, R. W. 1925 A, 183, fig. 20.
- Moodie, R. L. 1912 E, 34.  
 1917 B, 332, fig. 5.  
 1918 C, 267, fig. 7.  
 1921 A, 333 ("This genus?").  
 1923 B, 116, pls. xiv, xv.  
 1926 A, 67, 84, 94, pl. xii; text-fig. 6.
- Nopcsa, F. 1923 E, 1053.  
 1923 H, 12, 51-55, 58, 59, 70, 85, 90, 153, 170, pl. ii, fig. 2.  
 1926 A, 636, 639; text-fig. 3.
- Osborn, H. F. 1903 D, 476, fig. 13.  
 1907 D, 265.  
 1917 B, 188, 189, fig.  
 1918 D, 685.
- Perrier, E. 1920 A, 308.
- Pompeckij, J. F. 1925 A, 17.
- Reynolds, S. H. 1897 A, 276.
- Rogers, A. F. 1924 A, 546, pl. xxix, fig. 1 (Naosaurus).
- Romer, A. S. 1922 A, 40, fig. 1.  
 1922 B, *passim*, pls. xxviii-xxx; xxxii; xxxv; xxxvi; xxxviii-xlvi; text-figs. 2, 3, 6, 7.  
 1923 C, 605, 608, fig. 2.  
 1924 C, 98.  
 1926 A, 59.  
 1927 B, 673, figs. 6-9.  
 1927 C, 231, fig. 1.  
 1928 C, 257.
- Schuchert, C. 1910 A, 570.
- Schuchert and Levene 1927 A, 292, fig.
- Sewertzoff, A. N. 1908 A, 251, fig. 23.
- Sixta, V. 1905 A, 675.
- Stappenbeck, R. 1905 A, 388.
- Steiner, H. 1921 A, 537.
- Sternberg, C. H. 1903 E, 96.  
 1909 C, 217.
- Stromer, E. 1915 B, 20.
- Thevenin, A. 1909 A, 1225.  
 1910 A, 55.
- Thyng, F. W. 1906 A, 54, fig. L.
- Tornier, G. 1913 B, 341, fig. 10.
- Versluys, J. 1910 B, 200.  
 1912 A, 499.  
 1912 B, 550, 585, fig. 2.
- Watson, D. M. S. 1912 B, 574, fig. 1.  
 1913 A, 74.  
 1914 A, 306.  
 1914 B, 85.  
 1914 D, 178.  
 1914 F, 777.  
 1914 H, 1014.  
 1914 J, 1026, fig. 4.  
 1916 A, 317, 343.  
 1916 D, 645.  
 1917 B, 11, fig. 4.  
 1917 C, 174, 184.  
 1919 A, 293, fig. 15.  
 1921 B, 65, 70, 73, 75, 91.
- Wegner, R. N. 1922 A, 464.
- Williston, S. W. 1904 B, 177, text-fig. 5.  
 1908 A, 148.  
 1910 A, 267.  
 1910 B, 75.

- Williston, S. W. 1910 F, 586.  
 1911 B, 54, 76.  
 1911 D, 379.  
 1911 F, 662, 663.  
 1914 A, 36, figs. 19, 28.  
 1914 C, 67.  
 1914 D, 386, 414, 415, fig. 14.  
 1915 A, 578.  
 1915 C, 556, 558, figs. 3, 4.  
 1916 A, 173.  
 1916 B, 234, figs. 66-70.  
 1917 B, 650.  
 1917 C, 415.  
 1918 A, 76, figs. 1, 3.  
 1918 B, 95, fig. 16.  
 1925 A, 25, 98, 101, 102, 104, 112, 133, figs. 11, 76, 79, 106, 114 (*Dimetrodon*); 158, fig. 129 (*Naosaurus*).  
 1925 B, 229, 230, 233, figs. 165, 166 (*Dimetrodon*); 233 (*Naosaurus*).  
 Williston and Case 1913 B, 42.  
 1913 D, 80, 81.  
 Woodward, A. S. 1922 C, 27.  
 Zittel and Broili 1911 A, 194.  
 1923 A, 234.  
 Zittel, Eastman, etc. 1902 A, 148.  
***Dimetrodon dollovisianus* (Cope).**  
 Hay, O. P. 1902 A, 433 (*Embolophorus*).  
 Beede, J. W. 1907 A, 119 (*Embolophorus*).  
 Broili, F. 1904 A, 89, pl. vii, fig. 2 (*Embolophorus*).  
 1904 C, 273 (*Embolophorus*).  
 Case, E. C. 1902 B, 67 (*Embolophorus*. This species?).  
 1903 B, 1, figs. 1, 3-22 (*Embolophorus*).  
 1903 C, 398, fig. 4 (*Embolophorus*).  
 1905 C, 6.  
 1907 E, 51, 75, 96, 128, pl. xvi, figs. 8-10; pl. xxiii, figs. 1, 2; pl. xxiv, fig. 1; text-figs. 35, 39, 40, 54, 56.  
 1915 A, 98.  
 Cummins, W. F. 1908 A, 740, 741, 743.  
 Gadow, H. 1896 A, 41, fig. 39 (*Embolophorus dollovisianus*).  
 Huene, F. 1905 A, 337, figs. 21, 23, 24, 29, 45, 46 (*Embolophorus*).  
 1911 D, 35.  
 Romer, A. S. 1927 B, 674, figs. 1-5 (This species?).  
 Sewertzoff, A. N. 1908 A, 251, 293 (*Embolophorus*).  
 Stappenbeck, R. 1905 A, 388, 420 (*Embolophorus*).  
 Zittel and Broili 1923 A, 234, fig. 334.  
 Permian (Wichita, Clear Fork); Texas.  
***Dimetrodon gignanhomogenes* Case.**  
 Case, E. C. 1907 E, 47, 74, 123, pl. xxi, fig. 9; pl. xxii; pl. xxiv, fig. 2; text-figs. 14, 36, 51-53.  
 1915 A, 98.  
 Case and Williston 1913 C, 67.  
 Cummins, W. F. 1908 A, 740, 744.  
 Permian (Clear Fork); Texas.  
***Dimetrodon gigas* Cope.**  
 Hay, O. P. 1902 A, 432.  
 Bassler, R. S. 1919 A, 61.  
 Beede, J. W. 1907 A, 118.  
 Broili, F. 1904 A, 81.  
 Broili, F. 1912 A, 153.  
 Case, E. C. 1904 A, 304, figs. 1-5.  
 1904 C, 253 ("pelycosaur").  
 1905 C, 6, pls. ii, iv; pl. vi, fig. 2; pl. vii; text-figs. 3-5.  
 1907 E, 46, 47, 74, 96, 116, pls. xviii-xix; pl. xxi, figs. 1-8; text-figs. 14, 30, 31, 34, 37, 42-50.  
 1915 A, 98.  
 1915 C, 475, figs. 3-5.  
 1924 B, 7, figs. 1-4.  
 Cummins, W. F. 1908 A, 740-743.  
 Gaupp, E. 1911 D, 641.  
 Gilmore, C. W. 1919 B, 20, figs. 2, 3.  
 1919 D, 525, pls. lxx-lxxiii; text-figs. 1-8.  
 1920 C, 278.  
 1921 F, 66 ("Dimetrodon").  
 Gregory and Camp 1918 A, pl. xlviii.  
 Huene, F. 1905 A, 345, fig. 37.  
 1909 F, 535, fig. 3.  
 1911 D, 30, figs. 30, 32, 37.  
 Joleaud, L. 1920 A, 492, fig. 7.  
 Romer, A. S. 1927 B, 683.  
 Steiner, H. 1922 A, 341.  
 Tornier, G. 1913 B, 343, fig. 12.  
 Versluys, J. 1912 B, 661, figs. t<sup>2</sup>, u<sup>2</sup>.  
 Watson, D. M. S. 1921 B, 71, fig. 21.  
 Wegner, R. N. 1922 A, 471.  
 Woodward, A. S. 1920 A, 118, fig. 1.  
 Zittel and Broili 1911 A, 195, fig. 327.  
 1923 A, 234, fig. 336.  
 Permian (Wichita?, Clear Fork); Texas: (Enid); Oklahoma.  
***Dimetrodon incisivus* Cope.**  
 Hay, O. P. 1902 A, 431 (*Clepsydraps limbatus*); 432 (*Dimetrodon incisivus*; *D. rectiformis*; *D. semiradicatus*).  
 Abel, O. 1912 F, 387, fig. 274.  
 1919 A, 357, figs. 275, 276, 278.  
 1920 A, 361.  
 1921 A, 304, fig. 117.  
 Ballou, W. 1897 A, 16, fig. 13.  
 Beede, J. W. 1907 A, 118 (*D. incisivus*, *D. rectiformis*); 120 (*D. semiradicatus*).  
 Broili, F. 1904 A, 91, 94, pl. xiii, fig. 4.  
 1904 C, 273, pl. xvii, figs. 1-3.  
 Broom, R. 1910 A, 225, fig. 19.  
 1913 G, 337, pl.  
 Case, E. C. 1897 C, 594.  
 1903 A, 94, fig. 8.  
 1904 A, 304, fig. 6.  
 1904 B, 312.  
 1905 C, 6, pls. i, iii; pl. v, fig. 1; pl. vi, fig. 1 (This species?); pl. v, figs. 2-7; text-figs. 1, 2.  
 1907 E, 39, 47, 75, 127, pls. viii-xii; pl. xiii, figs. 2, 3; pl. xiv, figs. 1-7, 9; pl. xv, figs. 2, 3, 5; pl. xvi, figs. 1-7; pl. xx; pl. xxiii, fig. 3; pl. xxvi, fig. 6; pl. xxxiii, figs. 1, 9; text-figs. 4, 27-29, 32, 33, 38, 41, 57; 40, 127 (*Clepsydraps limbatus* a syn.).  
 1910 C, 190, pls. xv-xix; text-figs. 1-4.  
 1915 A, 98, 141, 142, 157, text-fig. 28.  
 1913 C, 474, figs. 1, 2, 6.  
 1916 A, 18 ("Dimetrodon").  
 1924 B, 7, fig. 5.



- Cope and Matthew 1915 A, xxii  
 Cummins, W. F. 1908 A, 740, 741 (D. incisivus);  
 743 (Clepsydraps limbatus).  
 Gilmore, C. W. 1919 B, 20.  
 1919 D, 532.  
 Gregory, W. K. 1922 A, 14, fig. 8.  
 Huene, F. 1911 D, 29, figs. 34-36, 38, 39, 41.  
 1913 B, 356, figs. 42-47.  
 1919 A, 178, pl. vi.  
 Lakjer, T. 1927 A, 316, fig. 123.  
 Matthew, W. D. 1908 D, 818 (D. incisivus).  
 Clepsydraps limbatus).  
 Stappenbeck, R. 1905 A, 388.  
 Stromer, E. 1912 A, 117, fig. 115.  
 Sushkin, P. P. 1927 A, 297, 308, figs. 27, 28, 38.  
 Thevenin, H. 1910 A, 56.  
 Versluys, J. 1910 B, 200.  
 1912 B, 551, figs. f, u.  
 1919 A, 9, fig. 7.  
 Williston, S. W. 1910 F, 596, text-fig. 3.  
 1911 B, 76, text-fig. 24.  
 1914 D, 413, fig. 13.  
 1925 A, 30, fig. 16.  
 Woodward, H. 1904 B, 142.  
 Zittel and Broili 1911 A, 195, fig. 326.  
 1923 A, 234, fig. 335.  
 Permian (Wichita, Clear Fork); Texas:  
 (Enid); Oklahoma.
- Dimetrodon longiramus Case.**  
 Case, E. C. 1907 E, 56, 57, 75, text-figs. 15, 16.  
 1915 A, 99, pl. xxii, fig. 11.  
 Cummins, W. F. 1908 A, 741.  
 Permian (Wichita); Texas.

## TETRACERATOPS Matthew.

- Matthew, W. D. 1908 B, 183.  
 Abel, O. 1912 F, 578.  
 Broili and Fischer 1917 A, 413.  
 Huene, F. 1925 I, 246.  
 Lull, R. S. 1909 B, 93.  
 Nopcsa, F. 1923 H, 52, 169, 170, 188.  
 1928 A, 171.  
 Watson, D. M. S. 1917 C, 174.  
 Williston, S. W. 1915 A, 578.  
 1916 B, 225, 234.  
 1925 A, 9.  
 1925 B, 233.

## BATHYGNATHUS Leidy.

- Hay, O. P. 1902 A, 491.  
 Brauns, D. 1890 A, 162.  
 Case, E. C. 1905 D, 52.  
 Heilprin, A. 1887 A, 160.  
 Huene, F. 1905 A, 343.  
 1914 G, 20, 21.  
 1925 I, 241.  
 Huxley, T. H. 1869 K, 146.  
 1870 G, 479.  
 1870 H, 507.  
 1870 I, 23.  
 Nopcsa, F. 1901 A, 250.  
 1923 H, 52.  
 1928 A, 171.  
 Watson, D. M. S. 1917 C, 175.  
 Williston, S. W. 1916 B, 235.  
 1925 B, 233.

**Dimetrodon macrospendylus (Cope).**

- Hay, O. P. 1902 A, 431 (Clepsydraps).  
 Abel, O. 1919 A, 359, fig. 277.  
 Beede, J. W. 1907 A, 119 (Clepsydraps).  
 Case, E. C. 1907 E, 47, 52, 75, 131, pl. xxv, figs.  
 1, 3-5; pl. xxvi; text-figs. 14, 58, 59.  
 1915 A, 99.  
 Cummins, W. F. 1908 A, 741.  
 Huene, F. 1911 D, 35.  
 Permian (Wichita); Texas.

**Dimetrodon obtusidens (Cope).**

- Hay, O. P. 1902 A, 433 (Theropleura).  
 Beede, J. W. 1907 A, 119 (Theropleura).  
 Case, E. C. 1907 E, 54, 75, 134, pl. xxv, figs. 2,  
 6; pl. xxxiii, figs. 2, 11; text-figs. 60, 61.  
 1915 A, 99.  
 Permian (Wichita, Clear Fork?); Texas.

**Dimetrodon platycentrus Case.**

- Case, E. C. 1907 E, 54, 75, 134.  
 1915 A, 99.  
 Cummins, W. F. 1908 A, 741.  
 Permian (Wichita); Texas.

**Dimetrodon sp. indet.**

- Phillips, W. B. 1912 A, 41. Permian (Wichita);  
 Texas.  
 Romer, A. S. 1927 A, 232. Permian; Texas.  
 Watson, D. M. S. 1919 A, 298, fig. 15.  
 Wegman, C. H. 1915 A, 25, 26. Permian  
 (Wichita); Oklahoma.

Type *T. insignis* Matthew.

- Zittel and Broili 1911 A, 196.  
 1923 A, 235.

**Tetraceratops insignis Matthew.**

- Matthew, W. D. 1908 B, 183, fig. 1.  
 Abel, O. 1912 F, 577, fig. 447.  
 1919 A, 361, fig. 279.  
 Case, E. C. 1915 A, 99.  
 Huene, F. 1925 I, 246, text-fig. 24.  
 Lydekker, R. 1909 C, 487.  
 Permian (Clear Fork?, Wichita?); Texas.

Type *B. borealis* Leidy.

- Zittel and Broili 1911 A, 196.  
**Bathygnathus borealis Leidy.**  
 Hay, O. P. 1902 A, 491.  
 Case, E. C. 1905 D, 52.  
 1907 E, 63.  
 1915 A, 86, 99.  
 Ellis, R. W. 1906 A, 370.  
 Giebel, C. G. 1855 C, 139.  
 Huene, F. 1906 B, 101.  
 Jäger, G. 1856 A, 959 (Pachygnathus).  
 Lambe, L. M. 1904 C, 14, 20, 36, 48.  
 1912 A, 6.  
 Ruschenberger and Tryon 1879 A, 13.  
 Watson, L. W. 1912 A, 146-148.  
 Permian? or Triassic?; Prince Edward  
 Island.

## Suborder EDAPHOSAURIFORMES, new name.

- Case, E. C. 1915 A, 99, 122, 142 (Edaphosauria).  
 Huene, F. 1925 D, 229 (Edaphosauria).  
 Jaekel, O. 1910 B, 527 (Naosauri).  
 1910 C, 332 (Naosauri).  
 1911 A, 144 (Naosauri).
- Nopsca, F. 1922 A, 109 ("edaphosaurier").  
 1923 H, 60, tab., pl. II, fig. 3 (Edaphosauria); 123 (Edaphosauroidae).  
 1928 A, 172 (Edaphosauroidae).  
 Williston, S. W. 1916 B, 195 (Edaphosauria).  
 1925 B, 233 (Edaphosauria).

## EDAPHOSAURIDÆ Cope.

- Cope, E. D. 1882 B, 450.  
 Hay, O. P. 1902 A, 431 (Clepsydropidæ).  
 Abel, O. 1919 A, 367.  
 Arldt, T. 1908 A, 570 ("edaphosauriden," "naosauriden").  
 1912 A, 656.  
 Case, E. C. 1906 A, 19.  
 1907 E, 68, 72 (Edaphosauridæ); 58, 72, 74, 138 (Naosaurinæ).  
 1908 C, 578 (Naosauridæ).  
 1915 A, 99, 102, 122.  
 1923 A, 517.  
 1926 B, 193.  
 Huene, F. 1925 I, 245.
- Nopsca, F. 1923 H, 60, 123, 151, 170, 188.  
 1928 A, 172.  
 Romer, A. S. 1922 B, 590.  
 Watson, D. M. S. 1917 C, 174.  
 Williston, S. W. 1911 B, 71.  
 1911 C, 631.  
 1912 B, 649.  
 1915 C, 559.  
 1916 B, 230.  
 1918 B, 99.  
 1925 A, 46.  
 1925 B, 230.  
 Williston and Case 1913 D, 71.  
 Zittel and Broili 1911 A, 194 (Clepsydropidæ).  
 1923 A, 235.

EDAPHOSAURUS Cope. Type *E. pogonias* Cope.

- Hay, O. P. 1902 A, 432 (Naosaurus); 433 (Edaphosaurus).  
 Abel, O. 1908 D (217), (Naosaurus).  
 1919 A, 370 (Edaphosaurus); 904 (Naosaurus).  
 1920 A, 362 (Naosaurus).  
 Anonymous 1907 B, 36, figs. 1, 2 (Naosaurus).  
 1912 A, 519.  
 Beasley, W. L. 1907 A, 368, 5 figs. (Naosaurus).  
 Boas, J. E. V. 1914 C, 282, fig. 39.  
 Branson, E. B. 1911 A, 137.  
 Broili, F. 1904 A, 102 (Edaphosaurus, Naosaurus).  
 1908 F, 61 (Naosaurus).  
 1911 A, 132 (Naosaurus).  
 1924 A, 11.  
 Broom, R. 1903 D, 291 (Naosaurus).  
 1910 A, 221.  
 1913 K, 12.  
 1914 C, 137.  
 Case, E. C. 1898 C, 624 (Naosaurus).  
 1902 B, 63, 66 (Naosaurus).  
 1904 A, 304 (Naosaurus).  
 1906 A, 19.  
 1907 E, 69, 144, 155, text-fig. 65 (Edaphosaurus); 58, 75, 138, 145, pl. xxx, fig. 3; pl. xxxii, figs. 4, 7 (Naosaurus).  
 1908 B, 233 (Naosaurus).  
 1908 C, 530 (Naosaurus).  
 1908 D, 561, figs. 7-10 (Naosaurus).  
 1914 B, 117 (Edaphosaurus, Naosaurus).  
 1914 C, 213, fig. 3.  
 1915 A, 11, 112, 115, 122, 142.  
 1915 D, 797 [E. (Naosaurus)].  
 1918 A, 502.  
 1918 B, 1.  
 1919 B, 271.  
 1926 B, 193.  
 Cummins, W. F. 1908 A, 745 (Edaphosaurus, Naosaurus).
- Depéret, C. 1912 A, 704 (Naosaurus).  
 Douthitt, H. 1917 A, 239.  
 Drevermann, F. 1915 A, 405 (Edaphosaurus, Naosaurus).  
 Gadow, H. 1901 B, 308 (Naosaurus).  
 Geol. Mag. 1912 A, 519.  
 Gilmore, C. W. 1926 A, 29.  
 Gregory, W. K. 1920 A, 122, 230, fig. 37 (Naosaurus); 230 (Edaphosaurus).  
 Hem, A. 1905 A, 194 (Naosaurus).  
 Huene, F. 1905 A, 337 (Naosaurus).  
 1908 A, 433 (Naosaurus).  
 1913 B, 363, 377.  
 1919 A, 178 (Naosaurus a syn.).  
 1922 G, 451.  
 1925 I, 223.  
 1926 I, 55.  
 Jaekel, O. 1905 A, 193, fig. 2 (Naosaurus).  
 1910 B, 526, fig. 1 (Naosaurus).  
 1910 C, 332 (Naosaurus).  
 1911 A, 145, fig. 153 (Naosaurus).  
 1911 D, 36 (Naosaurus).  
 Knipe, H. R. 1912 A, 63, fig.  
 Loomis, F. B. 1921 A, 194.  
 Lucas, F. A. 1902 A, 132, fig. (Naosaurus).  
 Lull, R. S. 1910 A, 5 (Naosaurus).  
 1917 B, 221.  
 Lydekker, R. 1912 C, 19 (Naosaurus).  
 1915 C, 635.  
 Matthew, W. D. 1908 D, 817 (Naosaurus).  
 Moodie, R. L. 1923 B, 561, pls. xiv, xvii.  
 1926 A, 67.  
 Nat. Sci. 1898 A, 230 (Naosaurus).  
 Nopsca, F. 1923 H, 12, 51-55, 58, 59, 68, 153, 193, pl. II, fig. 3.  
 1928 A, 172 (Edaphosaurus, Naosaurus).  
 Osborn, H. F. 1903 D, 476.  
 1907 D, 263, fig. 2 (Naosaurus).  
 1917 B, 221 (Naosaurus).  
 Pompeckj, J. F. 1925 A, 17.

- Romer, A. S. 1922 B, 547, 557, pl. xxxvii (*Edaphosaurus*); pl. xlvii (*Naosaurus*).  
 1926 A, 59.  
 1927 B, 678, 680.  
 1928 C, 257, 258.
- Schuchert, C. 1910 A, 570 (*Edaphosaurus*, *Naosaurus*).
- Sternberg, C. H. 1909 C, 227 (*Naosaurus*).  
 1917 A, 185 ("reptile").
- Stromer, E. 1915 B, 18, 20 (*Edaphosaurus*, *Naosaurus*).
- Thevenin, A. 1909 A, 1225 (*Naosaurus*).  
 1910 A, 56.
- Tornier, G. 1913 B, 341, figs. 10, 11.
- Versluys, J. 1912 B, 588, 664.  
 1919 A, 10, 11, 25.
- Watson, D. M. S. 1913 A, 74.  
 1914 D, 179.  
 1914 F, 777.  
 1916 D, 637, 647.  
 1917 C, 174, 184 (*Edaphosaurus*, *Naosaurus*).
- Williston, S. W. 1910 B, 82.  
 1910 F, 586 (*Naosaurus*).  
 1911 B, 75, text-fig. 23 (*Naosaurus*); 77 (*Edaphosaurus*).  
 1911 C, 631.  
 1911 D, 330 (*Naosaurus*).  
 1914 A, 23, fig. 7.  
 1915 A, 575, 576, 578.  
 1915 C, 559.  
 1916 B, 231, figs. 80, 81 (*Edaphosaurus*); 231 (*Naosaurus*).  
 1918 B, 95, figs. 8, 14 (*Edaphosaurus*); 95 (*Naosaurus*).  
 1925 A, 24, 127, fig. 98.
- Williston and Case 1913 D, 71, 74, 81, figs. 50, 51 (*Edaphosaurus*, *Naosaurus*).
- Zittel and Broili 1911 A, 195 (*Naosaurus*); 196 (*Edaphosaurus*).  
 1923 A, 235 (*Edaphosaurus*, *Naosaurus*).
- Zittel, Eastman, etc. 1902 A, 149 (*Naosaurus*).
- Edaphosaurus claviger* (Cope).**  
 Unless otherwise indicated the authors, as quoted, refer this species to *Naosaurus*.  
 Hay, O. P. 1902 A, 432.  
 Abel, O. 1909 F, 455, fig. 1.  
 1912 F, 571, fig. 444.  
 1919 A, 372, fig. 292.
- Ballou, W. H. 1897 A, 13, 16, fig.
- Beede, J. W. 1907 A, 120.
- Broili, F. 1904 C, 272.
- Case, E. C. 1907 E, 59, 75, 139, pl. xxviii, fig. 1; pl. xxix, fig. 1; pl. xxx, figs. 1, 2; pls. xxxi, xxxv; text-figs. 63-65.  
 1915 A, 99 (*Edaphosaurus*).
- Cummins, W. F. 1908 A, 743, 744.
- Gadow, H. 1901 B, 308.
- Huene, F. 1925 I, 242, text-figs. 18, 19 (*Naosaurus*).
- Jaekel, O. 1910 B, 527.
- Lydekker, R. 1912 C, 110.
- Miner, R. W. 1925 A, 183, fig. 20 (*Naosaurus*).
- Osborn, H. F. 1904 F, 20.  
 1907 D, 265, pl. ix.
- Schmalhausen, J. 1917 A, 107, fig. 7.
- Stappenbeck, R. 1905 A, 388.
- Sternberg, C. H. 1909 C, 234, figs. 32, 33.
- Williston, S. W. 1910 B, 95, 96, figs. 10-14.
- Williston and Case 1913 D, 71, 72 (*Edaphosaurus*).
- Woodward, A. S. 1910 C, 12, fig. 1.  
 1922 C, 27, fig. 23 (*Naosaurus*).
- Zittel and Broili 1911 A, 195, fig. 328.  
 1923 A, 235, fig. 337.
- Zittel, Eastman, etc. 1902 A, 149, fig. 239.  
 Permian (Wichita, Clear Fork); Texas: (Enid); Oklahoma.
- Edaphosaurus cruciger* (Cope).**  
 Hay, O. P. 1902 A, 432 (*Naosaurus*).  
 Abel, O. 1909 F, 476 (*Naosaurus*).  
 1919 A, 370, fig. 290.  
 1920 A, 361, fig. 570.
- Beede, J. W. 1907 A, 119 [N. (*Dimetrodon*)].
- Case, E. C. 1907 E, 60, 75, 146 (*Naosaurus*).  
 1914 B, 117-121, figure.  
 1915 A, 99, 143, 157, 176, text-figs. 29, 50.  
 1915 C, 474.  
 1918 B, 1, pls. i, ii.
- Cummins, W. F. 1908 A, 740, 741, 743 (*Naosaurus*).  
 Huene, F. 1925 I, 243, text-fig. 20.
- Jaekel, O. 1910 B, 534 (*Naosaurus*).
- Lull, R. S. 1917 B, 498, fig. 149.
- Lydekker, R. 1915 C, 635 (*E. cruciger*).
- Moodie, R. L. 1923 B, 116, fig. 8, pl. xv.
- Osborn, H. F. 1917 B, 188, 189, fig.
- Williston and Case 1913 D, 72.  
 Permian (Wichita, Clear Fork); Texas.
- Edaphosaurus microdus* Cope.**  
 Hay, O. P. 1902 A, 432 (*Naosaurus*).  
 Abel, O. 1908 D (216), fig. 4 (*Naosaurus*).  
 1919 A, 371, figs. 291, 292 (*Naosaurus*).
- Beede, J. W. 1907 A, 119 (*Naosaurus*).
- Broili, F. 1904 A, 81 (Syn. of *Naosaurus claviger*).
- Case, E. C. 1907 E, 61, 71 (*Edaphosaurus*); 75, 146, pl. xxviii, fig. 3; pl. xxix, fig. 2; pl. xxxii; text-fig. 65 (*Naosaurus*).
- Cummins, W. F. 1908 A, 743 (*Naosaurus*).
- Williston and Case 1913 D, 72.  
 Permian; Texas.
- Edaphosaurus novomexicanus* Williston and Case.**  
 Williston and Case 1913 A, 6.  
 Case, E. C. 1915 A, 99, 130, 144, 151.  
 Williston, S. W. 1925 A, 128, fig. 92.  
 Williston and Case 1913 D, 72, 74, text-figs. 47-49.  
 Permian; New Mexico.
- Edaphosaurus pogonias* Cope.**  
 Hay, O. P. 1902 A, 433.  
 Abel, O. 1919 A, 369, fig. 289.  
 Beede, J. W. 1907 A, 119.  
 Broom, R. 1910 A, 221, figs. 16-18.  
 Case, E. C. 1903 A, 91, figs. 4, 5.  
 1906 A, 19, pl. vii; text-figs. 1-4, 6.  
 1907 E, 69, 151, pl. xxxiv; text-figs. 66-71.  
 1914 B, 117.  
 1915 A, 99.
- Cummins, W. F. 1908 A, 743.  
 Dreverman, F. 1915 A, 2405.  
 Huene, F. 1912 B, 363, figs. 48, 49 [*Naosaurus* (*Edaphosaurus*)].  
 1925 I, 242, text-fig. 21.

Versluys, J. 1919 A, 10, fig. 8 (This genus?).  
 Watson, D. M. S. 1916 D, 637, figs. 1-4.  
 Williston, S. W. 1918 B, 95.  
 Williston and Case 1913 D, 72, fig. 46 (This species?).

Permian (Wichita, Clear Fork); Texas.

### **Edaphosaurus raymondi** Case.

Case, E. C. 1908 B, 238, pl. lix, fig. 3; text-fig. 7 (Naosaurus?).

1915 A, 99, 144.

Pennsylvanian (Upper); Pennsylvania.

### **Edaphosaurus** sp. indet.

Case, E. C. 1902 B, 63, 66 (Naosaurus). Permian; Oklahoma.

Phillips, W. B. 1912 A, 41 (Naosaurus). Permian (Wichita); Texas.

Romer, A. S. 1927 A, 232. Permian; Texas.

Stauffer and Schroyer 1920 A, 142, 147, pl. xiii, figs. 45, 46. Permian (Creston Reds); Ohio.

## Suborder CASEIFORMES, new name.

The writers, as cited, employ the name Caseasauria.

Case, E. C. 1915 A, 99, 122, 144.

Nopcsa, F. 1923 H, 9.

Watson, D. M. S. 1917 C, 173.

Williston, S. W. 1912 B, 649.

1916 B, 195.

1925 B, 211, 233.

Zittel and Broili 1923 A, 233.

## CASEIDÆ Williston.

Williston, S. W. 1911 C, 631.

Abel, O. 1919 A, 364.

Ardt, T. 1912 A, 656.

Case, E. C. 1915 A, 99, 122.

1923 A, 517.

Eastman, C. R. 1912 C, 657.

Huene, F. 1913 B, 377.

1916 A, 63 ("caseiden").

1925 I, 245.

Nopcsa, F. 1922 A, 109.

1923 H, 60, 123, 151, 168.

1928 A, 171.

Williston, S. W. 1911 B, 71, 111.

1912 B, 649.

1915 C, 559.

1916 B, 228.

1925 B, 233.

Zittel and Broili 1923 A, 233.

## CASEA Williston. Type *C. broilii* Williston.

Williston, S. W. 1910 F, 590.

Anonymous 1912 A, 520.

Broom, R. 1913 K, 12.

Case, E. C. 1915 A, 102, 144.

Geol. Mag. 1912 A, 520.

Gregory, W. K. 1920 A, 230.

1926 A, 195, 196.

Hay, O. P. 1912 C, 563, 564.

Huene, F. 1925 I, 240.

Nopcsa, F. 1923 H, 56, 58, 59, 70, 193.

1928 A, 171.

Romer, A. S. 1928 C, 257, 258.

Steiner, H. 1921 A, 537.

1922 A, 341.

Versluys, J. 1919 A, 10.

Watson, D. M. S. 1914 G, 1005.

1917 C, 173, 184.

Williston, S. W. 1911 B, 112.

1911 C, 631.

1913 C, 745.

1914 A, 55, fig. 30.

1914 C, 68.

1914 D, 386, 403.

1914 E, 121 (Cesaa).

Williston, S. W. 1915 C, 559.

1916 B, 230, fig. 79.

1925 A, 167, fig. 135.

1925 B, 236, fig. 169b.

Zittel and Broili 1923 A, 238.

### **Cesaa broilii** Williston.

Williston, S. W. 1910 F, 590, text-fig. 1.

Abel, O. 1919 A, 368, fig. 238.

1920 A, 361, fig. 569.

Broili, F. 1926 C, 36, fig. 10.

Broom, R. 1921 A, 149, fig. 9.

Case, E. C. 1915 A, 99, 145, text-fig. 30.

Hay, O. P. 1912 C, 562.

Huene, F. 1925 I, 240, text-figs. 16, 17.

Osborn, H. F. 1918 D, 686.

Williston, S. W. 1911 B, 112, frontispiece, pls. xiv-xxiii; text-figs. 23-31.

1913 C, 745, fig. 2.

1914 C, 68, fig. 10.

1914 D, 404, figs. 9, 10.

1925 A, 51, 154, figs. 41, 42.

Permian (Clear Fork); Texas.

## TRICHASAURUS Williston. Type *Trispondylus texensis* Williston.

Williston, S. W. 1913 D, 366 (To replace *Trispondylus*, preoccupied).

Nopcsa, F. 1923 A, 171 (*Trichosaurus*).

Watson, D. M. S. 1914 M, 348 (*Trispondylus*).

1917 C, 173 (*Trispondylus*).

Williston, S. W. 1910 F, 592 (*Trispondylus*).

1911 B, 131 (*Trispondylus*).

1916 B, 230.

1925 B, 236.

Zittel and Broili 1923 A, 233.

### **Trichasaurus texensis** (Williston).

Williston, S. W. 1910 F, 592, text-fig. 2 (*Trispondylus*).

Case, E. C. 1915 A, 99.

Williston, S. W. 1911 B, 131, pl. xxiv, figs. 1, 2; pl. xxv; text-fig. 32 (*Trispondylus*).

Permian (Clear Fork); Texas.

## REPTILIA INCERTÆ SEDIS.

METAMOSAUROS Cope. Type *M. fossatus* Cope.

- Hay, O. P. 1902 A, 434.  
 Broili, F. 1904 A, 103 (Metarmosaurus).  
 Cummins, W. F. 1908 A, 745.  
 Nopcsa, F. 1923 H, 54.  
 Schuchert, C. 1910 A, 570.  
 Williston, S. W. 1916 B, 234.  
 1925 B, 236.

This genus is placed by Case in the Amphibia; by Williston in the Reptilia.

**Metamosaurus fossatus** Cope.

- Hay, O. P. 1902 A, 434.  
 Beede, J. W. 1907 A, 118.  
 Case, E. C. 1907 E, 65, text-figs. 18, 19.  
 1915 A, 97.  
 Cummins, W. F. 1908 A, 743.  
 Permian (Wichita); Texas.

EMBOLOPHORUS Cope. Type *E. fritillus* Cope.

- Hay, O. P. 1902 A, 433.  
 Broili, F. 1904 A, 62, 102.  
 1904 C, 270, 273.  
 Broom, R. 1903 D, 291.  
 1908 A, 1058.  
 Case, E. C. 1902 C, pl. ii, figs. 5-7 (This genus?).  
 1903 B, 2.  
 1907 E, 129, text-fig. 55.  
 Cummins, W. F. 1908 A, 745.  
 Drevermann, F. 1915 A, 403.  
 Gadow, H. 1896 A, 49.  
 Huene, F. 1902 A, 35, fig. 38.  
 1905 A, 338.  
 Nopcsa, F. 1928 A, 171.  
 Osborn, H. F. 1903 D, 475, fig. 12 (This genus?).  
 1904 H, 111, fig. 12.

- Schuchert, C. 1910 A, 570.  
 Stappenbeck, R. 1905 A, 410.  
 Williston, S. W. 1910 B, 234.  
 1910 F, 590.  
 1925 B, 236.

**Embolophorus fritillus** Cope.

- Hay, O. P. 1902 A, 433.  
 Beede, J. W. 1907 A, 119.  
 Case, E. C. 1903 B, 2.  
 1907 E, 65, pl. xxvii, fig. 16.  
 1915 A, 99.  
 Cummins, W. F. 1908 A, 743 (Embolobus, *errore*).  
 Williston, S. W. 1910 F, 590.  
 Permian (Wichita, Clear Fork?); Texas.

ARCHÆOBELUS Cope. Type *A. vellicatus* Cope.

- Hay, O. P. 1902 A, 433.  
 Broili, F. 1904 A, 80, 102.  
 Case, E. C. 1915 A, 99 (Archæobellus).  
 Williston, S. W. 1916 B, 234 (Archæobolis).  
 1925 B, 236 (Archæobolis).

**Archæobelus vellicatus** Cope.

- Hay, O. P. 1902 A, 433.  
 Case, E. C. 1900 A, 715, pl. iii, fig. 1.  
 1907 E, 28, pl. iv, fig. 6.  
 1915 A, 99.  
 Cope and Matthew 1915 A, pl. iii, fig. 13.  
 Pennsylvanian (Upper); Illinois.

DOLICHOBRACHIUM Williston. Type *D. gracile* Williston.

- Williston, S. W. 1904 D, 688.  
 Huene, F. 1926 I, 96.  
 Mehl, M. G. 1915 B, 521.  
 Williston, S. W. 1905 B, 340.  
 1914 A, 54.  
 1917 C, 412.  
 Zittel and Broili 1911 A, 194 (To Poliosauridæ).  
 1923 A, 344.

The systematic position of this genus is uncertain.

**Dolichobrachium gracile** Williston.

- Williston, S. W. 1904 D, 688, text-figs. 1, 2.  
 Huene, F. 1911 D, 50, fig. 56.  
 1926 E, 4.  
 1926 I, 73, 76.  
 Mehl, M. G. 1928 B, 141.  
 Upper Triassic (Popo Agie); Wyoming.

## Order THERAPSIDA Broom.

- Broom, R. 1905 C, 269.

Unless otherwise indicated the authors, as quoted, employ the name Therodontia.

- Abel, O. 1919 A, 415.  
 1920 A, 367.  
 1922 C, 588 ("theriodontier").  
 Arldt, T. 1907 D, 685.  
 1908 A, 571, 585.  
 Brauns, D. 1890 A, 182 ("theriodonten").  
 Broili, F. 1904 A, 70.  
 Broom, R. 1897 C, 277 ("theriodonts").

- Broom, R. 1901 A, 181 ("theriodonts").

- 1902 D, 551, 554.  
 1903 A, 343 ("theriodonts").  
 1903 D, 286, 290, 293.  
 1903 E, 136 ("theriodonts").  
 1903 G, 144 ("theriodonts").  
 1903 H, 147, 156.  
 1903 I, 554.  
 1904 A, 490 ("theriodonts").  
 1905 B, 214 ("theriodonts").  
 1905 E, 74 ("theriodonts").

- Broom, R. 1905 F, 40 ("theriodonts").  
 1906 E, 369 (Therapsida).  
 1907 C, 797 (Therocephalia and Cynodontia).  
 1908 A, 1048 (Therapsida).  
 1910 A, 198, 207, 228 (Therapsida).  
 1915 C, 8, 9, 10, 15, 21, 25.  
 1917 A, 977 (Therapsida).  
 1921 A, 148 ("therapsids").  
 1922 A, 21.  
 1923 A, 674.  
 1924 B, 46, 61, 62.  
 1924 C, 72.
- Broom and Houghton 1913 B, 26 (Therapsida).  
 Carus, V. 1875 A, 400 (Anomodontia).  
 Case, E. C. 1898 C, 622.  
 1926 B, 194.  
 Du Toit, P. J. 1910 A, 417.  
 Fuchs, H. 1911 B, 367.  
 1914 A, 29.  
 1920 B, 363, 368 ("therapsiden").  
 Gadow, H. 1901 B, 306.  
 Gaupp, E. 1911 D, 620 ("theriodonten").  
 1913 A, 98.  
 Gregory, W. K. 1910 C, 298 ("theriodonts").  
 1910 D, 600.  
 1913 E, 4, 25, 37.  
 1916 D, 105.  
 1917 C, 977.  
 1920 A, 131, 231.  
 1922 A, 12, 14, 81.  
 1926 A, 201, 202 ("therapsids").  
 Gregory and Adams 1915 A, 763 ("theriodonts").  
 Houghton, S. H. 1918 A, 175.  
 Heilprin, A. 1887 A, 159.  
 Howes and Swinnerton 1901 A, 3.  
 Huene, F. 1911 D, 41, 58 (Therapsida).  
 1925 D, 229 (Therapsida, Theriodontia).  
 1926 I.  
 Jaekel, O. 1904 C, 172.  
 1905 B, 66 ("theriodontier").  
 1910 D, 114, 115, 121.  
 Lydekker, R. 1912 C, 17, 26.  
 Matthew, W. D. 1928 B, 948 ("theromorph reptiles").
- Nopcsa, F. 1922 A, 110, 111, 116 ("theriodontier").  
 1923 H, 122 (Theromorpha).  
 1923 A, 168 (Theromorpha).  
 Osborn, H. F. 1897 I, 107.  
 1898 U, 686.  
 1899 J, 415.  
 Owen, R. 1876 D, 15, 71.  
 Pearson, H. S. 1924 A, 822 ("theriodonts").  
 Reynolds, S. H. 1897 A, 272, 277, 283, 556 (Theromorpha).  
 Romer, A. S. 1922 A, 42 ("therapsids").  
 1922 B, 524, 591.  
 1924 C, 96.  
 Schmidt, O. 1886 A, 24.  
 Seeley, H. G. 1894 C, 387.  
 1896 B, 184 (Theropsida).  
 1899 B, 68 ("theriodonts").  
 1908 D, 611 ("theriodonts").  
 1909 A, 714 ("theriodonts").  
 Stener, H. 1921 A, 537.  
 Tormier, G. 1913 B, 342.  
 Versluys, J. 1919 A, 5, 11, 12-14, 21, 22, 27 (Theromora).  
 Watson, D. M. S. 1913 G, 222, 227 ("therapsids").  
 1914 B, 89 ("therapsids").  
 1914 J, 1038.  
 1916 A, 342 ("therapsids").  
 1921 B, 35.  
 Williston, S. W. 1904 B, 176.  
 1914 A, 102, 222 (Theriodontia); 16, 45, 102 (Therapsida).  
 1916 B, 196 (Therapsida); 198 (Theriodontia).  
 1917 C, 415 (Therapsida).  
 1918 B, 99 (Therapsida).  
 1925 A, *passim* (Therapsida); 19, 52, 104, 147 (Theriodontia).  
 Wiman, C. 1916 D, 413.  
 Zeigler, H. E. 1924 A, lx ("theriodontier").  
 Zittel, K. A. 1890 A, 448, 554, 572.  
 Zittel and Broili 1911 A, 196.  
 1923 A, 238.

### Order ANOMODONTIA Owen.

- The name Anomodontia (Owen, R. 1859 G, p. 58) is employed by writers in so many different senses that the author regards it as unavailable as a systematic term. The following citations may be found useful: On differences in usage see Watson, D. M. S. 1917 C; Nopcsa, F. 1923 H; and Williston, S. W. 1925 B.
- Hay, O. P. 1902 A, 430.  
 Abel, O. 1909 F, 456.  
 1912 F, 221.  
 Anderson, R. J. 1909 B, 746.  
 Arldt, T. 1907 D, 638.  
 Boas, J. E. V. 1914 B, 564.  
 1914 C, 235.  
 Boulenger, G. A. 1902 F, 382 ("anomodonts").  
 1904 C, 479, 480.  
 Brauns, D. 1890 A, 162, 163, 202.  
 Broili, F. 1904 A, 69.  
 1904 D, 578, 580 (Anomodonta).
- Broili, F. 1917 A, 561 ("anomodontier").  
 Broom, R. 1899 A, 749 ("anomodonts").  
 1903 C, 177 ("anomodonts").  
 1903 D, 286, 290.  
 1903 E, 136 ("anomodonts").  
 1903 F, 139 ("anomodonts").  
 1903 I, 554.  
 1904 C, 109 ("anomodonts").  
 1904 D, 75 ("anomodonts").  
 1905 B, 213 ("anomodonts").  
 1905 C, 266, 269.  
 1905 D, 263 ("anomodonts").  
 1906 A, 107 ("anomodonts").  
 1907 A, 35 ("anomodonts").  
 1908 A, 1048, 1059 ("anomodonts").  
 1909 D, 212.  
 1910 A, 210.  
 1910 C, 473.  
 1911 A, 917.  
 1912 B, 421.

- Broom, R. 1912 D, 341 ("anomodonts").  
 1913 J, 363.  
 1913 K, 12.  
 1913 L, 231.  
 1913 P, 226, 229.  
 1915 C, 11.  
 1923 A, 674.  
 1924 B, 64, fig. 13.
- Broom and Houghton 1913 B, 29 ("anomodonts").
- DuToit, P. J. 1911 A, 417.
- Fraas, E. 1905 B, 367.
- Fuchs, H. 1907 A, 161.  
 1907 B, 415 ("anomodontier").  
 1911 A, 34.  
 1911 B.
- Fuchs and Geinitz 1903 A, 36, 39.
- Fürbringer, M. 1904 A.
- Gadow, H. 1901 B, 309.
- Gaupp, E. 1906 A, 33 ("anomodontier").
- Gidley, J. W. 1912 C, 19.
- Goodrich, E. S. 1916 A, 263.
- Greene, J. R. 1861 A, 219, 226.
- Hoernes, R. 1886 A, 584.
- Hoffmann, C. K. 1890 B, 1319.
- Howes, G. B. 1893 C, 585, 590.
- Howes and Swinnerton 1901 A, 3.
- Huene, F. 1902 A, 12, 68.  
 1911 D, 43.  
 1912 F, 524.  
 1914 G, pl. vii.  
 1925 D, 229.
- Jaekel, O. 1902 C, 610.  
 1904 C, 173.  
 1905 B, 66 ("anomodontier").  
 1907 B, 1, 81 ("anomodontier").  
 1910 D, 121 ("anomodontier").
- Lydekker, R. 1912 C, 4, 16, 142.
- Newton, E. T. 1900 A, 645 ("anomodonts").
- Nopcsa, F. 1928 A, 170 (Anomodontoides).
- Osborn, H. F. 1899 J, 415.  
 1903 H, 453, 456, 465.
- Osborn, H. F. 1904 L, 256.  
 1904 N, 308.  
 1905 C, 295.  
 1905 N, 238.
- Owen, R. 1876 D, 29, 73.
- Seeley, H. G. 1882 A, 366.  
 1887 D, 338.  
 1896 B, 184.  
 1899 A, 180.  
 1899 B, 68.  
 1900 A, 280.
- Sera, G. L. 1921 A, 45 ("anomodonti").
- Sewertzoff, A. N. 1908 A.
- Sixta, V. 1900 B, 324.
- Sollas and Sollas 1914 A, 207.  
 1916 A, 531 (Dicynodon).
- Stappenbeck, R. 1905 A, 427 ("anomodonten").
- Sushkin, P. P. 1925 A, 180.  
 1928 A, 278.
- Swinnerton and Howes 1901 A, 3.
- Thevenin, A. 1910 A, 58 ("anomodontes").
- Tornier, G. 1913 B, 337.
- Versluys, J. 1912 B, 550, 665, 687.
- Watson, D. M. S. 1912 B, 575.  
 1913 A, 71 ("anomodonts").  
 1913 B, 257.  
 1913 E, 210 ("anomodonts").  
 1914 D, 176.  
 1914 F, 778.  
 1914 H, 1012.  
 1916 A, 317, 347 ("anomodonts").  
 1917 C, 173.  
 1921 B, 69, 75, 93 ("anomodonts").
- Williston, S. W. 1904 B, 176.  
 1905 D, 297.  
 1914 A, 16, 45, 102.  
 1916 B, 198.  
 1925 A, 10, 11, 28, 109, 118, 122, 147.
- Zittel and Broili 1911 A, 198.  
 1923 A, 230.
- Zittel, Eastman, etc. 1902 A, 179, 184.

### Suborder DICYNODONTIFORMES, new name.

- Unless otherwise indicated the writers, as cited, use the name Dicynodontia.
- Abel, O. 1919 A, 435.  
 1920 A, 370.  
 1922 C, 577 ("dicynodontier").
- Broom, R. 1910 A, 210 (Anomodontia).
- Carus, V. 1875 A, 401.
- Case, E. C. 1926 B, 194.
- Cope, E. D. 1891 N, 38, fig. 16 (Dicynodontia, Anomodontia).
- Goodrich, E. S. 1916 A, 262.
- Houghton, S. H. 1920 A, 12.
- Huene, F. 1925 D, 238.
- Lydekker, R. 1890 A, 15.
- Nopcsa, F. 1922 A, 111, 116 ("dicynodontier").  
 1923 H, 4-188.
- Owen, R. 1859 F, 289.  
 1860 E, 236.
- Pearson, H. S. 1924 A, 793, seq.  
 1924 B, 827.
- Pompeckj, J. F. 1925 A, 23 ("dicynodontier").
- Romer, A. S. 1922 B, 524.
- Sushkin, P. P. 1927 A, 301, 306 (Dicynodontia)
- Terra, P. 1911 A, 239 (Anomodontia).
- Watson, D. M. S. 1917 A, 30.  
 1917 C, 176.
- Woodward, A. S. 1922 C, 29.
- Zittel and Broili 1911 A, 198 (Anomodontia).  
 1923 A, 241.

### DICYNODONTIDÆ Owen.

- Owen, R. 1866 A, 16.
- Hay, O. P. 1902 A, 430.
- Ardt, T. 1907 D, 650.  
 1908 A, 585.
- Broom, R. 1902 A, 86 ("dicynodonts").
- Broom, R. 1903 C, 177 ("dicynodonts").  
 1905 D, 263 ("dicynodonts").  
 1912 D, 341 ("dicynodonts").
- Cope, E. D. 1889 R, 866.
- Flower and Lydekker 1889 A, 1063.

- Huene, F. 1926 I, 78 ("dicynodontier").  
 Huxley, T. H. 1859 F, 131 ("dicynodonts").  
     1865 C, 8 ("dicynodonts").  
 Jaekel, O. 1904 C, 172 ("dicynodonten").  
 Nopcsa, F. 1902 A, 184 ("dicynodonten").  
     1928 A, 170.  
 Owen, R. 1866 E, 236 (Dicynodontia).

- Owen, R. 1866 A, 16 (Dicynodontia).  
 Seeley, H. G. 1888 D, 71, 86 ("dicynodonts").  
     1888 F, 500 ("dicynodonts").  
 Tornier, G. 1913 B, 342 (Dicynodontia).  
 Watson, D. M. S. 1917 A, 30 ("dicynodonts").  
     1921 B, 93 ("dicynodonts").  
 Williston, S. W. 1925 B, 240.

DICYNODON Owen. Type *D. lacerticeps* Owen.

- Hay, O. P. 1902 A, 430.  
 Abel, O. 1919 A, 438, figs. 341, 342.  
     1922 C, 576.  
 Amalitzky, V. 1922 A, 332, figs. 1, 2.  
 Ameghino, F. 1909 A, 5, 10, fig. 2.  
 Brauns, D. 1890 A, 162, fig. 7.  
 Broom, R. 1890 A, 411.  
     1899 A, 763.  
     1901 A, 162, 166.  
     1904 A, 491.  
     1904 D, 73.  
     1905 D, 263.  
     1909 E, 401.  
     1910 C, 476.  
     1912 D, 337.  
     1913 M, 6.  
     1915 C, 11.  
     1921 B, 647.  
     1926 A, 258, fig. 1.  
     1927 A, 74, fig. 1.  
 Broom and Houghton 1913 C, 36.  
 Case, E. C. 1926 B, 194.  
 Gregory, W. K. 1920 A, 132, figs. 52, 53.  
     1926 A, 206, 209.  
 Hoffmann, C. K. 1890 B, 1310, 1318.  
 Huene, F. 1902 A, 14.  
     1922 C, 58-71, figs. 1-4.  
     1923 B, 459.  
 Huxley, T. H. 1859 F, 130.  
     1865 C, 13.  
 Lydekker, R. 1915 A, 236, fig. 1.  
 Nopcsa, F. 1902 A, 189.  
     1923 H, 41, 42, 164.  
     1926 A, 636.

- Owen, R. 1876 D, 30, pls. xxiii-xliv, lxix.  
 Pearson, H. S. 1924 A, 793, seq.  
     1924 B, 827.  
 Reynolds, S. H. 1897 A, 192, 273, 283.  
 Romer, A. S. 1922 A, 40, fig. 1.  
     1922 B, *passim*, pls. xxxiii, xxxvii.  
 Seeley, H. G. 1888 D, 76, 100.  
     1888 F, 488.  
     1898 B, 164.  
 Sera, G. L. 1921 A, 46.  
 Sollas and Sollas 1913 A, 61.  
     1914 A, 201, pls. xvii, xviii.  
     1916 A, 531, pls. xxxv, xxxvi.  
 Steiner, H. 1921 A, 537.  
 Sushkin, P. P. 1927 A, 299, 301, figs. 29-31.  
 Terra, P. 1911 A, 239.  
 Watson, D. M. S. 1912 B, 575, fig. 2.  
     1914 K, 95.  
     1917 B, 30, figs. 12-17.  
     1917 C, 176.  
 Wegner, R. N. 1922 A, 476.  
 Williston, S. W. 1925 A, 146, fig. 120.  
     1925 B, 240.  
 Woodward, A. S. 1922 C, 30, fig. 26.  
 Zittel and Broili 1911 A, 199, figs. 331, 332.  
     1923 A, 242, figs. 342-345.  
 Zittel, Eastman, etc. 1902 A, 187.  
**Dicynodon rosmarus** Cope.  
 Hay, O. P. 1902 A, 430.  
 Huene, F. 1926 I, 96.  
 Lyman, B. S. 1894 A, 212 (*D. rosmarinus*).  
     Triassic (Newark); Pennsylvania.

PLACERIAS Lucas. Type *P. hesternus* Lucas.

- Lucas, F. A. 1904 A, 194.  
 Broili, F. 1921 A, 339 (This genus?).  
 Broom, R. 1915, in Case, E. C. 1915 A, 75.  
 Case, E. C. 1915 A, 75.  
 Cross and Howe 1905 A, 489.  
 Huene, F. 1926 I, 77, 96.  
 Pearson, H. S. 1924 A, 793.  
 Simpson, G. G. 1926 G, 107.  
 Williston, S. W. 1911 F, 664.  
     1925 B, 240.  
 A genus of uncertain systematic position.

**Placerias hesternus** Lucas.

- Lucas, F. A. 1904 A, 194, pl. iv.  
 Cross, W. 1908 A, 113.  
 Cross and Howe 1905 A, 480.  
 Darton, N. H. 1910 A, 42.  
 Gregory, H. E. 1917 A, 46.  
 Huene, F. 1926 E, 4.  
     1926 I, 74.  
 Merrill, G. P. 1907 A, 75.  
 Pearson, H. S. 1924 A, 793.  
     Triassic (Chinle); Arizona.

BRACHYBRACHIUM Williston. Type *B. brevipes* Williston.

- Williston, S. W. 1904 D, 694.  
 Huene, F. 1926 I, 96.  
 Simpson, G. G. 1926 G, 107.  
 Williston, S. W. 1925 B, 240.  
 The systematic position of this genus is uncertain.

**Brachybrachium brevipes** Williston.

- Williston, S. W. 1904 D, 694, text-fig. 5.  
 Huene, F. 1911 D, 50, fig. 55.  
     1926 E, 4.  
     1926 I, 73.  
 Upper Triassic (Popo Agie beds); Wyoming.



EUBRACHIOSAURUS Williston. Type *E. browni* Williston.

- Williston, S. W. 1904 D, 690.  
 Abel, O. 1919 A, 431.  
 Broili, F. 1921 A, 342.  
 Huene, F. 1926 I, 96.  
 Pearson, H. S. 1924 A, 793.  
 Watson, D. M. S. 1917 C, 176.  
 Williston, S. W. 1911 F, 664.

**Eubrachiosaurus browni** Williston.

- Williston, S. W. 1904 D, 690, text-figs. 2, 3.  
 Huene, F. 1926 E, 4.  
 1926 I, 73, 77.  
 Pearson, H. S. 1924 A, 793.  
 Triassic (Chugwater); Wyoming.

Superorder *ASTATOGLYPTICA*, new name.

## Order TESTUDINATA, Bonaparte.

- Bonaparte, C. L. 1831, Gior. Arcad. Sci., xlix, 5.  
 Hay, O. P. 1902 A, 434 (Testudines).  
 Abel, O. 1907 B, (76) ("schildkröten").  
 1908 D, (215) ("schildkröten").  
 1909 D, (226) ("schildkröten").  
 1912 F, 221 (Testudinata); 528 ("schildkröten").  
 1914 C, 341 ("schildkröten").  
 1919 A, 374 (Testudinata).  
 1920 A, 363, fig. 572 (Chelonia).  
 1921 A, 145, 188, 251 ("schildkröten").  
 Adams, C. C. 1902 A, 116 ("turtle").  
 Altmann, F. 1925 A, 95 ("chelonier").  
 Anderson, R. J. 1912 A, 917 (Chelonia).  
 1912 D, 251 (Chelonia).  
 Andrews, C. W. 1896 B, 148 (Chelonia).  
 1906 A, xxiv (Chelonia).  
 1913 A, vii (Chelonia).  
 Anthony, R. 1912 A ("tortues").  
 1913 A, 24 ("chéloniens").  
 Arldt, T. 1907 D, 684.  
 1908 A, 587 ("schildkröten").  
 1909 D, 652 ("schildkröten").  
 Ballerstedt, M. 1921 A, 64.  
 Bardeleben, K. 1896 A, 114 ("schildkröten").  
 Batsch, A. J. 1788, Anleit., Kenntn. Thiern., Man. I, 437 (Testudines).  
 Baur, G. 1889 L, 312.  
 Beer, G. R. 1926 A, 316 (Chelonia).  
 Bender, O. 1907 A, 40 ("chelonier").  
 1911 A, 163 ("schildkröten").  
 1912 A, 3 ("chelonier").  
 1913 A, 284 ("schildkröten").  
 Beyer, H. 1907 A, 288 ("chelonier").  
 Blainville, H. M. D. 1835 A, 239 (Chelonia).  
 Bluntschli, H. 1912 B, 384 ("chelonier").  
 Boas, J. E. V. 1914 B, 565 ("schildkröten").  
 1914 C, 287 (Chelonia).  
 Bojanus, L. H. 1819 A, 1362 ("schildkröten").  
 1821 A, 1158 ("schildkröte").  
 Bonaparte, C. L. 1832 A, 312 (Chelonii).  
 1833 B, 1083.  
 Boulenger, G. A. 1888 B, 452 (Chelonia).  
 1893 B, 205 ("chelonians").  
 1904 C, 479-480 (Chelonia).  
 1917 C, 459 ("chéloniens").  
 1917 D, 1045 ("tortues").  
 1918 E, 514 ("chéloniens").  
 1919 A, 44 ("tortues marines").  
 Branca, W. 1908 B, 44 ("schildkröten").  
 Brauns, D. 1890 A, 147, 162, 163, 164 (Chelonia).  
 Braus, H. 1906 A, 261 ("chelonier").  
 Bronn, H. G. 1849 A, 812, seq. (Chelonii).  
 Broom, R. 1901 A, 188 (Chelonia).  
 Broom, R. 1902 D, 556 (Chelonia).  
 1903 I, 552 (Chelonia).  
 1904 C, 111 ("chelonians").  
 1905 B, 215 ("chelonians").  
 1908 A, 1054 (Chelonia).  
 1908 E, 114 ("chelonians").  
 1909 D, 213 (Chelonia).  
 1911 A, 920 ("chelonians").  
 1913 J, 364 (Chelonia).  
 1913 L, 231 (Chelonia).  
 1922 A, 17, 21, 25.  
 1924 B, 48, 64, fig. 13 (Chelonia).  
 1924 C, 75 (Chelonia).  
 Carter, J. T. 1905 A, 129 (Chelonia).  
 Carus, V. 1875 A, 391 (Chelonia).  
 Carus and Engelmann 1861 A, 1102-1105, 1564, 1675, 1694, 1702, 1721 (Chelonia).  
 Case, E. C. 1898 C, 725.  
 1905 A, 298.  
 1923 A, 517.  
 Cleland, J. 1863 B, 310 ("chelonians").  
 Coker, R. E. 1905 A, 874 ("turtles").  
 1905 B, 9 (Chelonia).  
 1910 A, 1 (Chelonia).  
 Cooper, C. F. 1922 C, 155 ("tortoises").  
 Cope, E. D. 1891 N, 35, 39.  
 Cuvier, G. 1805 A ("chéloniens").  
 1812 A, 125 ("tortues").  
 1825 A, v, 2, 176-249, pls. xi-xv ("tortues").  
 Dana, J. D. 1863 C, 343 ("chelonians").  
 Davenport, G. C. 1898 A, 187 ("turtles").  
 Dendy, A. 1907 A, 292 (Chelonia).  
 Diener, C. 1909 A, 36 ("schildkröten").  
 Döderlein, L. 1900 A, 335 (Chelonia).  
 Dollo, L. 1883 G, 590 (Chelonia).  
 1889 B, 668 ("chéloniens").  
 1903 C ("chéloniens").  
 1913 A, 50 ("chéloniens").  
 1913 B, 622 ("chéloniens").  
 Dombrowski, B. A. 1925 A, 75 ("schildkröten").  
 Drevermann, F. 1922 A, 102 ("schildkröten").  
 Duméril, A. M. C. 1806 A, 76 (Chelonii).  
 DuToit, P. J. 1911 A, 420.  
 Edgeworth, F. H. 1907 A, 516 (Chelonia).  
 Eichwald, E. 1832 A, 868 ("schildkröten").  
 Eimer, G. H. T. 1901 A, 261 ("schildkröten").  
 Emery, C. 1901 A, 672 ("schildkröten").  
 Fitzinger, L. 1836 A, 107.  
 1843 A, 29.  
 Fleischmann, A. 1910 A, 699 (Chelonia).  
 Fraas, E. 1903 A, 73 ("schildkröten").  
 1905 B, 363.  
 Frassetto, F. 1915 A ("chelonii").  
 Fries, C. 1924 A, 277 ("schildkröten").

- Fry, E. 1850 A, 21 (Testudina).  
 Fuchs, H. 1907 A, 161.  
     1907 B ("schildkröten").  
     1907 C, 19, 23 ("schildkröten").  
     1907 D, 33 ("schildkröten").  
     1908 B, 585 ("schildkröten").  
     1908 C, 153 ("schildkröten").  
     1909 B, 114, 143, 151 (Testudinata); 152 (Heterapsida).  
     1909 D, 26 ("schildkröten").  
     1910 A, 39 ("schildkröten").  
     1910 C, 495 ("chelonier").  
     1911 B.  
     1911 C, 39 ("schildkröten").  
     1912 D, 153 ("chelonier").  
     1920 A (Testudinata).  
     1926 B, 2, 31.  
     1927 A, 312, fig. 4.  
 Fürbringer, M. 1888 A, 1620 (Chelonia).  
     1902 B, 727 ("chelonier").  
     1904 A.  
 Gadow, H. 1896 A, 41-52, figs. 44-50 (Chelonia).  
     1901 A, 405 (Chelonia).  
     1901 B, 312 (Chelonia).  
     1902 B, 353 (Chelonia).  
     1902 D, 207 (Chelonia).  
     1912 B, 216 ("chelonians").  
     1914 A, 503 ("chelonians").  
 Gaupp, E. 1891 B, 108 ("chelonier").  
     1895 A, 58, seq. ("schildkröten").  
     1899 A, 1034, 1091 (Chelonia).  
     1902 A, 178, 224 ("schildkröte").  
     1905 D, 1016 ("chelonier").  
     1906 A, 43 ("schildkröten").  
     1906 B, 787 ("schildkröten").  
     1908 B, 528 ("schildkröten").  
     1910 A, 541 ("schildkröten").  
     1910 B, 358 ("schildkröten").  
     1910 C, 411 ("schildkröten").  
     1911 A, 420 ("schildkröten").  
     1911 B, 108 (Chelonia).  
     1911 C, 443, 449 (Chelonia).  
     1911 D, 616, 630 ("schildkröten").  
     1911 E, 338, 411 ("schildkröten").  
     1912 B, 221 ("schildkröten").  
     1913 A, 50 (Chelonia).  
 Gegenbaur, C. 1863 A, 466 ("schildkröten").  
     1867 B, 401 ("schildkröten").  
     1870 A, 336 ("schildkröten").  
     1871 A, 200 ("schildkröten").  
 Gelderen, C. 1923 A, 29 (Chelonia).  
     1925 A, 505 ("chelonier").  
 Gervais, P. 1852 A, 242 ("chéloniens").  
     1853 B, 30 ("chéloniens").  
     1859 A, 434 ("chéloniens").  
 Goodrich, E. S. 1916 A, 263, 264, 272.  
 Goodsir, J. 1857 A, 140, 144, 157, 160 ("chelonians").  
 Gray, J. E. 1825 A, 210 (Chelonii).  
     1837 C, 131 ("chelonians").  
     1855 A, 1 (Chelonia).  
     1873 D, 161, 169 (Chelonia).  
 Greene, J. R. 1861 A, 219, 226 (Chelonia).  
 Gregory, W. K. 1913 E, 17, 18 (Chelonia).  
     1920 A, 119, 229 (Chelonia).  
 Gregory and Camp 1918 A, 532 (Chelonia).  
 Gregory and Noble 1924 A, 437 ("turtles").  
 Haeckel, E. 1868 A, 453 ("schildkröten").  
     1873 A, 512, 531 (Chelonia).  
 Harkness, R. 1852 A, 250 (Chelonia).  
 Hase, A. 1913 A, fig. 36 ("schildkröten").  
 Hasse, C. 1871 A, 225-299 ("schildkröten").  
     1872 B, 543 ("schildkröten").  
     1873 D, 685 ("schildkröten").  
 Hasse and Schwarck 1870 A, 55 ("schildkröten").  
 Hay, O. P. 1901 C, 624 ("turtles").  
     1905 A, 137 (Testudines).  
     1905 G, 327 ("turtles").  
     1905 H, 295.  
     1908 A, 25, 43 (Testudines).  
     1912 E, 212 (Chelonia).  
     1922 E, 421, 440.  
     1928 A, 1-12.  
 Hayek, H. 1924 A, 149 ("schildkröten").  
 Heilmann, G. 1926 A, 204 (Chelonia).  
 Heilprin, A. 1887 A, 313 (Chelonia).  
 Henshaw, H. W. 1912 A, 318 ("turtles").  
 Hilzheimer, M. 1913 A, 516 ("schildkröten").  
 Hoernes, R. 1886 A, 586 (Chelonia).  
 Hoffmann, C. K. 1879 B, 52 ("schildpadden").  
 Holland, H. 1864 A, 13 ("tortues").  
 Hommes, J. H. 1924 A, 36 (Cheloni).  
 Howes, G. B. 1893 C, 585 (Chelonia).  
     1902 A, 524 (Chelonia).  
 Howes and Swinnerton 1901 A, 2, 30, 46, 68 (Chelonia); 3, 56 (Testudinata).  
 Huene, F. 1902 A, 48.  
     1920 D, 163 ("schildkröten").  
     1926 I, 78 ("schildkröten").  
 Humphry, G. M. 1876 A, 671 ("chelonians").  
 Huxley, T. H. 1859 D, 441, 449 (Chelonia).  
     1859 F, 137 (Chelonia).  
     1862 A, 11 (Chelonia).  
     1863 F, 477, 529 (Chelonia).  
     1870 A, 398 (Chelonia).  
     1870 H, 492 (Pleurospendylia).  
     1876 F, 173 (Chelonia).  
     1877 A, 58 (Chelonia).  
     1879 A, 398 (Chelonia).  
     1887 C, 232 (Chelonia).  
 Ihde, — 1912 A, 251 ("schildkröten").  
 Jaekel, O. 1901 A, 559.  
     1902 B, 134 ("schildkröten").  
     1902 D, 131 ("cheloniden").  
     1904 C, 188 ("schildkröten").  
     1905 C, 144 ("schildkröten").  
     1907 B, 60, 88, fig. 44 ("schildkröten").  
     1908 A, 140 (Testudinata).  
     1909 C, 706 ("schildkröten").  
     1910 D, 114, 116.  
     1911 A, 183.  
     1912 A, 618 ("schildkröten").  
     1913 A, 83, fig. 3 ("schildkröten").  
     1914 A, 197 ("testudinaten").  
     1915 A, 88.  
 Johnson, A. 1883 A, 406 (Chelonia).  
 Kasper, A. 1903 A, 137 ("schildkröten").  
 Kehler, F. A. 1896 A, 353 ("schildkröten").  
 Kerbert, C. 1876 A, 206 ("chelonier").  
 Kesteven, H. L. 1916 A, 304 (Chelonia).  
     1918 A, 449 (Chelonia).  
     1919 A, 233 ("chelonians").  
     1922 A, 316 (Chelonia).  
 Kingsley, J. S. 1905 A, 62 ("turtles").

- Kingsley, J. S. 1912 B, 91 ("chelonians").  
 1925 A, 14, 44, 145, 252, 285 (Chelonia).  
 Klaauw, C. J. 1924 B, 592 (Chelonia).  
 Klein, E. E. 1868 A ("chelonier").  
 Köstlin, O. 1844 A ("schildkröten").  
 Koken, E. 1893 B, 646 ("schildkröten").  
 1898 A, 141 ("schildkröten").  
 1898 B, 143 ("chelonier").  
 Kunkel, B. W. 1911 A, 354 ("schildkröten").  
 Lambe, L. M. 1901 B, 182 (Chelonia).  
 Lane, H. H. 1910 B, 345.  
 Latreille, P. A. 1825 A, 91 (Chelonii).  
 Lavocat, A. 1894 A, 1126 ("tortues").  
 1885 A, 36 ("chéloniens").  
 1889 A, 47 ("tortues").  
 Lebedinsky, N. G. 1913 A, 787 ("chelonier").  
 Le Conte, J. 1854 A, 188.  
 Le Damany, P. 1902 A, 334 ("tortues").  
 1902 B, 371 ("tortues").  
 1903 B, 275 ("chéloniens").  
 1903 D, 353 ("chéloniens").  
 1906 A, 61, 72 ("chéloniens").  
 1906 B, 156 ("chéloniens").  
 Leunis and Ludwig 1883 A, 526 (Chelonia).  
 Lobley, J. L. 1908 A, 199 (Chelonia).  
 Lorenz, L. E. F. 1807 A ("testudines").  
 Lubosch, W. 1914 A, 425 ("chelonier").  
 Lull, R. S. 1904 A, 528.  
 1910 D, 152 (Chelonia).  
 1917 B, 322.  
 Lydekker, R. 1909 C, 466 ("chelonians").  
 1912 C, 3, 4, 22, 23, 38, 123, 180 (Chelonia).  
 1915 C, 633 (Chelonia).  
 McGregor, J. H. 1905 A, 295 ("turtles").  
 Mantell, G. A. 1844 A, 765 (Chelonia).  
 Martins, C. 1872 A, 307 ("tortues").  
 Matthew, W. D. 1914 B, 383 (Chelonia).  
 1921 D, 211, 214 (Chelonia).  
 Meekel, J. F. 1825 A ("chelonier").  
 Merriam, J. C. 1912 B, 222.  
 Moodie, R. L. 1908 C, 319, 322 (Chelonia).  
 1908 D, 446 (Chelonia).  
 Mook, C. C. 1918 A, 466 (Chelonia).  
 Müller, J. 1832 A, 507.  
 Newman, H. H. 1906 A, 68 (Chelonia).  
 1906 B, 526 (Chelonia).  
 Noble, G. K. 1923 A, 377.  
 Nopcsa, F. 1922 A, 109, 116 ("schildkröten," "testudinaten").  
 1923 E, 1048 (Testudinata).  
 1923 F (Testudinata).  
 1923 H, 1-171, tab. (Chelonia, Testudinata).  
 1926 A, 638 ("tortoises").  
 1928 A, 165.  
 Oertel, W. 1924 A, 42-79 ("schildkröten").  
 Ogushi, K. 1911 A, 1 ("schildkröten").  
 Oken, L. 1819 A, 1529 ("schildkröten").  
 1823 B, 444 ("schildkröten").  
 Osborn, H. F. 1902 H, 750 (Chelonia).  
 1903 D, 313.  
 1903 H, 454, 456, 465 (Testudinata); 453, 454, 465 (Chelonia).  
 1904 H, 105.  
 1904 N, 308 (Chelonia).  
 1905 C, 295.  
 1905 N, 238.  
 Osborn, H. F. 1909 D, 57, 66.  
 1917 B, 201-203 (Chelonia).  
 1925 F, 962 (Chelonia).  
 Osburn, R. C. 1906 A, 447 (Chelonia).  
 Oswald, F. 1909 A, 124 ("chelonians").  
 Owen, R. 1842 F, 77 (Chelonia).  
 1846 E (Chelonia).  
 1848 B, 122 ("chelonians").  
 1868 A, 872, 873 (Chelonia).  
 Palacký, J. 1894 A, 133 ("schildkröten").  
 1902 B, 141 ("schildkröten").  
 Parker, G. H. 1901 A ("turtles").  
 Parker, W. K. 1869 A, 508 ("chelonians").  
 1878 C, 214 (Chelonia).  
 1879 C, 342 ("chelonians").  
 1888 C, 397 ("tortoises").  
 Parker and Haswell 1897 A, 313, 320 (Chelonia).  
 Perna, G. 1906 A, 135 ("chelonier").  
 Peters, W. 1838 A ("Chelonia").  
 1867 A, 726 ("schildkröte").  
 1868 B, 338 ("tortoises").  
 1869 A, 6 ("schildkröten").  
 Petronievics, B. 1919 A, 414 ("chéloniens").  
 Pfeiffer, H. 1854 A, 38 ("schildkröten").  
 Plieninger, F. 1906 A, 406.  
 Pompeckj, J. F. 1925 A, 6, 10 ("schildkröten").  
 Proctor, J. B. 1922 A, 516 ("chelonians").  
 Pycraft, W. P. 1909 A, 204 ("turtles").  
 Rabl, C. 1903 A, 164 ("dromopoden" and "eretmopoden"); 159, 165, fig. 12 ("schildkröten").  
 Rafinesque, C. S. 1815 A, 74 (Perostia).  
 Rathke, H. 1846 A, 161 ("chéloniens").  
 Reynolds, S. H. 1897 A, 193-293 (Chelonia).  
 Rice, E. L. 1920 A ("turtles").  
 Röse, C. 1892 G, 143 ("schildkröten").  
 Romer, A. S. 1922 B, 543 (Chelonia).  
 Sabatier, A. 1896 A, 125 ("chéloniens").  
 1902 A, 100 ("chéloniens").  
 Schauinsland, H. 1899 A, 333 ("schildkröten").  
 1906 A, 542 ("schildkröten").  
 Schmidt, W. J. 1916 A, 9 ("schildkröten").  
 Schöne, G. 1902 A, 11 ("chelonier").  
 Seeley, H. G. 1872 A, 275 ("chelonians").  
 1872 B, 25, 38 ("chelonians").  
 1876 C, 172, 175.  
 1880 B.  
 1882 A, 366 (Chelonia).  
 1887 D, 338 (Chelonia).  
 1887 E, 197 ("chelonians").  
 1899 B, 70 ("chelonians").  
 1904 A, 342.  
 Serres, M. 1852 A, 115, 144 ("chéloniens").  
 Sewertsoff, A. N. 1904 A, 484 ("chelonier").  
 1908 A.  
 Seydel, O. 1899 A ("chelonier").  
 Shufeldt, R. 1921 A, 213 (Chelonia).  
 Siebenrock, F. 1909 A, 429, 432.  
 1919 A, 273.  
 Sixta, V. 1905 A, 678 ("chelonier").  
 Smith, G. E. 1912 A, 426 (Chelonia).  
 Smith, L. W. 1914 A, 548 ("turtles").  
 Sollas, W. J. 1916 A, 115.  
 Stannius, H. 1856 A, 7, 27 (Chelonia).  
 Stefano, G. 1917 A, 278 (Chelonia).  
 Stehli, G. 1910 A, 781 ("schildkröten").  
 Steiner, H. 1921 A, 538 ("chelonier").  
 1922 A, 330, 337 (Chelonia).

- Steinmann, G. 1907 A, 433.  
 1908 A, 213 ("schildkröten").  
 1912 B, 731.
- Stejneger, L. 1907 C, 483.
- Stejneger and Barbour 1917 A, 111.
- Strecker, C. 1887 A, 302 ("schildkröten").
- Stromer, E. 1912 A, 94, 126 (Chelonia).
- Sushkin, P. P. 1927 A, 307 ("chelonians").
- Taschenberg, O. 1894 A, 3636 (Chelonia).
- Terra, P. 1911 A, 242 (Chelonii).
- Thäter, K. 1910 A, 471 ("schildkröten").
- Thevenin, A. 1910 A, 59 ("chéloniens").
- Thyng, F. W. 1906 A, 50.
- Tornier, G. 1909 C, 547 ("schildkröten").  
 1913 A, 336 (Chelonia).  
 1913 B, 364, 374 (Chelonia).
- Vallant, L. 1877 A, 13 ("chéloniens").  
 1877 C, 54 ("chéloniens").  
 1881 A, 1, 99 (Chelonia).
- Van Bemmelen, J. F. 1928 A, 286 ("chéloniens").
- Van den Broeck, E. 1900 A, 88 ("chéloniens").
- Van Gelderen, C. 1925 A, 505 ("chelonier").
- Versluys, J. 1912 B, 550, 574, 674, 687 (Chelonia).  
 1914 A, 791, 793 (Chelonia).  
 1914 B, 321-347.  
 1919 A, 7, 14.
- Virchow, H. 1914 A, 79 ("schildkröten").  
 1919 A, 303 ("schildkröten").  
 1921 A, 139 ("schildkröten").  
 1926 A, 214 ("schildkröten").
- Vitali, G. 1909 A, 212 ("chelon").
- Wagner, R. 1843 A (Chelonia).
- Wallace, A. R. 1876 A, II, 567 (Chelonia).
- Watson, D. M. S. 1914 B, 89 (Chelonia).  
 1914 H, 1011 (Chelonia).  
 1917 A, 984 ("tortoises").  
 1917 B, 60 (Chelonia).  
 1917 C, 177.
- Wegner, R. N. 1922 A, 480.
- Werner, F. 1904 A, 338 ("schildkröten").
- Wieland, G. R. 1908 A, 516.  
 1911 A, 123.  
 1912 B, 299 ("turtles").  
 1923 A, 10.
- Williston, S. W. 1902 G, 314 ("chelonians").  
 1904 B, 176.  
 1905 E, 294.  
 1907 A, 487 ("turtles").  
 1908 A, 143 (Chelonia).  
 1909 A, 394 ("turtles").  
 1910 A, 271 (Chelonia).  
 1912 E, 260 (Chelonia).  
 1914 A, 217 (Chelonia).  
 1916 B, 193 (Chelonia).  
 1917 C, 419 (Chelonia).  
 1918 A, 79 (Chelonia).
- Woodward, A. S. 1888 N, 373 (Chelonia).  
 1888 O, 353 (Chelonia).  
 1922 C, 41 (Chelonia).
- Woodward, H. 1904 B, 143 (Chelonia).
- Zdansky, O. 1924 A, 89.
- Zittel and Broili 1911 A, 241 (Testudinata);  
 254 (Chelonia); 252 (Chelonidea).  
 1923 C, 246, 293, 383 ("schildkröten").
- Zittel, Eastman, etc. 1902 A, 189 (Chelonia).

## Suborder EUNOTOSAURIA Watson.

- Watson, D. M. S. 1914 H, 1019, fig.
- Nopcea, F. 1928 A, 165.
- Williston, S. W. 1925 B, 221.
- Zittel and Broili 1923 A, 245, fig. 350.  
 No species are known from North America.  
 The relations of the suborder to the Testudinata are uncertain.

## Suborder ATHECÆ Cope.

- Hay, O. P. 1902 A, 435.
- Abel, O. 1901 B, 312.
- Andrews, C. W. 1919 A, 314.
- Cope, E. D. 1891 N, 39.
- Dollo, L. 1886 B, 180.  
 1889 B, 668 ("athèques").  
 1903 A, 727 ("athèques").  
 1903 C, 849 ("athèques").  
 1907 D, 82 ("athèques").  
 1913 A, 50 ("athèques").  
 1923 C, 418 ("athèques").
- Fejérváry, G. J. 1920 A, 347 ("atheken").
- Fuchs, H. 1907 B, 423 (Athea).  
 1909 B, 152.
- Fürbringer, M. 1900 A, 631.
- Gadow, H. 1898 A, 21.  
 1901 B, 333.
- Harrassowitz, H. 1922 A, 220.
- Hay, O. P. 1904 A, 265.  
 1908 A, 25, 43.
- Hay, O. P. 1909 D, 341.  
 1922 C.  
 1922 E, 425, 440.  
 1928 A, 4.
- Hilzheimer, M. 1913 A, 516.
- Jaekel, O. 1902 B, 136.  
 1907 B, 64.
- Kathariner, L. 1913 A, 373.
- Kingsley, J. S. 1925 A, 44.
- Nopcea, F. 1923 H, 115 ("lederschildkröten").
- Siebenrock, F. 1909 A, 428.
- Stejneger, L. 1907 A, 185.
- Tornier, G. 1913 B, 365.
- Versluys, J. 1914 B, 339.
- Völker, H. 1913 A, 435 (Athea).
- Werner, F. 1898 A, 280.
- Williston, S. W. 1908 G, 803.  
 1925 B, 222.
- Zittel and Broili 1911 A, 253.  
 1923 A, 307.

## DERMOCHELYIDÆ.

- Hay, O. P. 1902 A, 436.
- Abel, O. 1901 A, 25.  
 1919 A, 404.
- Ardt, T. 1907 D, 650.
- Bonaparte, C. L. 1832 A, 313 (Sphargidina).  
 1833 B, 1183 (Sphargidina).

- Boulenger, G. A. 1918 E, 515.  
 Carus, V. 1875 A, 400 (Sphargidinae).  
 Cope, E. D. 1891 N, 39 (Dermochelydæ).  
 Dollo, L. 1889 B, 669 (Sphargidæ).  
 1901 A, 1-26.  
 1903 A, 727 (Sphargidæ).  
 Fraas, E. 1903 A, 96 (Dermochelydæ).  
 1905 B, 364 ("dermochelyden").  
 Fuchs, H. 1907 B, 423 (Sphargidæ).  
 1920 A, 357.  
 1920 B, 353 (Dermochelydæ).  
 Gadow, H. 1901 B, 333 (Sphargidæ).  
 Goette, A. 1899 A, 428 (Psephophoridae).  
 Hay, O. P. 1901 C, 624 (Dermochelys).  
 1908 A, 14.  
 Jaekel, O. 1902 B, 132, 136 (Dermochelys).  
 1907 B, 49, figs. 34, 43 (Dermochelys).  
 1910 D, 116 ("dermochelyden").  
 1911 A, 187.  
 1916 A, 145 (Dermochelys).  
 Kathariner, L. 1913 A, 373 (Dermochelydæ).  
 Kingsley, J. S. 1925 A, 15 (Dermochelydæ).  
 Lull, R. S. 1924 A, 275 (Sphargidæ).  
 Lydekker, R. 1912 C, 28, 125.  
 Merriam, J. C. 1912 B, 222.  
 Newman, H. H. 1906 A, 72 (Dermochelydæ).  
 Nick, L. 1912 A, 7 (Dermochelydæ).
- Nopcsa, F. 1923 H, 39, 122 (Dermochelynæ),  
 191 (Dermochelydæ).  
 1928 A, 167.  
 Owen, R. 1866 A, 61 (Sphargis).  
 Petronevics, B. 1919 A, 411 (Dermochelys).  
 Pictet, F. A. 1853 A, 462 ("les sphargis").  
 Rabi, C. 1903 A, 159, 164 ("dermochelyden").  
 Sewertsoff, A. N. 1908 A, 262 ("dermocheliden").  
 Siebenrock, F. 1909 A, 428, 551.  
 Stehli, G. 1910 A, 787, 789 (Dermochelydæ).  
 Stejneger, L. 1907 C, 485 (Dermochelidæ).  
 Thyng, F. W. 1906 A, 51.  
 Tornier, G. 1913 B, 365.  
 Vaillant, L. 1877 A, 14 (Sphargis).  
 1877 C, 55 (Sphargidina).  
 1881 A, 99 (Sphargidina).  
 Versluys, J. 1914 B, 321, seq.  
 Wieland, G. R. 1902 A, 97, et seq. (Dermochelys, Dermochelydæ).  
 1903 A, 214 (Dermochelys).  
 Williston, S. W. 1914 A, 241 ("leather-back").  
 1925 A, 45.  
 1925 B, 225.  
 Woodward, A. S. 1888 O, 353 (Sphargidæ).  
 Zittel and Broili 1911 A, 253.  
 1923 A, 307.  
 Zittel, Eastman, etc. 1902 A, 197.
- DERMOCHELYS Blainville. Type *Testudo coriacea* Linnæus.
- Blainville, H. M. D. 1816, Jour. Phys., lxxxiii, 259.  
 Abel, O. 1901 A, 25.  
 1901 B, 297, 304 (Sphargis, Dermochelys).  
 1909 F, 469.  
 1912 F, 131, 523, 611, 668, fig. 469.  
 1919 A, 406, fig. 316.  
 1921 A, 193.  
 Andrews, C. W. 1919 A, 314.  
 Baur, G. 1888 A, 44.  
 Boulenger, G. A. 1889 A, 7, fig. 1.  
 1891 C, 8.  
 Broom, R. 1911 A, 921.  
 Burne, R. H. 1905 A, 291.  
 Case, E. C. 1898 C, 726.  
 Coker, R. E. 1910 A, 5.  
 Dollo, L. 1889 B, 669 (Dermatochelys).  
 1903 C, 801.  
 1923 C, 417.  
 Ford, J. 1879 A, 633 (Sphargis coriacea).  
 Fries, C. 1924 A, 279 ("lederschildkröte").  
 Fuchs, H. 1907 B, 423, pl. xx, figs. 1, 2 (Sphargis).  
 1909 B, 152.  
 1909 D, 55 (Sphargis).  
 1910 A, 84.  
 1912 B, 87.  
 1920 A.  
 1920 B.  
 Fürbringer, M. 1900 A, 320, fig. 82.  
 1904 A, 581.  
 Gadow, H. 1901 B, 333, fig. 73 (Sphargis).  
 Gray, J. E. 1873 D, 169, 171, pl. vi, fig. 5 (Sphargis).  
 Hay, O. P. 1901 C, 624.  
 1905 A, 147.  
 1908 A, 17.  
 1912 E, 218.
- Hay, O. P. 1922 C.  
 1922 E, 421.  
 1928 A, 1-12.  
 Hoffmann, C. K. 1879 B, 53 (Sphargis).  
 Kathariner, L. 1913 A, 369.  
 Kingsley, J. S. 1925 A, 266, fig. 287 (Sphargis).  
 K'laauw, C. J. 1924 B, 592.  
 Le Conte, J. 1854 A, 186 (Sphargis).  
 Lydekker, R. 1901 B, 652 ("leather turtle").  
 Matthes, E. 1921 C, 113, 187.  
 Nick, L. 1912 A, 1-214, pls. i-ix.  
 Noble, G. K. 1923 A, 377.  
 Nopcsa, F. 1923 E, 1045, 1048, figs. 8, 9.  
 1923 F.  
 1923 H, 32-34, 37, 164, 186, 191.  
 1926 A, 656.  
 Owen, R. 1868 A, 909 (Sphargis).  
 Proctor, J. B. 1922 A, 516.  
 Rabi, C. 1903 A, 167.  
 Rathke, H. 1846 A, 161, 165 (Sphargis).  
 Reynolds, S. H. 1897 A, 538.  
 Rüschkamp, F. 1925 A, 133.  
 Schmidt, W. J. 1920 A, 10.  
 Siebenrock, F. 1909 A, 552.  
 Stannus, H. 1856 A (Sphargis).  
 Strasser, O. z. 1919 A, 134.  
 Vaillant, L. 1881 A, 47.  
 Van Bermelen, J. F. 1923 A, 287, 288.  
 Versluys, J. 1908 A, xviii.  
 1909 A, 253, figs. A, B.  
 1910 A, 487.  
 1912 B, 576, 674.  
 1914 A, 791, figs. 1-3.  
 1914 B, 321-347, figs. 1, 3, 4.  
 1919 A, 5, fig. 2.  
 Völker, H. 1913 A, 432.  
 Watson, D. M. S. 1914 H, 1012.  
 Wieland, G. R. 1906 A, 239.

- Wieland, G. R. 1906 B, 10, fig. 3.  
 1909 A, 129.  
 1909 B, 252.  
 1911 A, 112.  
 1912 A, 287.  
 Williston, S. W. 1908 G, 803.  
 1914 A, 241, fig. 128.

- Williston, S. W. 1925 B, 223.  
 Woodward, A. S. 1888 O, 353.  
 Zdansky, O. 1924 A, 93.  
 Zittel and Broili 1911 A, 253.  
 1923 A, 297, 307.

No fossil species of this genus are recognized from North America.

**PSEPHOPHORUS** Meyer. Type *P. polygonus* Meyer.

- Meyer, H. 1847, Neues Jahrb. Min. Geol., 579.  
 Abel, O. 1901 B, 304.  
 1909 F, 469.  
 1912 F, 615.  
 1919 A, 406, fig. 315.  
 1921 A, 193.  
 Andrews, C. W. 1901 A, 440, fig. 3.  
 1906 A, xxiv, 275.  
 1916 B, 519.  
 1919 A, 314.  
 Boulenger, G. A. 1891 C, 8.  
 Dollo, L. 1888 C, 66, pl. iv, fig. 7 (*Sphargis rupeliensis*).  
 1903 C.  
 1919 A, 13.  
 Fries, C. 1924 A, 279.  
 Gadow, H. 1901 B, 337.  
 Goette, A. 1899 A, 426.  
 Hay, O. P. 1905 A, 160.  
 Jaekel, O. 1907 B, 51, fig. 35.  
 Lydekker, R. 1889 G, 224.  
 Nopcea, F. 1923 H, 191.  
 Oswald, F. 1909 A, 124.

- Seeley, H. G. 1880 B, 406.  
 Stromer, E. 1916 A, 405.  
 Versluys, J. 1914 B, 323, 343.  
 Volker, H. 1913 A, 535.  
 Wieland, G. R. 1909 A, 125.  
 Williston, S. W. 1925 B, 226.  
 Woodward, A. S. 1898 B, 174.  
 Zittel, K. A. 1890 A, 520.  
 Zittel and Broili 1911 A, 254.  
 1923 A, 308.  
 Zittel and Eastman, etc. 1902 A, 197.

**Psephophorus calvertensis** Palmer.

- Palmer, W. 1909 A, 370, pl. xxxi.  
 Upper or Middle Miocene (Calvert); Maryland.

**Psephophorus** sp. indet.

- Abel, O. 1901 A, 25 (Not *Psephophorus*).  
 Müller, J. 1849 A, 34, pl. xxvii, fig. 7 ("Dermatochelys"?).  
 Winge and Miller 1921 A, 58. Eocene (Jackson); Alabama. This genus?.

**Suborder THECOPHORA** Dollo.

- Hay, O. P. 1902 A, 436.  
 Abel, O. 1901 B, 316 ("thecephoren").  
 1904 B, 743 ("thecephoren").  
 Arldt, T. 1909 D, 652.  
 Coker, R. E. 1910 A, 5.  
 Dollo, L. 1886 B, 130.  
 1887 B, 392.  
 1889 B, 669 ("thecephores").  
 1901 A, 9.  
 1903 A, 727 (thecephores).  
 1913 A, 51 (thecephores).  
 1923 C, 418 ("thecephores").  
 Fejérváry, G. J. 1920 A, 347.  
 Fuchs, H. 1907 B, 425.  
 1909 B, 152.

- Fuchs, H. 1920 A, 356 ("thecephoren").  
 Fürbringer, M. 1900 A, 631.  
 Gadow, H. 1901 B, 338.  
 Hay, O. P. 1908 A, 43.  
 1909 D, 341.  
 1922 C.  
 1922 E, 425, 439.  
 1923 A, 4.  
 Siebenrock, F. 1909 A, 428.  
 Tornier, G. 1913 B, 365 (Thecopora).  
 Versluys, J. 1914 B, 339.  
 Volker, H. 1913 A, 526 ("thecephoren").  
 Werner, F. 1898 A, 280.  
 Williston, S. W. 1908 G, 803.  
 1925 B, 222.

**Superfamily PLEUROSTENOIDEÆ**, new name.

- Unless otherwise stated the authors, as cited, employ the name *Amphichelydia*.  
 Abel, O. 1919 A, 411 (*Amphichelydæ*).  
 Andrews, C. W. 1921 A, 152.  
 Arldt, T. 1907 D, 637 (*Amphichelydæ*).  
 1909 D, 652 ("amphichelydiden").  
 Baur, G. 1891 E, 638.  
 Fraas, E. 1913 B, 14.  
 Fuchs, H. 1920 A, 357 ("amphichelydide").  
 Cooper, C. F. 1922 C, 156 (*Amphichelydæ*).  
 Harrassowitz, H. 1922 A, 183.  
 Hay, O. P. 1904 A, 264.  
 1905 A, 137.  
 1905 D, 125.  
 1905 G, 331.  
 1905 H, 296.

- Hay, O. P. 1905 J, 992.  
 1908 A, 43.  
 1912 E, 219.  
 1922 E, 425.  
 Huene, F. 1926 G, 511, 514 ("amphichelydiden").  
 Jaekel, O. 1911 A, 185 (*Amphichelydi*).  
 1916 A, 206 (*Amphichelidea*).  
 Lydekker, R. 1912 C, 28.  
 Matthew, W. D. 1915 K, 437.  
 Nopcea, F. 1922 D, 156 (*Amphichelydæ*).  
 1923 E, 1047 (*Amphichelydia*).  
 1923 F (*Amphichelydia*, *Amphichelydæ*).  
 1923 H, 35, 39, 121, 168, tab. (*Amphichelydæ*).  
 1926 A, 651 (*Amphichelydia*).  
 1928 A, 165 (*Amphichelonoides*).

- Thyng, F. W. 1906 A, 51.  
 Versluys, J. 1914 A, 794.  
 Watson, D. M. S. 1907 A, 314.  
 1914 H, 1013.  
 1917 C, 178.  
 Wegner, T. 1911 A, 122.

- Williston, S. W. 1908 G, 804.  
 1914 A, 223.  
 1925 B, 210, 223.  
 Zittel and Broili 1911 A, 247 (Amphichelydidae).  
 1923 A, 300.  
 Zittel, Eastman, etc. 1902 A, 204, 206.

## PLEUROSTERNIDÆ Cope.

- Cope, E. D. 1868 B, 282.  
 Hay, O. P. 1902 A, 437, in part.  
 Abel, O. 1919 A, 411.  
 Arldt, T. 1912 A, 668, 678.  
 Ballerstedt, M. 1921 A, 65 (Pleurosternum).  
 Cope, E. D. 1873 E, 621 (Baenidae).  
 1882 E, 143.  
 Gilmore, C. W. 1920 A, 11.  
 Hay, O. P. 1908 A, 45.

- Marsh, O. C. 1890 E, 178 (Glyptopsidae).  
 Matthew, W. D. 1921 D, 211.  
 Nopcsa, F. 1923 H, 122 (Pleurosternidae, Pleurosterninae).  
 1928 A, 165 (Pleurosternidae, Pleurosterninae).  
 Watson, D. M. S. 1907 A, 314.  
 Williston, S. W. 1925 B, 223.  
 Zittel, Eastman, etc. 1902 A, 207.

GLYPTOPS Marsh. Type *G. ornatus* Marsh = *Compsemys plicatulus* Cope.

- Marsh, O. C. 1890 E, 177.  
 Hay, O. P. 1902 A, 437 (Compsemys, in part).  
 Andrews, C. W. 1921 A, 150, 152.  
 Hay, O. P. 1908 A, 45.  
 Huene, F. 1926 G, 511.  
 Nopcsa, F. 1923 D, 104.  
 1923 F.  
 1923 H, 32, 35, 36, 191.  
 Oertel, W. 1914 A, 105.  
 Simpson, G. G. 1926 E, 7.  
 Völker, H. 1913 A, 493.  
 Watson, D. M. S. 1910 A, 311.  
 Williston, S. W. 1925 B, 223.  
 Zittel and Broili 1923 A, 301.

**Glyptops? belviderensis** (Cragin).

- Hay, O. P. 1902 A, 439 (Plesiochelys).  
 1908 A, 53, pl. vii, figs. 3, 4.  
 Lower Cretaceous (Comanche); Kansas.

**Glyptops cælatus** Hay.

- Hay, O. P. 1908 A, 46, 52, pl. vii, figs. 1, 2; text-figs. 23-31.  
 Gilmore, C. W. 1916 A, 11.  
 1921 E, 590.  
 Lower Cretaceous (Potomac); Maryland.

**Glyptops depressus** Hay.

- Hay, O. P. 1908 A, 46, 55, text-figs. 33, 34.  
 Bowen, C. F. 1915 A, 126.  
 Gilmore, C. W. 1916 A, 11.  
 1920 A, 23.  
 Upper Cretaceous (Denver or Arapahoe); Colorado.

**Glyptops pervicax** Hay.

- Hay, O. P. 1908 A, 46, 54, text-fig. 32.  
 Gilmore, C. W. 1916 A, 11.  
 Upper Cretaceous (Benton); Montana.

**Glyptops plicatulus** (Cope).

- Hay, O. P. 1902 A, 437 (Compsemys).  
 Gilmore, C. W. 1909 B, 39 (*G. ornatus*).  
 1914 A, 4, 25.  
 1916 A, 7.  
 Hay, O. P. 1908 A, 20, 46, 47, pls. v, vi; text-figs. 17-27.  
 1908 D, 161, text-fig. 1.  
 Huene, F. 1926 G, 511 (*G. plicatilis*).  
 Merrill, G. P. 1907 A, 72 (*G. ornatus*).  
 Mook, C. C. 1916 A, 155 (Compsemys, Glutops ornatus).  
 Nopcsa, F. 1923 F, 14, 15.  
 Stromer, E. 1912 A, 95, fig. 93.  
 Watson, D. M. S. 1910 A, 314.  
 Williston, S. W. 1905 B, 346 [Compsemys plicatulus (*Glutops ornatus*)].  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming, Colorado.

**Glyptops utahensis** Gilmore.

- Gilmore, C. W. 1916 A, 7, pls. i, ii; text-figs. 1, 2.  
 Upper Jurassic or Lower Cretaceous (Morrison); Utah.

NEURANKYLUS Lambe. Type *N. eximius* Lambe.

- Lambe, L. M. 1902 A, 42.  
 Gilmore, C. W. 1916 D, 289.  
 1920 A, 11.  
 Hay, O. P. 1908 A, 93.  
 Nopcsa, F. 1923 F, 15.  
 1923 H, 35.  
 Williston, S. W. 1925 B, 224.

**Neurankylus baueri** Gilmore.

- Gilmore, C. W. 1916 D, 290, pls. lxxiv, lxxv; text-figs. 32, 33.  
 1919 C, 113.

- Gilmore, C. W. 1920 A, 8, 10, 11.  
 Reeside, J. B. 1924 A, 23.  
 Upper Cretaceous (Kirtland); New Mexico.

**Neurankylus eximius** Lambe.

- Lambe, L. M. 1902 A, 42, text-fig. 7.  
 Bowen, C. F. 1915 A, 122.  
 Brown, B. 1914 E, 378.  
 Gilmore, C. W. 1916 D, 289, fig. 31.  
 Hatcher, J. B. 1905 B, 79.  
 Hay, O. P. 1908 A, 94, text-fig. 90.  
 Knowlton, F. H. 1911 C, 59, 62.

- Lambe, L. M. 1904 C, 22, 37, 47.  
1906 A, 194.  
Matthew, W. D. 1916 A, 484.  
Osborn, H. F. 1902 H, 674.  
1902 I, 12, 17.  
Upper Cretaceous (Belly River); Alberta.

**Neurankylus wyomingensis** Gilmore.

- Gilmore, C. W. 1919 C, 113-115, pls. xxix, xxx.  
Upper Cretaceous (Colorado); Wyoming.

**BAËNIDÆ** Cope.

- Cope, E. D. 1883 E, 143.  
Hay, O. P. 1902 A, 437 (Pleurosternidæ, in part).  
Ardt, T. 1912 A, 668, 678, 688, 714.  
Cooper, C. F. 1922 C, 156.  
Cope, E. D. 1880 U, 152.  
Gilmore, C. W. 1920 A, 24.  
Hay, O. P. 1903 B, 203.  
1908 A, 18, 56.  
1922 E, 438.

- Huxley, T. H. 1887 C, 234.  
Lydekker, R. 1886 G, 522.  
Matthew, W. D. 1914 B, 387.  
1921 D, 211, 214.  
Nopcsa, F. 1922 D, 156.  
1923 H, 39.  
1928 A, 165 (Baëninæ).  
Stefano, G. 1917 A, 282, 286.  
Watson, D. M. S. 1907 A, 814.  
Williston, S. W. 1925 B, 224.

**PROBAËNA** Hay. Type *P. sculpta* Hay.

- Hay, O. P. 1903 B, 201.  
1908 A, 58.  
Nopcsa, F. 1923 H, 35.  
Simpson, G. G. 1926 E, 7.  
1926 H, 204.  
Williston, S. W. 1925 B, 224.  
Zittel and Broili 1911 A, 248.  
1923 A, 301.

**Probaëna sculpta** Hay.

- Hay, O. P. 1903 B, 201, pl. iii, figs. 1, 2.  
Gilmore, C. W. 1914 A, 25.  
Hay, O. P. 1908 A, 58, pl. vii, fig. 5.  
Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**BAËNA** Leidy. Type *B. arenosa* Leidy.

- Leidy, J. 1870 S, 123.  
Hay, O. P. 1902 A, 437.  
Boulenger, G. A. 1918 E, 515.  
Dollo, L. 1886 A, pl. ii, fig. 11.  
Fraas, E. 1913 B, 15, 29.  
Gilmore, C. W. 1917 A, 107.  
1920 A.  
Hay, O. P. 1901 A, 825.  
1903 B, 201.  
1903 H, 350.  
1904 A, 265.  
1905 A, 138.  
1905 G, 331.  
1905 I, 297.  
1908 A, 20, 59.  
1922 E, 438.  
Leidy, J. 1873 B, 161, 341, pl. xiii, figs. 1-3; pl. xvi, figs. 8-9.  
Lydekker, R. 1889 E, 518.  
Nopcsa, F. 1923 F.  
1923 H, 31, 32, 34-36, 186, 191, pl. v, fig. 6.  
Osborn, H. F. 1902 H, 673.  
Williston, S. W. 1902 K, 953.  
1925 B, 224.  
Zittel and Broili 1911 A, 248.  
1923 A, 301.  
Zittel, Eastman, etc. 1902 A, 207.

**Baëna antiqua** Lambe.

- Lambe, L. M. 1902 A, 44, text-fig. 10.  
Bowen, C. F. 1915 A, 122.  
Brown, B. 1914 E, 378.  
Gilmore, C. W. 1919 C, 116-119, pls. xxxi, xxxii; text-figs. 1, 2.  
Hatcher, J. B. 1905 B, 78.  
Hay, O. P. 1905 B, 182.  
1908 A, 62, text-figs. 37, 38.

- Knowlton, F. H. 1911 C, 59, 63.  
Lambe, L. M. 1904 C, 22, 37, 47.  
1906 A, 189.  
1906 B, 233.  
1907 B, 179.

**Baëna arenosa** Leidy.

- Matthew, W. D. 1916 A, 484.  
Nopcsa, F. 1923 F, 15, 16.  
Osborn, H. F. 1902 H, 674.  
1902 I, 12, 17.  
Upper Cretaceous (Belly River); Alberta.

**Baëna callosa** Hay.

- Hay, O. P. 1902 A, 437.  
Gilmore, C. W. 1915 H, 107, pl. xviii, fig. 1; text-fig. 1.  
Hay, O. P. 1905 A, 140.  
1908 A, 67, pls. xii, xiii, fig. 1; pl. xiv, figs. 1-3; text-figs. 44-51.  
Huene, F. 1926 G, 511.  
Lambe, L. M. 1906 B, 233.  
Merrill, G. P. 1907 A, 64.  
Middle Eocene (Bridger); Wyoming.

**Baëna clara** Hay.

- Hay, O. P. 1905 B, 178, text-figs. 1, 2.  
Bowen, C. F. 1915 A, 122.  
Hay, O. P. 1908 A, 60, pl. viii, fig. 1; text-figs. 35, 36.  
Upper Cretaceous (Judith River); Montana.  
Hay, O. P. 1908 A, 74, pl. xvi, figs. 1, 2; text-figs. 57, 58.  
Gilmore, C. W. 1915 H, 116.  
Nopcsa, F. 1923 F, 14, 15, 16.  
Middle Eocene (Bridger); Wyoming.



**Baëna emiliæ Hay.**

Hay, O. P. 1908 A, 80, pl. xx, figs. 1, 2; text-figs. 67, 68.

Gilmore, C. W. 1915 H, 109.

Upper Eocene (Uinta); Utah.

**Baëna escavada Hay.**

Hay, O. P. 1908 A, 65, pl. xi, figs. 1, 2; text-figs. 42, 43.

Gilmore, C. W. 1920 A, 10.

Matthew, W. D. 1914 B, 383.

Reeside, J. B. 1924 A, 42.

Paleocene (Torrejon); New Mexico.

**Baëna gigantea Gilmore.**

Gilmore, C. W. 1915 H, 116, pl. xx, figs. 1, 2; text-figs. 5-7.

Upper Eocene (Uinta); Utah.

**Baëna hatcheri Hay.**

Hay, O. P. 1901 A, 325, pl. xv.

Bowen, C. F. 1915 A, 122.

Gilmore, C. W. 1915 H, 117.

1916 D, 293.

1919 C, 123.

Hatcher, J. B. 1903 D, 372.

1905 B, 79.

Hay, O. P. 1903 D, 118.

1904 A, 261.

1905 B, 181.

1908 A, 63, pls. ix, x; text-figs. 40, 41.

Knowlton, F. H. 1911 C, 59, 63.

Lambe, L. M. 1902 A, 43, figs. 8, 9.

1904 C, 22, 36, 47.

1906 B, 233.

Nopcsa, F. 1923 F, 15.

Osborn, H. F. 1902 H, 674.

1902 I, 12, 17.

Williston, S. W. 1902 K, 953.

Upper Cretaceous (Lance); Wyoming; (Belly River); Alberta.

**Baëna hayi Gilmore.**

Gilmore, C. W. 1916 C, 641, pls. xxxii, xxxiii.

Nopcsa, F. 1923 F, 14.

Upper Cretaceous (Lance); Wyoming.

**Baëna inflata Gilmore.**

Gilmore, C. W. 1915 H, 112, pl. xix; text-figs. 2, 3.

Upper Eocene (Uinta); Utah.

**Baëna marshi Hay.**

Hay, O. P. 1904 A, 261, pl. xi; text-fig. 1.

Bowen, C. F. 1915 A, 122.

Hay, O. P. 1905 B, 181.

1908 A, 62, pl. viii, fig. 2; text-fig. 39.

Lambe, L. M. 1906 B, 233.

Upper Cretaceous (Lance); Wyoming.

**Baëna nodosa Gilmore.**

Gilmore, C. W. 1916 D, 293, pl. lxxvi; text-figs. 34, 35.

1920 A, 8, 10, 24.

Reeside, J. B. 1924 A, 21, 23, 27.

Upper Cretaceous (Kirtland, McDermott, Fruitland); New Mexico.

**Baëna platyplastra Gilmore.**

Gilmore, C. W. 1915 H, 120, pl. xviii, fig. 2; text-fig. 8.

Upper Eocene (Uinta); Utah.

**Baëna riparia Hay.**

Hay, O. P. 1908 A, 76, pls. xvii-xix, figs. 1-3; text-figs. 59-66.

Huene, F. 1920 D, 166.

Nopcsa, F. 1923 F, 13, 16.

Volker, H. 1913 A, 493.

Middle Eocene (Bridger); Wyoming.

**Baëna sima Hay.**

Hay, O. P. 1908 A, 71, pl. xiii, figs. 2, 3; pl. xiv, figs. 4-6; pl. xv; text-figs. 52-56.

Gilmore, C. W. 1915 H, 112.

Huene, F. 1926 G, 511.

Nopcsa, F. 1923 D, 104.

1923 F, 2.

Middle Eocene (Bridger); Wyoming.

**Baëna sp. indet.**

Gilmore, C. W. 1920 A, 8, 24. Upper Cretaceous (Kirtland); 10, 24: Paleocene (Torrejon); 9, 24 (Puerco); New Mexico.

1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

Reeside, J. B. 1924 A, 38. Upper Cretaceous (Puerco); New Mexico.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

**EUBAENA Hay. Type *E. cephalica* Hay.**

Hay, O. P. 1908 A, 82.

1910 B, 294.

Nopcsa, F. 1923 F, 6.

Williston, S. W. 1925 B, 224.

**Eubaëna cephalica Hay.**

Hay, O. P. 1904 A, 263, pl. xii, figs. 1-3 (Baëna).

Bowen, C. F. 1915 A, 126.

Hay, O. P. 1905 A, 138 (Baëna).

1908 A, 82, pl. xix, fig. 4; pl. xxi, figs. 1-2.

Lambe, L. M. 1906 B, 233 (Baëna).

Nopcsa, F. 1923 F, 2.

Upper Cretaceous (Lance); Wyoming.

**Eubaëna latifrons Hay.**

Hay, O. P. 1908 A, 83, text-figs. 69, 70.

Bowen, C. F. 1915 A, 126.

Upper Cretaceous (Lance); Wyoming.

**CHISTERNON Leidy. Type *C. undatum* Leidy.**

Leidy, J. 1872 L, 162.

Hay, O. P. 1902 A, 436 (Baëna, in part).

Harrassowitz, H. 1922 A, 183.

Hay, O. P. 1908 A, 20, 84.

Nopcsa, F. 1923 E, 1058.

1923 F.

1923 H, 34, 35 (Chisternum).

**Chisternon hebraicum** (Cope).

- Cope, E. D. 1872 NN, 4 (Baëna).  
 Hay, O. P. 1902 A, 438 (Baëna).  
     1906 C, 156, text-fig. 1.  
     1908 A, 87, pl. xxi, figs. 3, 4; pl. xxiii, fig. 1; text-figs. 76-87.  
 Lambe, L. M. 1906 B, 233 (Baëna).  
 Merrill, G. P. 1907 A, 64 (Baëna).  
 Nopcsa, F. 1923 D, 104.  
 Völker, H. 1913 A, 492.  
     Middle Eocene (Bridger); Wyoming.

**Chisternon? interpositum** Hay.

- Hay, O. P. 1909 B, 194, text-figs. 2, 3.  
     Paleocene (Fort Union); Montana.

**Chisternon undatum** Leidy.

- Hay, O. P. 1902 A, 433 (Baëna).  
     1905 A, 138, 140, text-figs. 1-3 (Baëna).  
     1906 C, 156.  
     1908 A, 85, pl. xxii; text-figs. 71-75.  
     Middle Eocene (Bridger); Wyoming.

**BOREMYS** Lambe. Type *Baëna pulchra* Lambe.

- Lambe, L. M. 1906 B, 232.  
 Hay, O. P. 1908 A, 91.  
     1909 B, 194.  
 Nopcsa, F. 1923 H, 35, 36.  
 Versluys, J. 1914 A, 801.  
     1914 B, 337, 338.  
 Williston, S. W. 1925 B, 224.  
**Boremys albertensis** Gilmore.  
 Gilmore, C. W. 1919 C, 119-123, pls. xxxiii, xxxiv; text-figs. 3, 4.  
 Nopcsa, F. 1923 F, 14.  
     Upper Cretaceous (Belly River); Alberta.

**Boremys pulchra** Lambe.

- Lambe, L. M. 1906 A, 189, pl. iii, fig. 4; pl. iv (Baëna).  
 Bowen, C. F. 1915 A, 122.  
 Brown, B. 1914 E, 378.  
 Gilmore, C. W. 1919 C, 121.  
 Hay, O. P. 1906 C, 156.  
     1908 A, 92, text-figs. 88, 89.  
 Lambe, L. M. 1906 B, 232.  
     1914 A, 13, text-figs.  
     1914 F, 294.  
 Matthew, W. D. 1916 A, 434.  
 Nopcsa, F. 1923 F, 14, 15.  
     Upper Cretaceous (Belly River); Alberta.

**THESCELUS** Hay. Type *T. insiliens* Hay.

- Hay, O. P. 1908 A, 94.  
     1910 B, 294.  
 Nopcsa, F. 1923 H, 35.  
     1928 A, 165.  
 Williston, S. W. 1925 B, 224.  
**Thescelus insiliens** Hay.  
 Hay, O. P. 1908 A, 95, pls. xxiv, xxv.  
 Bowen, C. F. 1915 A, 126.  
 Brown, B. 1914 E, 380.  
     Upper Cretaceous (Lance); Wyoming.

**Thescelus rapiens** Hay.

- Hay, O. P. 1908 A, 97, figs. 91, 92.

- Brown, B. 1910 A, 269 (*T. repiens*).  
     1914 E, 380.  
 Gilmore, C. W. 1916 D, 295, fig. 36.  
     1920 A, 9.  
 Reeside, J. B. 1924 A, 31.  
 Sinclair and Granger 1914 A, 303.  
     Upper Cretaceous (Ojo Alamo); New Mexico.

**Thescelus** sp. indet.

- Gilmore, C. W. 1924 D, 27 (This genus?).  
     Upper Cretaceous (Lance); Saskatchewan.  
 Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

**CHARITEMYS** Hay. Type *C. captans* Hay.

- Hay, O. P. 1908 A, 98.  
 Williston, S. W. 1925 B, 224.

**Charitemys captans** Hay.

- Hay, O. P. 1908 A, 93, text-figs. 93-95.  
     Upper Cretaceous (Judith River); Montana.

**POLYTHORAX** Cope. Type *P. missuriensis* Cope.

- Hay, O. P. 1902 A, 438.  
     1908 A, 18, 100.  
 Nopcsa, F. 1923 A, 165.  
 Williston, S. W. 1925 B, 224.

**Polythorax missuriensis** Cope.

- Hay, O. P. 1902 A, 438.

- Bowen, C. F. 1915 A, 126.  
 Hatcher, J. B. 1905 B, 77.  
 Hay, O. P. 1908 A, 100.  
 Knowlton, F. H. 1911 C, 59, 62.  
 Osborn, H. F. 1902 H, 674.  
     1902 I, 12, 17.  
     Upper Cretaceous (Judith River); Montana.

**NAOMICHELYS** Hay. Type *N. speciosa* Hay.

- Hay, O. P. 1908 A, 101.  
 Nopcsa, F. 1923 H, 166, 191.  
 Williston, S. W. 1925 B, 224.

**Naomichelys speciosa** Hay.

- Hay, O. P. 1908 A, 101, pl. xl, figs. 2, 3.  
     Upper Jurassic or Lower Cretaceous (Morrison); Montana.

*Superfamily CHELYDROIDÆ, new name.*

- Unless otherwise indicated the authors, as cited, use for this group the name *Pleurodira*.
- Hay, O. P. 1902 A, 438.  
 Abel, O. 1919 A, 406.  
 1920 A, 363.  
 Andrews, C. W. 1906 A, xxiv.  
 Arldt, T. 1907 D, 674.  
 1909 D, 652 ("pleurodiren").  
 Baur, G. 1891 E, 631.  
 Boulenger, G. A. 1918 E, 515 ("pleurodires").  
 Case, E. C. 1898 C, 728.  
 Cope, E. D. 1891 N, 39.  
 Diener, C. 1909 A, 36.  
 Dollo, L. 1886 B, 130.  
 1889 B, 669.  
 1903 A, 19 ("pleurodères").  
 1903 C, 807 ("pleurodères").  
 1913 A, 50 ("pleurodères").  
 1913 B, 623 ("pleurodères").  
 Fraas, E. 1903 A, 88, 100.  
 Fuchs, H. 1907 B, 433.  
 1908 C, 155 ("pleurodiren").  
 1909 B, 143 ("pleurodiren").  
 1912 B, 83 ("pleurodiren").  
 1920 A, 370.  
 1920 B, 12.  
 Gadow, H. 1901 B, 368.  
 1905 B, 639 (Pleurodires).  
 Hay, O. P. 1905 A, 137, 170.  
 1905 D, 125.  
 1905 G, 331.  
 1905 I, 297.  
 1905 J, 992.  
 1908 A, 12, 34, 43, 102.  
 1912 E, 219.  
 1922 E, 421, 489.  
 1928 A, 6.  
 Jaekel, O. 1911 A, 185 (Pleurodiri).  
 1916 A, 206, 213 ("pleurodiren").
- Kasper, A. 1903 A, 137, 147.  
 Koken, E. 1893 B, 272, 397.  
 Lydekker, R. 1889 E (Pleurodira, Amphichelydia).  
 1912 C, 28, 127.  
 Matthew, W. D. 1915 A, 284.  
 1915 K, 437.  
 Nopcsa, F. 1923 F.  
 1923 H, 36, 37, 39, 122, 165, 167, 168, tab.  
 1928 A, 166 (Pleurodira).  
 Reynolds, S. H. 1897 A, 195.  
 Siebenrock, F. 1906 A, 829 (Chelydridæ).  
 1909 A, 554.  
 Siegelbauer, F. 1909 A, 185 (Pleurodiren).  
 Stannius, H. 1856 A (Emydea monomopelyca).  
 Stehli, G. 1910 A, 788.  
 Steinmann, G. 1907 A, 435.  
 Stromer, E. 1912 A, 96.  
 Tornier, G. 1913 B, 365.  
 Vallant, L. 1881 A.  
 Versluys, J. 1914 A, 798.  
 1914 B, 325 ("pleurodiren").  
 1919 A, 15 ("pleurodiren").  
 Waite, E. R. 1905 A, 117.  
 Wamich, P. 1913 A, 14 ("pleurodiren").  
 Watson, D. M. S. 1914 H, 1012 (Pleurodeira).  
 1917 C, 177 (Pleurodeira).  
 Williston, S. W. 1908 G, 804.  
 1914 A, 16, 45, 222, 224.  
 1925 A, 198.  
 1925 B, 210, 223, 224.  
 Woodward, A. S. 1888 O, 352.  
 1898 B, 175.  
 1901 B, 182.  
 Zdansky, O. 1924 A, 91, 98.  
 Zittel and Broili 1911 A, 247.  
 1923 A, 302.  
 Zittel, Eastman, etc. 1902 A, 203.

*BOTHREMYDIDÆ Baur.*

- Hay, O. P. 1902 A, 438 (Pelomedusidæ).  
 Arldt, R. 1912 A, 688.  
 Hay, O. P. 1908 A, 102.
- Nopcsa, F. 1923 H, 122, 193.  
 1928 A, 166.  
 Zittel and Broili 1911 A, 248.  
 1923 A, 303.

*BOTHREMYS Leidy. Type B. cookii Leidy.*

- Hay, O. P. 1902 A, 438.  
 1908 A, 102.  
 Nopcsa, F. 1928 A, 166.  
 Williston, S. W. 1901 B, 198.  
 1925 B, 224.  
 Zittel and Broili 1911 A, 248.
- Bothremys cookii* Leidy.  
 Hay, O. P. 1902 A, 438.  
 1908 A, 103, pl. xxiii, figs. 2, 3; text-figs. 96, 97.  
 Upper Cretaceous? (Navesink-Horners-town?); New Jersey.

*TAPHROSPHYS Cope. Type Platemys sulcatus Leidy.*

- Hay, O. P. 1902 A, 438.  
 1908 A, 102, 104.  
 Nopcsa, F. 1923 F, 17.  
 1928 A, 166.  
 Williston, S. W. 1925 B, 224.
- Taphrospheys dares* Hay.  
 Hay, O. P. 1908 A, 120, text-figs. 121-124.  
 Stephenson, L. W. 1912 A, 120.  
 Upper Cretaceous (Ripley); Georgia. Also in Black Creek formation, North Carolina, *fdæ* Gilmore.

**Taphrosphys lesianus** Cope.

Hay, O. P. 1902 A, 438.  
1908 A, 111, text-figs. 103-106.  
Upper Cretaceous; New Jersey.

**Taphrosphys longinuchus** Cope.

Hay, O. P. 1902 A, 438.  
1908 A, 108, text-figs. 101, 102.  
Upper Cretaceous? (Hornerstown?); New Jersey.

**Taphrosphys molops** Cope.

Hay, O. P. 1902 A, 438.  
Cope, E. D. 1869 M, 158, 159, figs. 43, 44, pl. vii; fig. 16.  
Hay, O. P. 1908 A, 115, text-figs. 112-120.  
Upper Cretaceous? (Navesink); New Jersey.

**Taphrosphys nodosus** Cope.

Hay, O. P. 1902 A, 438.  
1908 A, 122.  
Upper Cretaceous? (Hornerstown); New Jersey.

**Taphrosphys strenuus** Cope.

Hay, O. P. 1902 A, 438.  
Dall and Harris 1892 A, 85 (Taphrosphys).  
Hay, O. P. 1908 A, 114, text-figs. 107-111.  
Upper Cretaceous? (Navesink-Hornerstown); New Jersey.

**Taphrosphys sulcatus** (Leidy).

Hay, O. P. 1902 A, 439.  
Cope, E. D. 1869 M, 159, 164, text-figs. 45, 45bis (Taphrosphys); 165, pl. xi, fig. 2 (Prochonias).  
Hay, O. P. 1908 A, 106, text-figs. 98-100.  
Upper Cretaceous (Tinton); New Jersey.

**AMBLYPEZA** Hay. Type *A. entellus* Hay.

Hay, O. P. 1908 A, 102, 122.  
Nopcsa, F. 1928 A, 166.  
Williston, S. W. 1925 B, 224.

**Amblypeza entellus** Hay.

Hay, O. P. 1908 A, 122, figs. 125, 132.  
Upper Cretaceous? (Greensand); New Jersey.

**NAIADOCHELYS** Hay. Type *N. ingravata* Hay.

Hay, O. P. 1908 A, 102, 125.  
Nopcsa, F. 1928 A, 166.  
Williston, S. W. 1925 B, 224.  
Zittel and Broili 1911 A, 248.

**Naiadochelys ingravata** Hay.

Hay, O. P. 1908 A, 125, text-fig. 133.  
Upper Cretaceous (Mesa Verde); New Mexico.

*Superfamily THALASSEMYDOIDÆ*, new name.

Zittel, Eastman, etc. 1902 A, 199 (Chelydroidea, in part).

**THALASSEMYDIDÆ** Rüttimeyer.

Hay, O. P. 1902 A, 440.  
Abel, O. 1919 A, 397 ("thalassemydiden").  
Arlt, T. 1907 D, 645 (Chelonemydidæ); 685 (Thalassemydidæ).  
Dollo, L. 1887 B, 393 (Propleuridæ).  
1903 A, 813 ("thalassémydes").  
1903 C ("thalassémydes").  
Fraas, E. 1903 A, 88.  
1905 B, 364 ("thalassemydiden").  
Fuchs, H. 1909 B, 152.  
1920 A, 357 (Thalassemydæ).  
Gadow, H. 1901 B, 380.  
Hay, O. P. 1905 A, 146, 148.  
1908 A, 126.  
Hoernes, R. 1886 A, 591 (Thalassemydæ).  
Lydekker, R. 1889 A, 147 (Acichelyidæ).  
Nopcsa, F. 1923 F, 13, 16, 122 (Thalassemydæ); 35, 36, 39, 122 (Chelonidæ, in part); 122 (Lytolominae).

Nopcsa, F. 1928 A, 166 (Thalassemydæ, Thalassemydinae).  
Rüttimeyer, L. 1873 A, 125 ("thalassemydiden"); 173 ("chelonemyden").  
Tornier, G. 1913 B, 365.  
Wegner, T. 1911 A, 105.  
Wieland, G. R. 1904 A, 127 (Propleuridæ, Lytolomidæ).  
1904 B, 193 (Propleurinae).  
Williston, S. W. 1925 B, 225.  
Zittel and Broili 1911 A, 250.  
1923 A, 304.

Zittel, Eastman, etc. 1902 A, 199.  
The genera here included under the name *Thalassemydæ* may, on further increase of knowledge, be distributed among two or more families.

**OSTEOGYGIS** Cope. Type *O. emarginatus* Cope.

Hay, O. P. 1902 A, 441.  
Abel, O. 1919 A, 401.  
Dollo, L. 1886 B, 131.  
Hay, O. P. 1905 A, 152.  
1908 A, 127.  
Heilprin, A. 1887 A, 315.

Nopcsa, F. 1923 F.  
1923 H, 37, 191.  
1926 A, 656.  
Wieland, G. R. 1902 A, 108.  
1904 A, 118 (Osteogygis); 125, 129 (Propleura).

Wieland, G. R. 1904 B, 188, 192, 193 (Osteopygis); 188 (Propleura).

1905 A, 329.

Williston, S. W. 1925 B, 225.

Zittel and Broili 1911 A, 251.

1923 A, 305.

Zittel, Eastman, etc. 1902 A, 198.

### **Osteopygis borealis (Wieland).**

Wieland, G. R. 1904 A, 129, pl. ix (Propleura).

Hay, O. P. 1902 A, 441 (Osteopygis sopitus, in part).

Cope, E. D. 1868 E, 147 (Osteopygis sopitus).

1869 B, 735 (Propleura sopita).

1869 K, 88 (Propleura sopita).

1869 M, 140, pl. vii, figs. 4-7; text-fig. 39 (Propleura sopita).

1875 E, 258 (Osteopygis sopitus, in part).

Hay, O. P. 1908 A, 128, 141, pl. xxvi, fig. 3; text-figs. 163-171.

Wieland, G. R. 1904 B, 190, fig. 4 (Propleura).  
Upper Cretaceous? (Hornerstown?); New Jersey.

### **Osteopygis chelydrinus Cope.**

Hay, O. P. 1902 A, 441.

1908 A, 128, 136, pl. xxiii, figs. 4-7; pl. xxviii, figs. 1-4; text-figs. 152-154.

Upper Cretaceous (Navesink); New Jersey.

### **Osteopygis emarginatus Cope.**

Hay, O. P. 1902 A, 441.

1908 A, 128, 129, text-figs. 134-141.

Wieland, G. R. 1904 A, 126.

Upper Cretaceous (Navesink); New Jersey.

### **Osteopygis erosus Cope.**

Hay, O. P. 1902 A, 441.

1908 A, 128, 138, pl. xxvi, fig. 2; text-figs. 155-162.

Wieland, G. R. 1904 A, 130 (Propleura).

Upper Cretaceous? (Navesink-Hornerstown); New Jersey.

### **Osteopygis gibbi Wieland.**

Wieland, G. R. 1904 A, 118, pls. v-viii; text-figs. 3-8.

Hay, O. P. 1908 A, 128, 132, pl. xxvi, fig. 1; pl. xxvii, figs. 1, 2; text-figs. 142-146.

Nopcsa, F. 1923 F, 20.

Wieland, G. R. 1904 B, 188.

1906 B, 12, fig. 5.

Upper Cretaceous? (Navesink-Hornerstown); New Jersey.

### **Osteopygis platylomus Cope.**

Hay, O. P. 1902 A, 441.

1908 A, 128, 146, text-figs. 172-180.

Wieland, G. R. 1904 A, 126.

Upper Cretaceous? (Navesink-Hornerstown); New Jersey.

### **Osteopygis robustus Hay.**

Hay, O. P. 1908 A, 128, 137, text-figs. 147-151.

Upper Cretaceous? (Navesink-Hornerstown); New Jersey.

### **Osteopygis sopitus (Leidy).**

Hay, O. P. 1902 A, 441.

1908 A, 128, 149, text-figs. 181-184.

Wieland, G. R. 1904 A, 130 (Propleura).

Upper Cretaceous (Tinton); New Jersey.

## **CATAPLEURA Cope. Type *C. repanda* Cope.**

Cope, E. D. 1869 M, 143, 235.

Hay, O. P. 1902 A, 441 (Osteopygis).

Dollo, L. 1886 B, 130.

Hay, O. P. 1908 A, 127, 150.

Nopcsa, F. 1923 H, 37.

Williston, S. W. 1925 B, 225.

### **Catapleura ponderosa Cope.**

Hay, O. P. 1902 A, 441 (Osteopygis).

1908 A, 152, text-figs. 189, 190.

Upper Cretaceous (Navesink); New Jersey.

### **Catapleura repanda Cope.**

Hay, O. P. 1902 A, 441 (Osteopygis).

Cope, E. D. 1869 B, 735 (Propleura; no description).

Hay, O. P. 1908 A, 150, text-figs. 185-188.

Upper Cretaceous? (Navesink-Hornerstown?); New Jersey.

## **LYTOLOMA Cope. Type *L. angusta* Cope.**

Hay, O. P. 1902 A, 441.

Abel, O. 1912 F, 528, 616.

1919 A, 401.

Dollo, L. 1886 B, 131.

1887 B, 394 (Euclastes).

1888 G, 107 (Euclastes).

1903 A.

1903 C.

Fuchs, H. 1920 A, 357 (Euclastes).

Hay, O. P. 1905 A, 153.

1908 A, 154.

Huene, F. 1902 A, 48, figs. 55, 59 (Euclastes).

Lydekker, R. 1912 C, 135.

1889 N, 177.

Nopcsa, F. 1923 F, 13, 14.

Nopcsa, F. 1923 H, 37, 191.

Wieland, G. R. 1902 A, 96.

1904 B, 183, 192, 193.

1905 A, 332.

1906 A, 294.

1906 B, 13.

Williston, S. W. 1925 B, 225.

Woodward, A. S. 1898 B, 174.

Zittel and Broili 1911 A, 251.

Zittel, Eastman, etc. 1902 A, 198.

### **Lytoloma angusta Cope.**

Hay, O. P. 1902 A, 442.

1908 A, 155, pl. xxviii, figs. 5, 6; text-figs. 191, 192.

Völker, H. 1913 A, 532.

Wieland, G. R. 1904 B, 184, pls. vi-viii; text-figs. 1, 2, 3.

1905 A, 322, fig. 5.

Upper Cretaceous? (Hornerstown?); New Jersey.

***Lytoloma jeanesii* Cope.**

Hay, O. P. 1902 A, 442.

1908 A, 156, figs. 193-195.

Upper Cretaceous (Hornerstown); New Jersey.

***Lytoloma wielandi* Hay.**

Hay, O. P. 1908 A, 157, pl. xxviii, figs. 7, 8; pl. xxix, fig. 1; text-figs. 196, 197.

Versluys, J. 1914 B, 337 (Syn.? of *L. angusta*).  
Upper Cretaceous? (Hornerstown?); New Jersey.

***Lytoloma?* sp. indet.**

Hay, O. P. 1902 A, 442.

Case, E. C. 1901 A, 97 (Euclastes).

Clark, W. B. 1895 A.  
1897 A, 59.

Clark and Miller 1912 A, 117, 118 (Euclastes).  
Eocene (Aquia); Maryland.

**ERQUELINNESIA Dollo.**

Dollo, L. 1887 B, 393.

Hay, O. P. 1908 A, 160.

Lydekker, R. 1889 G, 51 (Syn. of *Lytoloma*).

Nopcsa, F. 1923 H, 37 (Erquellinesia).

Zittel, K. A. 1890 A, 526 (Syn. of Euclastes).

**Type *E. gosseleti* Dollo.**

***Erquellinesia molaria* Hay.**

Hay, O. P. 1908 A, 160, text-figs. 198, 199.

Cretaceous? (Navesink-Hornerstown); New Jersey.

**RHETECHELYS Hay. Type *Euclastes platyops* Cope.**

Hay, O. P. 1908 A, 161.

Heilprin, A. 1887 A, 315 (Euclastes).

Nopcsa, F. 1923 H, 37 (Rethelchelys).

Zittel and Broili 1911 A, 251.

1923 A, 305.

***Rhetechelys platyops* (Cope).**

Hay, O. P. 1902 A, 442 (*Lytoloma*).

Cope, E. D. 1869 M, 149, pl. vi; pl. vii, fig. 9 (Euclastes).

Hay, O. P. 1908 A, 162, pl. xxix, figs. 2, 3.

Wieland, G. R. 1904 B, 185 (*Lytoloma*).

Upper Cretaceous? (Hornerstown?); New Jersey.

**Superfamily CHELONIOIDÆ, new form.**

Abel, O. 1922 C, 321, 326 ("seeschildkröten").

Nick, L. 1912 A, 214 (Cheloniodea).

Rabl, C. 1903 A, 164 ("eretmopoden").

Siebenrock, F. 1909 A, 544 (Cheloniidea).

Valliant, L. 1894 A, 341 (Phanero derma?).

Wieland, G. R. 1902 A, 107.

1909 A, 102.

Zdansky, O. 1924 A, 91 (Cheloniidea).

Zittel and Broili 1911 A, 252 (Cheloniidea).

1923 A, 307 (Cheloniidea).

Zittel, Eastman, etc. 1902 A, 197 (Cheloniodea).

**DESMATOCHELYIDÆ Williston.**

Hay, O. P. 1902 A, 442.

1908 A, 184.

Nopcsa, F. 1928 A, 166 (Desmemydinæ).

Wieland, G. R. 1902 A, 108 (Desmatochelydinæ).

1906 B, 13 (Desmatochelydinæ).

Williston, S. W. 1925 B, 225.

Zittel and Broili 1911 A, 255.

1923 A, 311.

Zittel and Koken 1911 A, 255.

**DESMATOCHELYS Williston. Type *D. lowii* Williston.**

Hay, O. P. 1902 A, 443.

Boulenger, G. 1885, Zool. Record, Rept. 29 (Desmocheilus).

Dollo, L. 1903 A, 780.

1903 C.

Hay, O. P. 1908 A, 184.

Nopcsa, F. 1923 H, 32.

1928 A, 166.

Williston, S. W. 1914 A, 231.

1925 B, 225.

Zittel and Broili 1911 A, 255.

Zittel and Broili 1923 A, 311.

Zittel, Eastman, etc. 1902 A, 199.

Zittel and Koken 1911 A, 255.

***Desmatochelys lowii* Willist.**

Hay, O. P. 1902 A, 443.

1908 A, 185, text-figs. 238-243.

Longman, H. A. 1915 A, 28.

Williston, S. W. 1914 A, 232, fig. 122.

Upper Cretaceous (Benton); Nebraska.

**NEPTUNOCHELYS Wieland. Type *Protostega tuberosa* Cope.**

Hay, O. P. 1902 A, 440.

1908 A, 187.

Nopcsa, F. 1928 A, 166.

Williston, S. W. 1925 B, 225 (Neptunichelys).

Zittel and Broili 1911 A, 255.

**Neptunochelys tuberosa** (Cope).

Hay, O. P. 1902 A, 440.

Ford, J. 1879 A, 636 (Protostega).

Hay, O. P. 1908 A, 187, fig. 244.

Wieland, G. R. 1902 A, 96.

Upper Cretaceous; Mississippi.

**Atlantochelys** Agassiz. Type *A. mortoni* Agassiz.

Hay, O. P. 1902 A, 440.

1908 A, 188.

Nopcsa, F. 1928 A, 166.

Williston, S. W. 1925 B, 225.

**Atlantochelys mortoni** Agassiz.

Hay, O. P. 1902 A, 440.

Cope, E. D. 1875 E, 257 (Protostega neptunia).

Ford, J. 1879 A, 636 (Protostega neptunia).

Hay, O. P. 1908 A, 188, fig. 245.

Longman, H. A. 1915 A, 28.

Upper Cretaceous; New Jersey.

**PROTOSTEGIDÆ** Cope.

Hay, O. P. 1902 A, 439.

Ardt, T. 1909 D, 653 ("protostegiden").

Goette, A. 1899 A, 428 (Protosphargidæ).

Hay, O. P. 1908 A, 189.

Jaekel, O. 1915 A, 104 ("protostegiden").

Longman, H. A. 1915 A, 24.

Nopcsa, F. 1928 A, 167 (Protosteginæ).

Versluys, J. 1914 A, 793.

1914 B, 324.

Völker, H. 1913 A, 491.

Wieland, G. R. 1902 A, 107 (Protosteginæ).

1903 A, 214 (Protosteginæ).

1906 B, 8 (Protosteginæ).

1909 A, 101, 102.

Williston, S. W. 1914 A, 231.

1925 B, 225.

Zittel and Broili 1911 A, 254.

1923 A, 309.

Zittel, Eastman, etc. 1902 A, 197.

**PROTOSTEGA** Cope. Type *P. gigas* Cope.

Hay, O. P. 1902 A, 439.

Abel, O. 1922 C, 320.

Andrews, C. W. 1919 A, 316.

Case, E. C. 1898 C, 726.

Dollo, L. 1903 C, 808.

Hay, O. P. 1905 A, 149.

1908 A, 190.

1912 E, 218.

1928 A, 4.

Longman, H. A. 1915 A, 28.

Merriam, J. C. 1912 B, 221.

Nopcsa, F. 1923 F, 14.

1923 H, 164, 191.

Sternberg, C. H. 1905 A, 123

Tornier, G. 1913 B, 365.

Völker, H. 1913 A, 504.

Werner, F. 1898 A, 280.

Wieland, G. R. 1902 A, 99.

1906 A, 279.

1906 B, 8

1909 A, 102.

Williston, S. W. 1902 A, 276.

1909 A, 398.

1925 A, 179.

1925 B, 225.

Zittel and Broili 1911 A, 254.

1923 A, 309.

Zittel and Eastman, etc. 1902 A, 197.

**Protostega advena** Hay.

Hay, O. P. 1908 A, 199, text-figs. 256-259.

1912 E, 218.

Wieland, G. R. 1909 A, 103, 117.

Upper Cretaceous (Niobrara); Kansas.

**Protostega copei** Wieland.

Wieland, G. R. 1909 A, 103, 104, figs. 1-4.

Abel, O. 1922 C, 319, figs. 276, 277.

Williston, S. W. 1914 A, 238.

Upper Cretaceous (Niobrara); Kansas.

**Protostega gigas** Cope.

Hay, O. P. 1902 A, 440.

Dames, W. 1898 A, 140.

Ford, J. 1879 A, 636.

Hay, O. P. 1908 A, 190, text-figs. 247-253.

1912 E, 218.

Hoernes, R. 1886 A, 538.

Osborn, H. F. 1904 I, 85.

Rogers, A. F. 1924 A, 545.

Sternberg, C. H. 1881 B, 3.

1900 A, 34.

1905 A, 123, pls. xviii, xix.

1906 B, 122 ("Protostega").

1907 C, 122 ("Protostega").

1909 C, 114, fig. 21.

1917 A, 21.

Wieland, G. R. 1906 A, 279, 282, pls. xxxi, xxxii; text-figs. 1-6.

1909 A, 101, 103.

Williston, S. W. 1902 A, 276, fig. 1.

Woodward, A. S. 1922 C, 43.

Upper Cretaceous (Niobrara); Kansas.

**Protostega potens** Hay.

Hay, O. P. 1908 A, 198, text-figs. 246, 254, 255.

Wieland, G. R. 1909 A, 103, 122.

Upper Cretaceous (Niobrara); Kansas.

**Protostega** sp. indet.

Williston, S. W. 1902 E, 247.

Upper Cretaceous (Benton); Kansas.

ARCHELON Wieland. Type *A. ischyros* Wieland.

- Hay, O. P. 1902 A, 440.  
 Abel, O. 1912 F, 615.  
     1919 A, 403.  
     1920 A, 365.  
     1922 C, 322.  
 Andrews, C. W. 1919 A, 316.  
 Dollo, L. 1903 C, 808.  
 Hay, O. P. 1905 A, 149.  
     1908 A, 202.  
     1912 E, 218.  
     1922 E, 425, 439.  
     1928 A, 4.  
 Jaekel, O. 1907 B, 64.  
 Longman, H. A. 1915 A, 28.  
 Lucas, F. A. 1902 B, 198.  
 Lydekker, R. 1910 F, 670.  
 Merriam, J. C. 1912 B, 221.  
 Nopcsa, F. 1923 F, 14.  
     1923 H, 37, 191 (Archelon).  
 Osborn, H. F. 1917 B, 203, 206, fig.  
 Schuchert, C. 1915 A, 907.  
 Versluys, J. 1914 A, 800.  
     1914 B, 328.  
 Völker, H. 1913 A, 504.  
 Wieland, G. R. 1902 A, 95.  
     1905 A, 325.  
     1906 A, 295.  
     1909 A, 101, 103.  
     1909 B, 252.  
     1912 A, 287.  
     1912 B, 299.  
     1925 B, 558.  
 Williston, S. W. 1902 A, 276.  
     1906 B, 8.  
     1914 A, 234.  
     1925 B, 225.  
 Zittel and Broili 1911 A, 254.  
     1923 A, 307.  
 Zittel, Eastman, etc. 1902 A, 198.

## Archelon ischyros Wieland.

- Hay, O. P. 1902 A, 440.  
 Abel, O. 1912 F, 611, fig. 467.  
     1919 A, 402, figs. 312, 313.  
     1920 A, 366, figs. 574, 575.  
     1921 A, 190, fig. 48.  
     1922 C, 324, 326, figs. 281-283.  
 Hay, O. P. 1908 A, 202, text-figs. 260-268.  
 Huene, F. 1920 D, 166.  
 Jaekel, O. 1911 A, 187, fig. 201 (Chelon).  
     1916 A, 155, fig. 39 (Orlitia bornensis).  
 Lucas, F. A. 1901 J, 54 ("Archelon").  
 Lull, R. S. 1917 B, 187 ("Archelon").  
 O'Harra, C. C. 1910 A, 119 ("turtle").  
 Sternberg, C. H. 1917 A, 26.  
 Versluys, J. 1914 A, 798, fig. 5.  
     1914 B, 333, 344, figs. 2, 6.  
 Völker, H. 1913 A, 532.  
 Wieland, G. R. 1902 A, 99, fig. 2.  
     1903 A, 211, fig. 1.  
     1906 B, 10, figs. 1, 4.  
     1909 A, 111, pls. ii-iv; text-figs. 6-12.  
 Williston, S. W. 1914 A, 234, figs. 123-127.  
 Woodward, A. S. 1922 C, 43.  
 Zdansky, O. 1924 A, 94.  
 Zittel and Broili 1923 A, 308, fig. 420.  
     Upper Cretaceous (Pierre); South Dakota.
- Archelon marshii Wieland.**  
 Hay, O. P. 1902 A, 440.  
     1908 A, 208.  
 Wieland, G. R. 1903 A, 215.  
     1909 A, 103, 110, fig. 6 (Protostega).  
     1914 A, 238.  
     Upper Cretaceous (Pierre); South Dakota.

## CHELONIIDÆ Bonaparte.

- Bonaparte, C. L. 1831 A, 64 (Chelonidæ).  
 Hay, O. P. 1902 A, 443.  
 Abel, O. 1909 F, 467 ("meeresschildkröten").  
     1912 F, 132 ("seeschildkröten").  
     1919 A, 399 (Chelonidæ).  
 Adams, A. 1854 A, 70 (Chelonidæ).  
 Arldt, T. 1907 D, 645 (Chelonidæ).  
     1909 D, 653 ("cheloniden").  
 Ash, F. H. 1908 A, 79 ("turtles").  
 Blainville, H. M. D. 1835 A, 240 (Chelonea).  
 Bonaparte, C. L. 1832 A, 313 (Chelolina).  
     1833 B, 1183 (Chelonina).  
 Boulenger, G. A. 1918 E, 516 ("chélonées").  
 Carus, V. 1875 A, 400 (Cheloniniæ).  
 Cope, E. D. 1869 M, 139, 153.  
     1880 U, 147 ("chelonidées").  
 Dollo, L. 1886 B, 141.  
     1903 A, 727.  
     1903 C, 801 ("chéloniens").  
     1913 A, 50 ("chélonoidées").  
 Fraas, E. 1903 A, 98.  
     1905 B, 360 ("seeschildkröten").  
 Fuchs, H. 1907 B, 431 (Chelonidæ).  
     1909 B, 152 ("cheloniden").  
     1920 A (Chelonidæ).  
 Fuchs, H. 1920 B (Chelonidæ).  
 Gadow, H. 1901 B, 378 (Chelonidæ).  
     1905 B, 639.  
 Gaupp, E. 1905 D, 1021 (Chelonidæ).  
 Goodrich, E. S. 1916 A, 264 (Chelonidæ).  
 Gray, J. E. 1855 A, 70 (Chelonadæ).  
     1873 D, 169 ("sea-turtles").  
 Hay, O. P. 1905 A, 147, 148.  
     1905 H, 296.  
     1908 A, 8, 208.  
     1922 E, 421.  
     1928 A, 4.  
 Hoernes, R. 1886 A, 587.  
 Jaekel, O. 1902 B, 137 ("meerschildkröten").  
     1907 B, 68 ("cheloniden").  
     1908 A, 140 (Chelonidæ).  
     1910 C, 325 ("chelonier").  
     1911 A, 186 (Chelonii).  
     1916 A, 168.  
     1925 A, 165 ("cheloniden").  
 Kathariner, L. 1913 A, 373.  
 Kesteven, H. 1916 A, 305 (Chelonidæ).  
 Lane, H. H. 1910 A, 350 (Chelonidæ).  
 Leunis and Ludwig 1883 A, 537 (Chelonidæ).  
 Lobley, J. L. 1908 A, 203, 208.



Longman, H. A. 1915 A, 25 (Chelonidæ).  
 Lull, R. S. 1924 A, 275 (Chelonidæ).  
 Lydekker, R. 1912 C, 28, 107.  
 Nopcsa, F. 1923 E, 1048.  
     1923 F (Chelonidæ).  
     1923 H, 32, 33, 36, 37, 39, 122, 164, 166, 168,  
     191 (Chelonidæ, Cheloninæ).  
     1926 A, 654 (Chelonidæ).  
     1928 A, 167.  
 Oertel, W. 1914 A, 102.  
 Pictet, F. A. 1853 A, 459 ("chelonées").  
 Rabl, C. 1903 A, 160, 165, 167 ("cheloniden").  
 Rüschkamp, F. 1925 A, 127 (Chelonidæ).  
 Sewertzoff, A. N. 1908 A, 262 (Chelonidæ).  
 Siebenrock, F. 1907 A, 532 (Chelonidæ).  
     1909 A, 428, 544.  
     1919 A, 276.  
 Siegelbauer, F. 1909 A, 184 (Chelonidæ).  
 Stehli, G. 1910 A, 784 ("cheloniden").  
 Stejneger, L. 1907 C, 506.  
 Stromer, E. 1912 A, 97.

Thyng, F. W. 1906 A, 51.  
 Tornier, G. 1913 A, 336.  
     1913 B, 365.  
 Vaillant, L. 1877 C, 55 (Chelonina).  
     1881 A, 99 (Chelodina).  
 Versluys, J. 1914 A, 793.  
     1914 B, 324, seq.  
 Volker, H. 1913 A, 491 ("cheloniden").\*  
 Wagner, R. 1843 A ("seeschildkröten").  
 Wegner, T. 1911 A, 125 ("cheloniden").  
 Werner, F. 1898 A, 280 (Chelonidæ).  
 Wieland, G. R. 1902 A, 107 (Chelonidæ); 108  
     (Chelonina).  
     1906 B, 13 (Chelonina).  
 Williston, S. W. 1914 A, 229.  
     1925 B, 225.  
 Woodward, A. S. 1888 O, 353.  
 Zittel and Broili 1911 A, 254.  
     1923 A, 309.  
 Zittel, Eastman, etc. 1902 A, 198 (Chelonidæ).

PERITRESIUS Cope. Type *Chelone ornata* Leidy.

Hay, O. P. 1902 A, 441.  
 Dollo, L. 1886 B, 131.  
 Hay, O. P. 1908 A, 209.  
 Williston, S. W. 1925 B, 225.

**Peritresius ornatus** (Leidy).

Hay, O. P. 1902 A, 441.  
 Dall and Harris 1892 A, 85.  
 Hay, O. P. 1908 A, 210.  
     Upper Cretaceous (Uppermost Greensand?);  
     New Jersey: (Rupley); Georgia.

SYLLOMUS Cope. Type *S. crispatus* Cope.

Hay, O. P. 1902 A, 442.  
     1908 A, 209, 211.  
 Williston, S. W. 1925 B, 225 (Scyllomus).  
 Zittel and Broili 1911 A, 255 (Scyllomus).  
     1923 A, 310 (Scyllomus).  
 Zittel and Koken 1911 A, 255 (Scyllomus).

**Syllomus crispatus** Cope.

Hay, O. P. 1902 A, 442.  
 Clark and Miller 1912 A, 167, 168.  
 Hay, O. P. 1908 A, 211, pl. xxxii, figs. 1, 2;  
     text-fig. 269.  
 Schlosser, M. 1899 N, 147.  
     Miocene; Virginia.

LEMBONAX Cope. Type *L. polemicus* Cope.

Hay, O. P. 1902 A, 444.  
     1908 A, 209, 212.  
 Williston, S. W. 1925 B, 225.  
 Zittel and Broili 1911 A, 255.

**Lembonax? insularis** Cope.

Hay, O. P. 1902 A, 444.  
     1908 A, 213, text-fig. 271.  
     Eocene; New Jersey.

**Lembonax polemicus** Cope.

Hay, O. P. 1902 A, 444.  
     1908 A, 212, text-fig. 270.  
     Eocene (Shark River); New Jersey.

**Lembonax propylæus** Cope.

Hay, O. P. 1902 A, 444 (*L. prophylæus, errore*).  
     1908 A, 214, text-fig. 272.  
     Eocene (Shark River); New Jersey.

PROCOLPOCHELYS Hay. Type *Chelonia grandæva* Leidy.

Hay, O. P. 1908 A, 209, 215.  
 Dollo, L. 1923 C, 418 (Puppigerus).  
 Williston, S. W. 1925 B, 225.  
 Zittel and Koken 1911 A, 255.

**Procolpochelys grandæva** (Leidy).

Hay, O. P. 1902 A, 443 (Puppigerus).  
 Cope, E. D. 1869 M, 153, figs. 40, 41 (Chelone);  
     235 (Puppigerus).  
 Hay, O. P. 1908 A, 216, text-figs. 273-280.  
     Miocene (Kirkwood); New Jersey.

CAROLINOCHELYS Hay. Type *C. wilsoni* Hay.

Hay, O. P. 1923 B, 119.  
**Carolinochelys wilsoni** Hay.  
 Hay, O. P. 1923 B, 119.

Allen, G. M. 1926 A, 447.  
 Hay, O. P. 1923 D, 29, pls. ii, iii.  
     Oligocene (Ashley River); South Carolina.

CHELONIA Latreille. Type *Testudo mydas* Linnæus.

- Latreille, J. N. 1802, Hist. Nat. Rept., i, 22.  
 Hay, O. P. 1902 A, 443 (Chelonia, Puppigerus).  
 Abel, O. 1907 A, 226 (Chelone).  
     1908 E, 404 (Chelone).  
     1912 F, 131, 528, 611, 665, fig. 73 (Chelone).  
     1921 A, 189, 222.  
     1922 C, 323.  
 Allis, E. P. 1919 A, 384 (Chelone).  
     1919 D, 212.  
 Andrews, C. W. 1896 B, 148 (Chelone).  
 Bender, O. 1913 A, 285 (Chelone).  
 Boas, J. E. V. 1914 C, 291, fig. 82.  
 Boulenger, G. A. 1889 A, 180 (Chelone).  
     1918 E, 515 (Chelone).  
 Bronn, H. G. 1848 A, 287 (Chelone).  
     1849 A, 695.  
 Broom, R. 1911 A, 921 (Chelone).  
 Cleland, J. 1863 B, 809 ("turtle").  
 Coker, R. E. 1905 B, 23 (Chelone).  
 Cuvier, G. 1805 A.  
 Dollo, L. 1886 B, 131, 139, fig. 3.  
     1889 B, 673 (Chelone).  
     1901 A, 9 (Chelone).  
     1903 A (Chelone).  
     1903 C (Chelone).  
 Durand, J. P. 1898 A, 294 ("chelonée").  
 Edgeworth, F. H. 1907 A, 516, figs. 18-20.  
 Fitzinger, L. 1836 A, 120.  
 Fleischmann, A. 1910 A, 682, fig. 1.  
 Fries, C. 1924 A, 277 (Chelone).  
 Fuchs, H. 1907 B, 432, pl. xxi, figs. 11, 12 (Chelone).  
     1909 B, 124, 143 (Chelone).  
     1909 D, 40 (Chelone).  
     1910 A, 54 (Chelone).  
     1911 B, 398 (Chelone).  
     1911 C, 624, figs. 35-51 (Chelone imbricata).  
     1912 B, 81, figs. (Chelone).  
     1913 A, 59 (Chelone).  
     1913 B, 301 (Chelone).  
     1915 A.  
     1920 A, 359 (Chelone).  
 Gadow, H. 1901 B, 381 (Chelone).  
     1902 B, 353 (Chelone).  
     1905 B, 639 (Chelone).  
 Gaupp, E. 1894 A, 99 (Chelone).  
     1906 A, 43 (Chelone).  
     1910 C, 386 (Chelone).  
     1911 C, 450, figs. 14, 15 (Chelone).  
     1912 B, 221 (Chelone).  
 Gegenbauer, C. 1863 A, 464.  
 Goette, A. 1899 A, pls. xxvii-xxix (Chelone).  
 Gray, J. E. 1855 A, 74.  
 Gregory, W. K. 1910 A, 114.  
     1920 A, 122, fig. 36 (Chelone).  
 Gregory and Adams 1915 A, 763 (Chelone).  
 Haller, G. 1926 A, 457.  
 Hasse, C. 1871 A, 230.  
     1873 D, 684.  
 Hay, O. P. 1908 A, 209, 220.  
 Heilprin, A. 1887 A, 313, 315 (Chelone).  
 Hoernes, R. 1886 A, 587.  
 Hoffmann, C. K. 1879 B, 53.  
 Jaekel, O. 1903 F, 44 (Chelone).  
     1912 A, 619, fig. 8.  
 Kesteven, H. L. 1910 A, 368 (Chelone).  
 Kesteven, H. L. 1916 A, 305 (Chelone).  
     1919 A, 231.  
 Kingsley, J. S. 1925 A, 138, 146, 147, 149, 252, 285, figs. 146, 155, 156, 158, 267 (Chelone).  
 Klaauw, C. J. 1924 B, 592 (Chelone).  
 Köstlin, O. 1844 A.  
 Lebedinsky, N. G. 1917 A, 313 (Chelone).  
 Leunis and Ludwig 1883 A, 538 (Chelone).  
 Matthew, W. D. 1915 A, 280.  
 Meckel, J. F. 1825 A (Chelone).  
 Moodie, R. L. 1908 C, 322 (Chelone).  
     1908 D, 445 (Chelone).  
 Nick, L. 1912 A, 169, pls.  
 Nopcsa, F. 1904 A, 263 (Chelone).  
     1923 E, 1053, fig. 8 (Chelone).  
     1923 F (Chelone).  
     1923 H, 34, 37, 113, 164, 191 (Chelone).  
     1925 A, 24 (Chelone).  
 Owen, R. 1848 B, 191 (Chelone).  
     1866 A (Chelone).  
     1868 A, 872 (Chelone).  
 Palacký, J. 1902 B, 141 (Chelone).  
 Parker and Bettany 1877 A, 213 (Chelone).  
 Pictet, F. J. 1853 A, 459.  
 Rabl, C. 1903 A, 167.  
 Rathke, H. 1846 A, 161, 163.  
 Reynolds, S. H. 1897 A, 194, 215, 218, 271, 283 (Chelone).  
 Rice, E. L. 1920 A.  
 Schlesinger, G. 1909 A (142) (Chelone).  
 Seeley, H. G. 1876 C, 181 (Chelone).  
 Sewertzoff, A. N. 1908 A, 272, 310.  
 Siebenrock, F. 1909 A, 545.  
 Stannius, H. 1856 A, 8, 29, 79.  
 Stehli, G. 1910 A, 784 (Chelone).  
 Stejneger, L. 1907 C, 509.  
 Stejneger and Barbour 1917 A, 122.  
 Strasser, O. z. 1919 A, 134.  
 Tornier, G. 1913 B, 365 (Chelone).  
 Ubaghs, C. 1888 A, 452, 453.  
     1889 A, 333.  
 Vaillant, L. 1877 C, 56 (Chelone).  
 Veit, O. 1916 A, 368 (Chelone).  
 Versluys, J. 1909 A, 288 (Chelone).  
     1910 A, 438 (Chelone).  
     1912 B, 556 (Chelone).  
     1914 A, 800.  
     1914 B, 824.  
     1919 A, 5, 14.  
 Virchow, H. 1914 A, 79.  
     1919 A, 305, 309, 321, figs. 2, 9, 10.  
     1921 A, 133, fig. 6 (Chelone).  
     1926 A, 218, fig. 8 (Chelone).  
 Völker, H. 1913 A, 491.  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A, ii, 409 (Chelone).  
 Watson, D. M. S. 1919 C, 240.  
 Wegner, Th. 1917 A, 361-372, pls. xxviii-xxx.  
 Wiedersheim, R. 1892 A, 52.  
 Wieland, G. R. 1904 B, 192 (Chelone).  
 Williston, S. W. 1904 B, 177, text-fig. 3 (Chelone).  
     1914 A, 16, 45, 221 (Chelone), fig. 114.  
 Zdansky, O. 1924 A, 93.  
 Zittel and Broili 1911 A, 254.  
     1923 A, 309.

Zittel, Eastman, etc. 1902 A, 198 (Chelone).

**Chelonia mydas Linnaeus.**

*Linnaeus*, C. 1758 A, 197.

Abel, O. 1912 F, 165, figs. 73, 111 (Chelone midas).

1919 A, 380, fig. 296.

1921 A, 190, 224, fig. 78.

Allis, E. P. 1919 D, 212, 218 (C. midas).

Bluntschli, H. 1912 B, 386 (Chelone midas).

Bojanus, L. H. 1819 A, pl. xvi, fig. 3 (Testudo midas).

Boulenger, G. A. 1889 A, 180 (Chelone).

Camper, A. 1812 A, 234, pl. iii ("Midas").

Chapman, H. C. 1894 A, 42, fig. 8 ("turtle").

Coker, R. E. 1905 B, 23 (Chelone).

Dollo, L.: 1888 A, 266 (Chelone).

1903 C (Chelone).

1923 C, 420 (Chelone).

Emmer, G. H. T. 1901 A, 63, 160.

Fuchs, H. 1907 B, 431, pl. xxi, fig. 11; text-fig. 5 (Chelone).

1909 B, 143, fig. 19 (Chelone).

1920 A, 383, 386, 456, figs. 1-21.

1920 B, 5, 358, fig. 24 (Chelone).

Fürbringer, M. 1900 A, 812, figs. 76-78, 81 (Chelone).

Gadow, H. 1896 A, 41, fig. 50 (Chelone midas).

1901 B, 381.

Gaupp, E. 1902 A, 177, 215 (Chelone viridis).

1908 B (Chelone).

1913 A, 96, figs. 55, 56 (Chelone viridis).

Goette, A. 1899 A, 409 (Chelone).

Gray, J. E. 1873 D, 166, pl. vi, fig. 4.

Hasse, C. 1871 A, figs. (C. midas).

Hay, O. P. 1916 C, 75.

1917 E, 44.

1923 A, 382, 383.

1923 D, 30.

Heilmann, G. 1926 A, 94 (Chelone).

Hennig, E. 1924 A, 144 (Chelone midas).

Howes and Swinnerton 1901 A, 29 ("green turtle").

Huene, F. 1926 G, 513.

Huxley, T. H. 1859 D, 399, fig. 5.

1863 F, 457, 529, figs. 41, 42, 47 (Chelone midas).

Jaekel, O. 1916 A, 144, figs. 33, 45, 48 (Chelone midas).

Kesteven, H. L. 1910 A, 368, pls. xx-xxiii (Chelone midas).

1918 A, 455 (Chelone midas).

Kesteven, H. L. 1919 A, 233, fig. 11 (C. midas).

1922 A, 313, fig. 5 (C. midas).

Lorenz, L. 1807 A, 11 (Testudo).

Lydekker, R. 1889 N, 173 (Chelone).

Nick, L. 1912 A, 73, pls. (C. midas).

Owen, R. 1848 B, 191 (Chelone).

1866 A, 127, figs. 90, 91.

1868 A, 872.

Parker, W. K. 1879 C, 329 (Chelone midas).

1888 D, 465 (Chelone viridis).

Parker and Haswell 1897 A, 317, fig. 936.

Perna, G. 1906 A, 136, pl. vii, fig. 25.

Pfeiffer, H. 1854 A, 36, pl. 1, fig. 9 (Chelone midas).

Rabl, C. 1903 A, 156, 176, pl. i, fig. 1; pl. ii, fig. 8; text-figs. 17, 18, 20.

Rathke, H. 1846 A, 161.

Reichert, K. B. 1849 A, 454.

Reynolds, S. H. 1897 A, 214-236, figs. 37-39 (Chelone midas).

Rose, C. 1892 G, 127 (Chelone midas).

Ruschkamp, F. 1925 A, 127, pls. i, ii (Chelone).

Schaumsland, H. 1903 A, 56, pl. x.

Sellards, E. H. 1916 C, 147.

Siebenrock, F. 1909 A, 545.

Stannius, H. 1856 A, 28, seq.

Stejneger and Barbour 1917 A, 122.

Taschenberg, O. 1894 A, 3640.

Tornier, G. 1913 A, 317, figs. 1, 2 (Chelone midas).

Ubaghs, C. 1888 A, 453.

1889 A, 388.

Vaillant, T. 1877 A, 14 (Chelone).

1881 A, 47, 102 (Chelone midas).

Versluys, J. 1914 B, 335.

Virchow, H. 1919 A, 305 (C. midas).

1926 A, 218, fig. 9 (C. midas?).

Völker, H. 1913 A, 493, 532, fig. B (Chelone).

Wegner, Th. 1917 A.

Wieland, G. R. 1897 A, 446 (Chelone).

Zdansky, O. 1924 A, 92.

Zittel and Broili 1923 A, 295, 309, fig. 405.

Recent in warm seas: Pleistocene (Late); Florida.

**Chelonia? parvitecta (Cope).**

Hay, O. P. 1902 A, 443 (Puppigerus).

1908 A, 220, pl. xxxii, fig. 3.

Miocene (Kirkwood): Eocene (Shark River);

New Jersey; Maryland?.

**CARETTA Rafinesque. Type *Testudo caretta* Linnaeus.**

*Rafinesque*, C. S. 1814, *Specchio Sci.* (Palermo), II, No. 9, 66.

Andrews, C. W. 1901 A, 441 (Thalassochelys).

1906 A, xxiv (Thalassochelys).

Baur, G. 1890 F, 486.

Coker, R. E. 1905 B, 20 (Thalassochelys).

1910 A, 6.

Dollo, L. 1889 B, 673 (Thalassochelys).

1903 A, 795 (Thalassochelys).

1903 C (Thalassochelys).

Fitzinger, L. 1836 A, 121 (Thalassochelys).

Fuchs, H. 1920 A, 354 (Thalassochelys).

Gadow, H. 1901 B, 387.

Gray, J. E. 1855 A, 72 (Caouana).

Gray, J. E. 1873 B, 395, 404 (Caouana).

Heilprin, A. 1887 A, 313 (Thalassochelys).

Huene, F. 1926 G, 513 (Thalassochelys).

Le Conte, J. 1854 A, 186 (Chelone).

Leunis and Ludwig 1883 A, 539 (Thalassochelys).

Lydekker, R. 1889 N, 177 (Thalassochelys).

Nopce, F. 1928 A, 167 (Thalassochelys).

Rabl, C. 1903 A, 177 (Thalassochelys).

Sewertzoff, A. N. 1908 A, 273.

Siebenrock, F. 1909 A, 548.

Stejneger, L. 1907 C, 507.

Stromer, E. 1916 A, 405 (Thalassochelys).

Vaillant, L. 1877 C, 56 (Thalassochelys).

Versluys, J. 1914 B, 324 (Thalassochelys).

- Volker, H. 1913 A, 495 (Thalassochelys).  
 Wegner, T. 1917 A.  
 Williston, S. W. 1925 A, 43, figs. 31, 144 (Thalassochelys).  
 Zittel and Broili 1911 A, 255, fig. 400.  
 1923 A, 309, fig. 421.

**Caretta caretta** (Linnaeus).

- Linnaeus, C. 1758 A, 197 (Testudo).  
 Abel, O. 1912 F, 131, 424, 523 (Thalassochelys).  
 Baur, G. 1890 F, 486.  
 Broili, F. 1926 C, 37, fig. 10 (Thalassochelys).  
 Carruccio, A. 1913 C, 179 (Thalassochelis).  
 Coker, R. E. 1905 A, 874 (Thalassochelys).  
 1905 B, 9 (Thalassochelys).  
 1910 A, 46, pls. xi-xiv; text-fig. C (Thalassochelys).  
 Dollo, L. 1923 C, 419 (Thalassochelys).  
 Fuchs, H. 1920 A, 337 (Thalassochelys).  
 1920 B, 2, 35 (Thalassochelys).  
 Gadow, H. 1901 B, 327, 379, figs. 69, 84 (Thalassochelys).  
 1902 D, 216, figs. (Thalassochelys).  
 1905 B, 638 (Thalassochelys).  
 Gaupp, E. 1908 B, 529 (Chelonia).  
 Gray, J. E. 1855 A, 71 (Caouana).  
 1873 B, 404 (Caouana).  
 Hay, O. P. 1917 E, 43.

- Hay, O. P. 1923 A, 382, 333.  
 1923 D, 30.  
 Hay, W. P. 1916 A, 258 ("loggerhead").  
 Hennig, E. 1924 A, 144.  
 Huene, F. 1926 G, 513 (Thalassochelys).  
 Lydekker, R. 1912 C, 107, 131, fig. 10 (Thalassochelys).  
 Newman, H. H. 1906 A, 81 (Thalassochelys).  
 Nopcsa, F. 1923 F, 20 (Thalassochelys).  
 Oswald, F. 1911 A, 411 (Thalassochelys).  
 Owen, R. 1866 A, 61, 63 (Chelone).  
 Rabi, C. 1903 A, 177, fig. 21 (Thalassochelys).  
 Reynolds, S. H. 1897 A, 216, fig. 36 (Thalassochelys).  
 Rüschkamp, F. 1925 A, 127, figs. 1, 2.  
 Schmidt, W. J. 1916 A, 10, figs. 1, 2.  
 Siebenrock, F. 1909 A, 549.  
 Siegelbauer, F. 1909 A, 134, pl. vi, figs. 1-3; pl. viii, figs. 13, 14 (Thalassochelys corticata).  
 Stejneger and Barbour 1917 A, 123.  
 Strecker, C. 1887 A (Chelonia).  
 Tornier, G. 1913 B, 354 (Thalassochelys).  
 Vaillant, L. 1881 A, -47, pls. xxviii, xxix.  
 Volker, H. 1913 A, 497, fig. C (Thalassochelys).  
 Woodward, A. S. 1922 C, 42, fig. 40 (Thalassochelys).  
 Recent; Atlantic Ocean: Pleistocene (Middle or Late); Florida.

*Superfamily EMYDOIDÆ, new form.*

Unless otherwise indicated the authors as cited, use the name Cryptodira. From the Emydoideæ are excluded the Thalassemydoideæ and the Chelonioidæ.

- Hay, O. P. 1902 A, 439.  
 Abel, O. 1920 A, 364 (Cryptodira).  
 Arldt, T. 1907 D, 648.  
 1909 D, 653 ("cryptodiren").  
 Baur, G. 1891 E, 632 (Cryptodira).  
 Bonaparte, C. L. 1832 A, 312 (Testudinina).  
 1833 B, 1183 (Testudinidæ).  
 Case, E. C. 1898 C, 725.  
 Cope, E. D. 1891 N, 39 (Cryptodira).  
 Diener, C. 1909 A, 36.  
 Dollo, L. 1886 B, 130.  
 1889 B, 669.  
 1903 C.  
 1913 A, 50 ("cryptodères").  
 1913 B, 623 ("cryptodères").  
 Fraas, E. 1903 A, 88, 100.  
 1905 B, 364 ("kryptodiren").  
 Fuchs, H. 1907 B, 425.  
 1909 B, 143 ("cryptodiren").  
 1920 A, 370.  
 1920 B, 12.  
 Gadow, H. 1901 B, 333.  
 Gaupp, E. 1911 C, 449.  
 1913 A, 95.  
 Harkness, R. 1852 A, 253 (Testudinæ).  
 Harrassowitz, H. 1922 A, 142, 217, 219, 220.  
 Hay, O. P. 1905 A, 137, 170.  
 1905 D, 125.  
 1905 G, 331.  
 1905 I, 297.  
 1905 J, 992.  
 1908 A, 31, 43, 126.

- Hay, O. P. 1912 E, 219.  
 1922 E, 421, 439.  
 1928 A, 6.  
 Huene, F. 1926 G, 514 ("cryptodiren").  
 Jaekel, O. 1911 A, 136 (Cryptodiri).  
 1916 A, 207, 212 ("cryptodiren").  
 Kasper, A. 1903 A, 139.  
 Lydekker, R. 1886 G, 522.  
 1889 E, 518.  
 1912 C, 28, 127.  
 Nopcsa, F. 1923 F.  
 1923 H, 32, 33, 39, 122, 165, 167, 168, tab.  
 1928 A, 166.  
 Reynolds, S. H. 1897 A, 194.  
 Siebenrock, F. 1909 A, 432.  
 Siegelbauer, F. 1909 A, 134 (Cryptodira).  
 Stefano, G. 1917 A, 278.  
 Stehli, G. 1910 A, 788.  
 Steinmann, G. 1907 A, 436.  
 Stromer, E. 1912 A, 97.  
 Thäter, K. 1910 A, 510 ("cryptodiren").  
 Tornier, G. 1913 B, 365.  
 Versluys, J. 1914 A, 793.  
 1914 B, 325 ("cryptodiren").  
 1919 A, 15 ("cryptodiren").  
 Waite, E. R. 1905 A, 117.  
 Watson, D. M. S. 1914 H, 1013 ("cryptodires").  
 Werner, F. 1898 A, 280.  
 Williston, S. W. 1908 G, 804.  
 1914 A, 16, 45, 222, 225.  
 1925 B, 210, 222, 224.  
 Woodward, A. S. 1888 O, 353.  
 Zdansky, O. 1924 A, 91, 110.  
 Zittel and Broili 1911 A, 250.  
 1923 A, 304.  
 Zittel, Eastman, etc. 1902 A, 196.

## CHELYDRIDÆ.

- Hay, O. P. 1902 A, 446.  
 Arldt, T. 1907 D, 645.  
     1909 D, 653 ("chelyriden").  
     1912 A, 714, 758.  
 Baur, G. 1896 D, 314, 319.  
 Cooper, C. F. 1922 C, 156.  
 Cope, E. D. 1880 U, 147 ("chelydridés").  
 Dollo, L. 1886 B, 130.  
     1889 B, 670.  
     1903 C.  
 Fuchs, H. 1907 B, 425.  
 Gadow, H. 1901 B, 338.  
 Gill, T. 1885 B, 27.  
 Gray, J. E. 1873 D, 164, 170 (Chelydradæ).  
     1873 E, 66 (Chelydradæ, Chelydraina).  
 Harrassowitz, H. 1922 A, 141.  
 Hay, O. P. 1905 A, 148.  
     1908 A, 32, 221.  
 Huxley, T. H. 1887 C, 236.  
 Kasper, A. 1903 A, 139, 147.
- Lydekker, R. 1912 C, 40, 109.  
 Matthew, W. D. 1915 A, 283.  
 Newman, H. H. 1906 A, 99.  
 Nopcsa, F. 1922 D, 156.  
     1923 E, 1053.  
     1923 F.  
     1923 H, 39, 122, 168.  
     1928 A, 166.  
 Osborn, H. F. 1909 D, 58.  
 Scharff, R. F. 1911 A, 134, 251 (Chelydridæ).  
 Siebenrock, F. 1907 A, 527, 532.  
     1909 A, 433.  
 Tornier, G. 1913 A, 336.  
 Williston, S. W. 1914 A, 225.  
     1925 B, 226.  
 Woodward, A. S. 1888 O, 353.  
 Zittel and Broili 1911 A, 251.  
     1923 A, 305.  
 Zittel, Eastman, etc. 1902 A, 200.

ACHERONTEMYS Hay. Type *A. heckmani* Hay.

- Hay, O. P. 1902 A, 446.  
     1908 A, 221.  
 Nopcsa, F. 1923 A, 166.  
 Williston, S. W. 1925 B, 226.
- Acherontemys heckmani** Hay.  
 Hay, O. P. 1902 A, 446.  
     1908 A, 222, text-fig. 281.  
 Merrill, G. P. 1907 A, 63.  
 Sauvage, H. E. 1900 A, 5.  
     Miocene (Roslyn); State of Washington.

CHELYDRA Schweigger. Type *Testudo serpentina* Linnaeus.

- Schweigger, A. F. 1812, Arch. Naturwiss. Math., 1, 293.  
 Hay, O. P. 1902 A, 446.  
 Adams, L. A. 1919 A, 88, pl. vi.  
 Altmann, F. 1925 A, 95, fig. 10.  
 Anderson, R. J. 1912 A, 917.  
 Arldt, T. 1907 D, 275, 276.  
 Boas, J. E. V. 1914 C, 265, 287.  
 Boulenger, G. A. 1902 D, 49.  
     1918 E, 516.  
 Bronn, H. G. 1848 A, 288.  
     1849 A, 649.  
 Brown, A. E. 1904 A, 467.  
 Carus, V. 1875 A, 397.  
 Dollo, L. 1889 B, 670.  
     1903 A, 755.  
     1903 C, 822.  
 Fitzinger, L. 1836 A, 117.  
 Fuchs, H. 1907 B, 425, pl. xx, fig. 4.  
 Gaupp, E. 1899 A, 1092.  
 Gegenbaur, C. 1863 A, 464.  
 Gregory and Adams 1915 A, 763.  
 Hay, O. P. 1908 A, 223.  
     1912 E, 218.  
     1928 A, 7.  
 Heilprin, A. 1887 A, 313-315.  
 Huene, F. 1902 A, 49.  
     1926 G, 514.  
 Huxley, T. H. 1887 C, 233.  
 Kasper, A. 1903 A, 146.  
 Kingsley, J. S. 1925 A, 266, fig. 288.  
 Klaauw, C. J. 1924 B, 592.  
 Le Conte, J. 1854 A, 186.  
 Leonis and Ludwig 1883 A, 534.
- Moodie, R. L. 1907 A, 89.  
     1908 D, 445.  
 Newman, H. H. 1906 B, 526.  
 Nick, L. 1912 A, 169, pls.  
 Nopcsa, F. 1923 E, 1053.  
     1923 F, 2, 16.  
     1923 H, 34, 37.  
 Owen, R. 1866 A, 131, 136.  
 Palacký, J. 1902 B, 145.  
 Pictet, F. J. 1853 A, 453.  
 Reynolds, S. H. 1897 A, 26, 291.  
 Rice, E. L. 1920 A.  
 Scharff, R. F. 1911 A, 347.  
 Schlosser, M. 1898 K, 526.  
 Seeley, H. G. 1876 C, 173 (Chelydra); 182 (Emysaura).  
 Sewertsoff, A. N. 1908 A, 213.  
 Siebenrock, F. 1907 A, 527, 533.  
     1909 A, 433.  
 Stannius, H. 1856 A, 7, 60.  
 Stejneger and Barbour 1917 A, 113.  
 Taschenbeig, O. 1894 A, 3641.  
 Tornier, G. 1913 A, 321, fig. 10.  
     1913 B, 365.  
 Vaillant, L. 1877 C, 57.  
 Versluys, J. 1914 B, 330, 339.  
     1919 A, 17.  
 Völker, H. 1913 A, 492.  
 Wallace, A. R. 1876 A, II, 165.  
 Wieland, G. R. 1902 A, 97.  
     1906 A, 294.  
 Williston, S. W. 1903 A, 32, pl. v, fig. 2.  
     1925 A, 188, fig. 154.  
     1925 B, 226.

Zdansky, O. 1924 A, 102.  
Zittel and Broili 1923 A, 305.  
Zittel, Eastman, etc. 1902 A, 201.

**Chelydra laticarinata** Hay.

Hay, O. P. 1916 C, 72, 75, pl. vi, figs. 6, 7.  
1923 A, 382.

Sellards, E. H. 1916 C, 145.  
Pleistocene (Early); Florida.

**Chelydra sculpta** Hay.

Hay, O. P. 1916 C, 73, 75, 76, pl. iv, fig. 7; pl. vi, figs. 8, 9.

1916 E, 53.  
1917 E, 44, 46, pl. iii, fig. 1.  
1918 B, 4.  
1923 A, 382.

Sellards, E. H. 1916 C, 147.  
Pleistocene (Middle or late); Florida.

**Chelydra serpentina** (Linnæus).

Hay, O. P. 1902 A, 446.  
Beer, G. R. 1926 A, 319, figs. 88-90, 115.  
Boas, J. E. V. 1914 C, 239, fig. 77.  
Boulenger, G. A. 1902 D, 51.  
Camp, C. L. 1923 A, 448, fig. 41.  
Cope, E. D. 1869 E, 178.  
Dohrer, J. 1916 A, 103, pl. vii.  
Dollo, L. 1889 B, 671.  
Eaton, G. F. 1910 A, 11, pl. v, fig. 10.  
Fischer, E. 1903 A, 710.  
Fuchs, H. 1907 B, 425, pl. xx, fig. 4.  
1912 B, 87.  
1920 A, 383.  
1920 B, 21, 24.  
1927 A, 332.  
Gadow, H. 1901 B, 338.  
Goodrich, E. S. 1916 A, 265, fig. 2.  
Gray, J. E. 1873 D, 165.

**MACROCHELYS** Gray. Type *M. temminckii* (Holbrook).

Gray, J. E. 1856, Proc. Zool. Soc. Lond. 1855, 200.  
Baur, G. 1892 D, 207.  
1896 D, 314, 318.  
Boulenger, G. A. 1918 E, 515 (Macrolemmys).  
Coker, R. E. 1910 A, 6 (Macrolemmys).  
Dollo, L. 1889 B, 671 (Macrolemmys).  
Durand, J. P. 1898 A, 295 ("emysaure").  
Fuchs, H. 1907 B, 425, pl. xx, fig. 5 (Macrolemmys).  
Gadow, H. 1901 B, 340 (Macrolemmys).  
Gray, J. E. 1855 A, 48 (Macrolemmys).  
Hay, O. P. 1905 A, 169.  
1912 E, 218.  
Huene, F. 1902 A, 51 (Macrolemmys).  
1926 G, 514 (Macrolemmys).  
Huxley, T. H. 1887 C, 233 (Gypochelys).  
Kasper, A. 1903 A, 164, pl. i, fig. 1; text-fig. 4 (Macrolemmys).  
Lönnberg, E. 1910 A, 22 (Macrolemmys).  
Nopcsa, F. 1923 F, 21 (Macrolemmys).  
1928 A, 166 (Macrolemmys).  
Siebenrock, F. 1907 A, 527, 533 (Macrolemmys).  
1909 A, 435 (Macrolemmys).  
Versluys, J. 1914 A, 801 (Macrolemmys).

Hay, O. P. 1905 A, 141, 149.  
1906 D, 170.  
1908 A, 223.  
1916 C, 76.  
1923 A, 482.

Huene, F. 1920 D, 166.  
Kingsley, J. S. 1905 A, 63, fig. 5.  
Kneeland, S. 1854 A, 84 (Emysaurus).  
Kraglievich, L. 1926 C, 62.  
Lang and Rüttemeyer 1867 A, 28.  
Le Damany, P. 1906 A, 50, fig. 8 ("émysaure").  
Lehrs, Ph. 1911 A, 263.  
Leidy, J. 1889 H, 6.  
Mercer, H. C. 1894 A, 98 ("snapper").  
Miller, B. L. 1912 A, 5 (This species?).  
Moodie, R. L. 1908 D, 445.  
Newman, H. H. 1906 A, 71, 99.  
Nick, L. 1912 A, 73, pls.  
Nikitin, B. 1916 A, 266, pls. ii-v.  
Rice, E. L. 1920 A.  
Scharff, R. F. 1911 A, 134.  
Seeley, H. G. 1876 C, 173.  
Shufeldt, R. 1921 A, 221.  
Siebenrock, F. 909 A, 434.  
Siegelbauer, F. 1909 A, 184, pl. viii, fig. 10; pl. x, figs. 26-28.  
Stannius, H. 1856 A, 30.  
Stejneger and Barbour 1917 A, 113.  
Tornier, G. 1909 C, 552, fig. 2.  
Vaillant, L. 1881 A, 46, 103.  
Wegner, T. 1911 A, 122, 129.  
Wieland, G. R. 1902 A, 103.  
Williston, S. W. 1914 A, 226.  
Zdansky, O. 1924 A, 93.

Recent; Eastern half United States: Pleistocene (Middle?); Maryland.

**Chelydra** sp. indet.

Gidley, J. W. 1927 E, 274. Pleistocene; Florida.  
Hay, O. P. 1927 D, 274. Pleistocene; Florida.

*M. temminckii* (Holbrook).

Völker, H. 1913 A, 520 (Macrolemmys).  
Williston, S. W. 1925 A, 42, 107, 118, figs. 30, 83.  
1925 B, 226.  
Zittel and Broili 1911 A, 251 (Macrolemmys).  
1923 A, 305 (Macrolemmys).

**Macrochelys floridana** Hay.

Hay, O. P. 1907 B, 847, text-figs. 1-4.  
Gratacap, L. P. 1908 A, 921 (M. temminckii).  
Hay, O. P. 1908 A, 222, text-figs. 282-285.  
Pleistocene (Early); Florida.

**Macrochelys temminckii** (Holbrook).

Holbrook, J. E. 1840, N. Amer. Herp., ed. i, v, 29, pl. iv (Chelonura).  
Dollo, L. 1889 B, 671 (Macrolemmys).  
Gadow, H. 1896 A, 42, fig. 49 (Macrolemmys).  
1901 B, 340 (Macrolemmys).  
1902 D, 219 (Macrolemmys).  
Gray, J. E. 1855 A, 49 (Macrolemmys).  
Hay, O. P. 1911 A, 452, 455, pls. xviii, xix; text-fig. 1.  
Huene, F. 1920 D, 166 (Macrolemmys).  
Newman, H. H. 1906 A, 70, 75.  
Nopcsa, F. 1923 F, 20 (Macrolemmys).

Owen, R. 1886 A, 131, 135 (Chelonura).  
 Scharf, R. F. 1911 A, 135 (Macrolemmys).  
 Siebenrock, F. 1909 A, 436 (Macrolemmys).  
 Vaillant, L. 1881 A, 46, 103 (Chelydra).  
 Virchow, H. 1919 A, 304 (Macrolemmys).

Virchow, H. 1926 A, 217, fig. 4 (Macrolemmys temnickii).  
 Volker, H. 1913 A, 532 (Macrolemmys).  
 Wiedersheim, R. 1892 A, 52 (Makrochelys).  
 Recent; Texas to Georgia, north to Missouri: Pleistocene (Early); Texas.

#### CHELYDROPS Matthew. Type *C. stricta* Matthew.

Matthew, W. D. 1924 C, 208.

#### Chelydrops stricta Matthew.

Matthew, W. D. 1924 C, 68, 208, fig. 63.  
 Upper Miocene (Lower Snake Creek); Nebraska.

#### TOXOCHELYIDÆ Baur.

Baur, G. 1896 B, 564.  
 Hay, O. P. 1902 A, 442.  
 Baur, G. 1895 D, 569 (Toxochelydæ).  
 1896 E, 569 (Toxochelydæ).  
 Hay, O. P. 1903 A, 163.  
 Oertel, W. 1914 A, 102 ("toxochelyden").  
 Versluys, J. 1914 A, 793.  
 1914 B, 324.

Völker, H. 1913 A, 491.  
 Wieland, G. R. 1902 A, 108 (Toxochelydinæ).  
 Williston, S. W. 1902 L, 918 (Toxochelydæ).  
 1925 B, 225.  
 Zittel and Broili 1911 A, 255.  
 1923 A, 310.  
 Zittel and Koken 1911 A, 255 (Toxochelydæ).

#### Toxochelys Cope. Type *T. latiremis* Cope.

Hay, O. P. 1902 A, 442.  
 Abel, O. 1912 F, 529, 616.  
 1919 A, 401.  
 1921 A, 191.  
 1922 C, 320.  
 Anonymous 1906 D, 711.  
 Arldt, T. 1907 D, 276.  
 Baur, G. 1891 B, 414.  
 1896 E, 569.  
 Dollo, L. 1903 A.  
 1903 C.  
 Gaupp, E. 1911 B, 109.  
 1911 C, 449.  
 Hay, O. P. 1905 A, 154.  
 1908 A, 163.  
 1909 D, 341.  
 1922 E, 425, 439.  
 1928 A, 4, 9.  
 Longman, H. A. 1915 A, 28.  
 Nopcsa, F. 1923 E, 1051, figs. 8, 9.  
 1923 H, 32, 37, 191.  
 1928 A, 167.  
 Oertel, W. 1914 A, 102.  
 Rogers, A. F. 1924 A, 545.  
 Schlosser, M. 1898 K, 526.  
 Sternberg, C. H. 1908 A, 111.  
 Tornier, G. 1913 B, 365.  
 Völker, H. 1913 A, 493.  
 Wieland, G. R. 1902 A, 96.  
 1904 A, 125.  
 1905 A, 325.  
 1906 B, 13.  
 1912 B, 299.  
 Williston, S. W. 1901 B, 198.  
 1908 G, 803.  
 1914 A, 231.  
 1914 D, 411.  
 Zittel and Broili 1911 A, 255.  
 1923 A, 310.  
 Zittel, Eastman, etc. 1902 A, 201.

Wieland, G. R. 1905 A, 326, 334, 341, pl. x;  
 text-figs. 1-4, 6, 7.  
 Abel, O. 1919 A, 399, figs. 310, 311.  
 1922 C, 321, figs. 278-280.  
 Hay, O. P. 1908 A, 178, text-figs. 229, 230.  
 Sternberg, C. H. 1908 A, 112.  
 1909 C, 257, fig. 37.  
 Versluys, J. 1914 A, 798, fig. 4.  
 1914 B, 333, 340, fig. 5.  
 Wieland, G. R. 1909 A, 107.  
 1912 A, 287.  
 Williston, S. W. 1914 A, 231, 238, fig. 120.  
 Upper Cretaceous (Niobrara); Kansas.

#### Toxochelys brachyrhina Case.

Hay, O. P. 1902 A, 442.  
 1905 E, 177.  
 1908 A, 171, pl. xxxi, fig. 1.  
 Wieland, G. R. 1905 A, 337.  
 Upper Cretaceous (Niobrara); Kansas.

#### Toxochelys elkader Hay.

Hay, O. P. 1908 A, 174, text-figs. 221-223.  
 Upper Cretaceous (Niobrara); Kansas.

#### Toxochelys latiremis Cope.

Hay, O. P. 1902 A, 442.  
 Cope, E. D. 1875 E, 98, 260, pl. viii, figs. 1, 2.  
 Hay, O. P. 1905 A, 155.  
 1905 E, 177.  
 1908 A, 163, text-figs. 200, 202-206.  
 Leidy, J. 1873 B, 269, pl. xxxvi, figs. 17-21  
 (?Cynocercus incisus).  
 Merrill, G. P. 1907 A, 69 (Cynocercus incisus?).  
 Oertel, W. 1914 A, 103.  
 Schlosser, M. 1898 K, 525.  
 Sternberg, C. H. 1917 A, 159 (Torycheles).  
 Wieland, G. R. 1902 A, 95, fig. 1.  
 1905 A, 329, 336, fig. 8.

- Wieland, G. R. 1906 A, 233, fig. 7.  
 Williston, S. W. 1901 B, 195, pl. xviii.  
 1914 A, 232, fig. 121.  
 Upper Cretaceous (Niobrara); Kansas.

**Toxochelys procax** Hay.

- Hay, O. P. 1905 E, 181, text-figs. 13, 14.  
 1908 A, 176, text-figs. 224-228.  
 Oertel, W. 1914 A, 102, 104.  
 Versluys, J. 1914 A, 796, fig. 3.  
 1914 B, 329.  
 Wieland, G. R. 1905 A, 338.  
 Upper Cretaceous (Niobrara); Kansas.

**Toxochelys serrifer** Cope.

- Hay, O. P. 1902 A, 442.  
 1905 E, 178, text-figs. 1-7.  
 1908 A, 170, text-figs. 207-213.  
 Newman, H. H. 1906 A, 74, 104.  
 Wieland, G. R. 1905 A, 337.  
 Williston, S. W. 1901 B, 198.  
 Upper Cretaceous (Niobrara); Kansas.

**Toxochelys stenopora** Hay.

- Hay, O. P. 1905 E, 180, text-figs. 8-12.  
 1908 A, 172, text-figs. 214-220.  
 1909 B, 191, pl. i; text-fig. 1.  
 Wieland, G. R. 1905 A, 338 (T. stenoporus = T. serrifer).  
 Upper Cretaceous (Niobrara); Kansas.

**CYNOCERCUS** Cope. Type *C. incisus* Cope.

- Hay, O. P. 1902 A, 442.  
 Cope, E. D. 1872 H.  
 Hay, O. P. 1908 A, 180.  
 Wieland, G. R. 1902 A, 198.

**Cynocercus incisus** Cope.

- Hay, O. P. 1902 A, 442.  
 1905 E, 182.  
 1908 A, 180.  
 Upper Cretaceous (Niobrara); Kansas.

**PORTHOCHELYS** Williston. Type *P. laticeps* Williston.

- Williston, S. W. 1901 B, 195.  
 Hay, O. P. 1905 A, 156.  
 1908 A, 180.  
 1909 D, 341.  
 Nopcsa, F. 1923 H, 191.  
 Wieland, G. R. 1901 A, 103.  
 Williston, S. W. 1908 G, 304.  
 1925 B, 225.  
 Zittel, Eastman, etc. 1902 A, 201.  
 Zittel and Koken 1911 A, 255.

**Porthochelys browni** Hay.

- Hay, O. P. 1905 E, 183, text-figs. 15, 16.  
 1908 A, 182, text-figs. 235-237.  
 Upper Cretaceous (Pierre); South Dakota.

**Porthochelys laticeps** Williston.

- Williston, S. W. 1901 B, 195, pls. xix-xxii.  
 Hay, O. P. 1905 E, 183.  
 1908 A, 180, pl. xxxi, figs. 2, 3; text-figs. 231-234.  
 Upper Cretaceous (Niobrara); Kansas.

**DERMATEMYDIDÆ.**

- Hay, O. P. 1902 A, 444 (Adocidæ).  
 Arltdt, T. 1907 D, 650.  
 1912 A, 678, 714.  
 Baur, G. 1891 E, 634.  
 1896 D, 314, 319.  
 Boulenger, G. A. 1889 A, 27 (Dermatemys).  
 Cooper, C. F. 1923 C, 156.  
 Cope, E. D. 1880 U, 147 (Adocidæ).  
 Dollo, L. 1889 B, 671.  
 Gadow, H. 1901 B, 341.  
 1902 D, 219.  
 1905 A, 209.  
 Gilmore, C. W. 1917 A, 121.  
 1920 A, 25.  
 Harrassowitz, H. 1922 A, 141, 142, 183.  
 Hay, O. P. 1905 A, 151.  
 1905 G, 339.  
 1906 C, 160.  
 1908 A, 18, 32, 223.  
 Kasper, A. 1903 A, 162 ("dermatemydiden").  
 Lydekker, R. 1912 C, 40, 107.  
 Matthew, W. D. 1914 B, 387.  
 1915 A, 283.  
 1915 K, 437.

- Matthew, W. D. 1921 D, 211, 214.  
 Nopcsa, F. 1922 D, 156.  
 1923 F.  
 1923 H, 36, 39, 122, 168 (Dermatemydinæ).  
 1926 A, 657 (Dermatemyda).  
 1928 A, 166 (Dermatemydidæ, Dermatemydinæ).  
 Osborn, H. F. 1909 D, 58.  
 Palacky, J. 1902 B, 145 (Dermatemys).  
 Scharff, R. F. 1911 A, 236, 251.  
 Siebenrock, F. 1907 A, 527, 533.  
 1909 A, 448.  
 Stefano, G. 1917 A, 232, 236 (Adocidæ).  
 Steiner, H. 1922 A, 336 (Dermatemys).  
 Tornier, G. 1913 B, 365.  
 Vaillant, L. 1877 C, 57 (Dermatemys).  
 Waite, E. R. 1905 A, 117.  
 Walther, W. G. 1922 A, 74, 76, 90.  
 Wieland, G. R. 1904 A, 116 (Dermatemys).  
 Williston, S. W. 1925 B, 226.  
 Zittel and Broili 1911 A, 255.  
 1923 A, 311.  
 Zittel, Eastman, etc. 1902 A, 201.



**BASEILEMYS** Hay. Type *Compsemus variolosus* Cope.

Hay, O. P. 1902 A, 445.

1908 A, 226.

1910 B, 294, 298.

Nopcsa, F. 1923 F, 15, 17.

Sternberg, C. M. 1926 A, 103.

Williston, S. W. 1925 B, 226.

**Basilemys imbricarius** (Cope).

Hay, O. P. 1902 A, 445.

Bowen, C. F. 1915 A, 122, 150.

Hatcher, J. B. 1905 B, 77.

Hay, O. P. 1908 A, 231, pl. xxxii, figs. 5-7;

text-figs. 290, 291.

Knowlton, F. H. 1911 C, 58, 62.

Osborn, H. F. 1902 H, 674.

1902 I, 12 (*Compsemys*); 16 (*Basilemys*).

Sternberg, C. H. 1914 A, 134 (*Compsemys*).

Upper Cretaceous (Judith River); Montana.

**Basilemys nobilis** Hay.

Hay, O. P. 1910 A, 316, text-figs. 12, 13.

Gilmore, C. W. 1916 D, 296, fig. 37.

1917 A, 7, 44.

1920 A, 9.

Reeside, J. B. 1924 A, 31.

Upper Cretaceous (Ojo Alamo); New Mexico.

**Basilemys ogmius** (Cope).

Hay, O. P. 1902 A, 445 (*B. variolosus*, part).

Bowen, C. F. 1915 A, 122, 151.

Dawson, G. M. 1885 A, 38 C (*Compsemys*).

Hatcher, J. B. 1905 B, 76 (*B. imbricarius* a syn.).

Hay, O. P. 1908 A, 226, 229 (= *B. variolosus*).

Lambe, L. M. 1906 A, 195 (*Compsemys*).

A species based on extremely poor and probably unidentifiable material.

Upper Cretaceous (Belly River); Alberta.

**Basilemys præclarus** Hay.

Hay, O. P. 1910 A, 313, pl. x, fig. 6; text-figs. 6-11.

Upper Cretaceous (Lance); South Dakota.

**Basilemys sinuosus** Riggs.

Riggs, E. S. 1906 A, 249, pls. lxxvi-lxxviii.

Bowen, C. F. 1915 A, 122.

Brown, B. 1907 A, 842.

1914 E, 358.

Hay, O. P. 1908 A, 229, pl. xxxiii, figs. 1, 2; text-figs. 288, 289.

1910 A, 313.

Knowlton, F. H. 1909 A, 180.

Upper Cretaceous (Hell Creek); Montana.

**Basilemys variolosus** (Cope).

Hay, O. P. 1902 A, 445.

Bowen, C. F. 1915 A, 122, 148, 151.

Brown, B. 1914 E, 378.

Dawson, G. M. 1884 A, 38 (*Compsemys agmius*).

Hatcher, J. B. 1905 B, 76 (*B. ogmius*).

Hay, O. P. 1903 D, 119.

1908 A, 226, pl. xxxii, fig. 4; pl. xxxiv, fig. 1; text-fig. 287.

1910 A, 313.

1910 B, 298.

Knowlton, F. H. 1911 C, 57, 62 (*B. ogmius*, *B. variolosus*).

Lambe, L. M. 1901 A, 63, pls. iii-vi (*Adocus*).

1902 A, 39, pl. ii, figs. 1-3; text-figs. 4-6 (*Adocus*).

1904 C, 22, 37, 47.

1906 A, 194.

1907 B, 179 (*Adocus*).

Matthew, W. D. 1916 A, 484.

Osborn, H. F. 1901 I, 12-16 (*Adocus*, *Basilemys*).

1902 H, 674.

Upper Cretaceous (Judith); Montana; (Belly River); Alberta.

**Basilemys** sp. indet.

Gilmore, C. W. 1917 B, 4, 44. Upper Cretaceous (Two Medicine); Montana.

1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

**COMPSEMYS** Leidy. Type *C. victus* Leidy.

Hay, O. P. 1902 A, 437.

Arlt, T. 1907 D, 276.

Cope, E. D. 1880 U, 143.

Fuchs, H. 1920 A, 360.

Gilmore, C. W. 1920 A, 12.

Hay, O. P. 1903 B, 203.

1905 A, 147.

1908 A, 226, 233.

1910 A, 308.

Loomis, F. B. 1901 A, 195.

Nopcsa, F. 1923 F.

1923 H, 35.

1923 A, 165.

Osborn, H. F. 1902 I, 9.

Simpson, G. G. 1926 H, 204.

Stanton and Hatcher 1905 A, 38 (*Emys*. This genus?).

Williston, S. W. 1925 B, 226.

**Compsemys obscurus** (Leidy).

Hay, O. P. 1902 A, 437.

Bowen, C. F. 1915 A, 124.

Brown, B. 1907 A, 842.

1914 E, 358.

Hay, O. P. 1908 A, 235, pl. xxxiv, fig. 4.

1910 B, 297.

Knowlton, F. H. 1911 C, 60, 63.

Leidy, J. 1860 A, 153, pl. xi, fig. 4 (*Emys*?).

Osborn, H. F. 1902 I, 12, 17.

Peale, A. C. 1912 A, 754.

Sternberg, C. H. 1914 A, 134.

Upper Cretaceous (Lance); North Dakota; (Hell Creek); Montana.

**Compsemys parvus** Hay.

- Hay, O. P. 1910 A, 308, pl. x, figs. 1-3; text-fig. 1 (C. parva).  
 Gilmore, C. W. 1920 A, 9, 10, 13, pl. i, figs. 1, 2; pl. xix, fig. 3; text-fig. 1.  
 Nopcsa, F. 1923 F, 15.  
 Reeside, J. B. 1924 A, 38, 42 (This species?).  
 Paleocene (Puerco, Torrejon?); New Mexico.

**Compsemys plicatulus** Cope.

- Hay, O. P. 1902 A, 437.  
 Baur, G. 1891 E, 634.  
 Hay, O. P. 1903 B, 203.  
 1905 A, 137, 153, text-fig. 4.  
 1905 D, 125.  
 1905 G, 331.  
 1905 I, 297.  
 Marsh, O. C. 1890 E, 177, pl. vii, figs. 1, 2 (Glyptops ornatus).  
 Mook, C. C. 1916 A, 149.  
 Williston, S. W. 1905 B, 346.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado, Wyoming.

**Compsemys puercensis** Gilmore.

- Gilmore, C. W. 1920 A, 9, 10, 19, pl. iii, figs. 1, 2; text-figs. 3, 4.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**Compsemys torrejonensis** Gilmore.

- Gilmore, C. W. 1920 A, 10, 21, pl. iv, figs. 1, 2; text-figs. 4-6.  
 Nopcsa, F. 1923 F, 15.  
 Reeside, J. B. 1924 A, 42.  
 Paleocene (Torrejon); New Mexico.

**Compsemys vafer** Hay.

- Hay, O. P. 1910 A, 311, pl. x, figs. 4, 5; pl. xi, figs. 1, 2; text-figs. 2-5.

Gilmore, C. W. 1916 D, 299.

1920 A, 9, 10, 16, pl. ii, figs. 1, 2; text-fig. 2.

Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**Compsemys victus** Leidy.

- Hay, O. P. 1902 A, 437.  
 Bowen, C. F. 1915 A, 124.  
 Brown, B. 1907 A, 842.  
 1914 E, 358.  
 Cope, E. D. 1874 B, 433, 454.  
 Cross, W. 1896 A, 227.  
 Gilmore, C. W. 1920 A, 12 (C. victa).  
 Hatcher, J. B. 1905 B, 79.  
 Hay, O. P. 1903 D, 119.  
 1908 A, 233, pl. xxxiv, figs. 2, 3; text-figs. 292-295.  
 1910 A, 308.  
 1910 B, 288.

Knowlton, F. H. 1911 C, 60, 63.  
 Lambe, L. M. 1904 C, 37, 47 (This genus?).

Merrill, G. P. 1907 A, 66.  
 Osborn, H. F. 1902 I, 12, 17.  
 Peale, A. C. 1912 A, 754.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Lance); North Dakota, Wyoming; (Hell Creek); Montana; (Denver or Arapahoe?); Colorado.

**Compsemys** sp. indet.

- Hay, O. P. 1902 A, 437. Paleocene (Puerco); New Mexico.  
 Gilmore, C. W. 1916 D, 299, pl. lxxviii, fig. 2.  
 Upper Cretaceous (Ojo Alamo); New Mexico.  
 1926 J, 28. Upper Cretaceous (Lance); Wyoming.  
 Reeside, J. B. 1924 A, 31. Upper Cretaceous (Ojo Alamo); New Mexico.

**Adocus** Cope. Type *Emys beatus* Leidy.

- Hay, O. P. 1902 A, 444.  
 Anonymous 1905 B, 205.  
 Gilmore, C. W. 1920 A, 25.  
 Hay, O. P. 1905 C, 339.  
 1906 C, 159.  
 1908 A, 226, 236.  
 1910 A, 319.  
 1910 B, 294.  
 Heilprin, A. 1887 A, 315.  
 Nopcsa, F. 1923 F, 13.  
 Wieland, G. R. 1904 A, 112, 114.  
 1904 B, 192.  
 Williston, S. W. 1925 B, 226.

**Adocus agilis** Cope.

- Hay, O. P. 1902 A, 444.  
 Gilmore, C. W. 1920 A, 26.  
 Hay, O. P. 1908 A, 236, 242, 246, pl. xxxvi, fig. 3.  
 Upper Cretaceous (Hornerstown?); New Jersey.

**Adocus beatus** (Leidy).

- Hay, O. P. 1902 A, 444.  
 Gilmore, C. W. 1920 A, 26.

Hay, O. P. 1908 A, 236, 239, pl. xxxiv, figs. 6, 7; text-figs. 299-301.

Maack, G. A. 1869 A, 278 (Emys).  
 Wieland, G. R. 1904 A, 115, fig. 2.  
 Upper Cretaceous?; New Jersey.

**Adocus bossi** Gilmore.

- Gilmore, C. W. 1920 A, 8, 10, 26, 29, pls. vii, viii; text-figs. 9, 10.  
 Reeside, J. B. 1924 A, 23.  
 Upper Cretaceous (Kirtland); New Mexico.

**Adocus hesperius** Gilmore.

- Gilmore, C. W. 1920 A, 9, 26, 33, pl. ix; text-fig. 11.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**Adocus kirtlandius** Gilmore.

- Gilmore, C. W. 1920 A, 8, 10, 26, pls. v, vi; text-figs. 7, 8.  
 Reeside, J. B. 1924 A, 23.  
 Upper Cretaceous (Kirtland); New Mexico.

**Adocus lacer Hay.**

Hay, O. P. 1908 A, 236, 241, pl. xxxiv, fig. 8; pl. xxxvi, fig. 1; text-figs. 302-307.

Gilmore, C. W. 1920 A, 26.

Upper Cretaceous? (Hornerstown?); New Jersey.

**Adocus lineolatus (Cope).**

Hay, O. P. 1902 A, 437 (Compsemys).

Bowen, C. F. 1915 A, 122, 148.

Brown, B. 1907 A, 842.

1914 E, 358 (Adocus?).

Cross, W. 1896 A, 244 ("Compsemys").

Gilmore, C. W. 1916 D, 297 (Adocus?).

1920 A, 26.

Hatcher, J. B. 1905 B, 75.

Hay, O. P. 1903 D, 117 (Compsemys); 119 (Adocus).

1908 A, 236, 242, 247, figs. 308, 309 (Adocus?).

1910 B, 298 (Adocus?).

Knowlton, F. H. 1911 C, 57, 62.

Lambe, L. M. 1902 A, 38 (Adocus?).

1904 C, 22, 37, 47 (Adocus?).

1906 A, 194 (Adocus?).

Osborn, H. F. 1902 I, 12, 16 (Adocus?).

Peale, A. C. 1912 A, 754 (Adocus?).

Upper Cretaceous (Denver or Arapahoe?); Colorado: (Belly River); Alberta: (Judith River, Hell Creek); Montana: (Lance); Wyoming.

**Adocus onerosus Gilmore.**

Gilmore, C. W. 1920 A, 10, 26, 35, pl. x, figs. 1, 2; text-figs. 12, 13.

Reeside, J. B. 1924 A, 42.

Paleocene (Torrejon); New Mexico.

**Adocus pravus (Leidy).**

Hay, O. P. 1902 A, 444.

Gilmore, C. W. 1920 A, 26.

Hay, O. P. 1908 A, 236, 242, 246.

Upper Cretaceous (Tinton?); New Jersey.

**Adocus punctatus Marsh.**

Marsh, O. C. 1890 E, 178, pl. vii, fig. 3.

Hay, O. P. 1902 A, 444 (Syn. of *A. beatus*).

Baur, G. 1891 B, 428 (*A. beatus*, part).

Gilmore, C. W. 1920 A, 26.

Hay, O. P. 1908 A, 236, pl. xxxiv, fig. 5; pl. xxxv, figs. 1, 2; text-figs. 296-298.

Nopcsa, F. 1926 A, 658, text-fig. 9.

Wieland, G. R. 1904 A, 112, pls. i-iv; text-figs. 1, 2.

Upper Cretaceous? (Hornerstown?); New Jersey.

**Adocus syntheticus Cope.**

Hay, O. P. 1902 A, 444.

Gilmore, C. W. 1920 A, 26.

Hay, O. P. 1908 A, 236, 242, 244, pl. xxxvii, fig. 2.

Upper Cretaceous (Hornerstown?); New Jersey.

**Adocus vigoratus Hay.**

Hay, O. P. 1910 A, 317, pl. xi, fig. 3; text-figs. 14-18.

Gilmore, C. W. 1916 D, 298, pl. lxxvii, fig. 2; pl. lxxviii, fig. 3; text-fig. 38.

1920 A, 9, 25, 26.

Reeside, J. B. 1924 A, 31.

Upper Cretaceous (Ojo Alamo); New Mexico.

**Adocus sp. indet.**

Gilmore, C. W. 1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

Reeside, J. B. 1924 A, 21. Upper Cretaceous (Fruitland); New Mexico.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

**AGOMPHUS Cope. Type *Emys turgidus* Cope.**

Hay, O. P. 1902 A, 444.

Anonymous 1905 B, 205.

Cooper, C. F. 1922 C, 156.

Hay, O. P. 1906 C, 159.

1908 A, 226, 248.

Nopcsa, F. 1922 D, 156.

Wieland, G. R. 1905 B, 430, 442.

1923 A, 7.

Williston, S. W. 1925 B, 226.

**Agomphus alabamensis Gilmore.**

Gilmore, C. W. 1919 C, 123-125, pl. xxxv; text-fig. 5.

Lower Eocene (Midway); Alabama.

**Agomphus firmus (Leidy).**

Hay, O. P. 1902 A, 445.

1908 A, 249, 254.

Wieland, G. R. 1905 B, 435.

Upper Cretaceous (Tinton); New Jersey.

**Agomphus masculinus Wieland.**

Wieland, G. R. 1905 B, 437, 438, fig. 8.

Hay, O. P. 1908 A, 249, 255, fig. 319.

Upper Cretaceous? (Navesink-Horners-town?); New Jersey.

**Agomphus oxysternum Cope.**

Hay, O. P. 1902 A, 445.

1908 A, 249, 256, fig. 320.

Wieland, G. R. 1905 B, 435 (Adocus); 430 (Amphimys).

Lower Eocene (Midway); Georgia.

**Agomphus pectoralis (Cope).**

Hay, O. P. 1902 A, 444 (Adocus).

Cope, E. D. 1870 N, 548 (Adocus).

Hay, O. P. 1908 A, 249, 254, pl. xxxvii, figs. 8, 9.

Wieland, G. R. 1905 B, 435 (Adocus).

Upper Cretaceous (Vincentown?); New Jersey.

**Agomphus petrosus** Cope.

- Hay, O. P. 1902 A, 445.  
 1908 A, 249, 250, pl. xxxvi, fig. 4; pl.  
 xxxvii, figs. 6, 7; text-figs. 311-313.  
 Wieland, G. R. 1905 B, 430.  
 Upper Cretaceous? (Upper Greensand); New  
 Jersey.

**Agomphus tardus** Wieland.

- Wieland, G. R. 1905 B, 430, figs. 1-7.

- Hay, O. P. 1908 A, 249, 252, figs. 314-318.  
 Upper Cretaceous? (Navesink-Hornerstown);  
 New Jersey.

**Agomphus turgidus** Cope.

- Hay, O. P. 1902 A, 445.  
 1908 A, 249, pl. xxxvii, figs. 1-5; text-  
 fig. 310.  
 Wieland, G. R. 1905 B, 430, 435, 442, fig. 9  
 (This species?).  
 Upper Cretaceous? (Upper Greensand); New  
 Jersey.

**ZYGORAMMA** Cope. Type *Z. striatula* Cope.

- Hay, O. P. 1902 A, 445.  
 1908 A, 226, 257.  
 Williston, S. W. 1925 B, 226.  
**Zygoramma microglypha** Cope.  
 Hay, O. P. 1902 A, 445.  
 1908 A, 259, text-fig. 322.  
 Upper Cretaceous? (Navesink-Hornerstown);  
 New Jersey.

**Zygoramma striatula** Cope.

- Hay, O. P. 1902 A, 445.  
 1908 A, 257, pl. xxxvii, fig. 10; pl. xxxviii,  
 figs. 1-3; text-fig. 321.  
 Upper Cretaceous? (Navesink-Hornerstown);  
 New Jersey.

**HOMOROPHUS** Cope. Type *H. insuetus* Cope.

- Hay, O. P. 1902 A, 446.  
 1908 A, 226, 260.  
 Williston, S. W. 1925 B, 226.

**Homorophus insuetus** Cope.

- Hay, O. P. 1902 A, 446.  
 1908 A, 260.  
 Upper Cretaceous? (Hornerstown?); New  
 Jersey.

**ALAMOSEMYS** Hay. Type *A. substricta* Hay.

- Hay, O. P. 1908 A, 226, 260.  
 1910 A, 319.  
 1910 B, 294.  
 Williston, S. W. 1925 B, 226.  
**Alamosemys annexa** Hay.  
 Hay, O. P. 1910 A, 318, fig. 19.  
 Gilmore, C. W. 1920 A, 10, 26, 37, pl. xi, figs  
 1, 2; pl. xii; text-figs. 14, 15 (Adocus).

- Reeside, J. B. 1924 A, 42 (Adocus).  
 Paleocene (Torrejon); New Mexico.

**Alamosemys substricta** Hay.

- Hay, O. P. 1908 A, 260, pl. xxxix, figs. 1, 2;  
 text-figs. 323, 324.  
 Gilmore, C. W. 1920 A, 10 (Adocus).  
 Matthew, W. D. 1914 B, 383 (A. substricta).  
 Reeside, J. B. 1924 A, 42 (Adocus).  
 Paleocene (Torrejon); New Mexico.

**HOPLOCHELYS** Hay. Type *Chelydra crassa* Cope.

- Hay, O. P. 1908 A, 226, 263.  
 Cooper, C. F. 1922 C, 156.  
 Gilmore, C. W. 1920 A, 40.  
 Hay, O. P. 1910 A, 321.  
 1910 B, 294.  
 Nopcsa, F. 1922 D, 156.  
 1923 F, 13, 15.  
 Williston, S. W. 1925 B, 226.

**Hoplochelys bicarinata** Hay.

- Hay, O. P. 1910 A, 321, pl. xii, figs. 1, 2; text-  
 figs. 20-23.  
 Gilmore, C. W. 1920 A, 9, 41, pl. xiv, figs. 1, 2;  
 text-figs. 17, 18.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**Hoplochelys cælata** Hay.

- Hay, O. P. 1908 D, 163, pl. xxvii, figs. 1-3.  
 1910 A, 324.  
 Paleocene (Torrejon); New Mexico.

**Hoplochelys crassa** (Cope).

- Hay, O. P. 1902 A, 446 (Chelydra).  
 Gardner, J. H. 1910 A, 731 (Chelydra).  
 Gilmore, C. W. 1920 A, 9, 10, 40, 41, pl. xiii;  
 text-fig. 16.  
 Hay, O. P. 1905 G, 339, 340.  
 1908 A, 263, pl. xxxviii, figs. 4-9; text-  
 fig. 325.  
 1908 D, 164.  
 Matthew, W. D. 1914 B, 383.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**Hoplochelys elongata** Gilmore.

- Gilmore, C. W. 1920 A, 10, 41, 50, pl. xvi, figs.  
 1, 2; text-figs. 21, 22.  
 Reeside, J. B. 1924 A, 42.  
 Paleocene (Torrejon); New Mexico.

**Hoplochelys laqueata** Gilmore.

- Gilmore, C. W. 1920 A, 9, 10, 41, 47, pl. xv,  
 figs. 1, 2; text-figs. 19, 20.

Nopcea, F. 1923 F, 14.

1926 A, 658, text-fig. 9.

Reeside, J. B. 1924 A, 38 (*H. laqueta*).

Paleocene (Puerco); New Mexico.

### **Hoplochelys paludosa** Hay.

Hay, O. P. 1908 A, 266, text-fig. 328.

Gilmore, C. W. 1920 A, 10.

Matthew, W. D. 1914 B, 383.

Reeside, J. B. 1924 A, 42.

Paleocene (Torrejon); New Mexico.

### **Hoplochelys saliens** Hay.

Hay, O. P. 1908 A, 265, text-figs. 326, 327.

Gilmore, C. W. 1920 A, 10, 41, 49.

Matthew, W. D. 1914 B, 383.

Reeside, J. B. 1924 A, 42.

Paleocene (Torrejon); New Mexico.

### **KALLISTIRA** Hay. Type *Dermatemys costilatus* Cope.

Hay, O. P. 1908 A, 226, 267.

Williston, S. W. 1925 B, 226.

Zittel and Broili 1911 A, 256 (*Kallistina*).

### **Kallistira costilata** (Cope).

Hay, O. P. 1902 A, 445 (*Baptemys*).

1908 A, 267, text-figs. 329-334.

Merrill, G. P. 1907 A, 69 (*Dermatemys*).

Lower Eocene (Wasatch); New Mexico.

### **NOTOMORPHA** Cope. Type *N. gravis* Cope.

Hay, O. P. 1902 A, 448.

1908 A, 226, 269.

Williston, S. W. 1925 B, 226.

### **Notomorpha gravis** Cope.

Hay, O. P. 1902 A, 448.

Cope, E. D. 1874 B, 441.

Hay, O. P. 1908 A, 269, text-figs. 335, 336.

Merrill, G. P. 1907 A, 71 (*Emys*); 74 (*Notomorpha*).

Lower Eocene (Wasatch); Wyoming.

### **BAPTEMYS** Leidy. Type *B. wyomingensis* Leidy.

Hay, O. P. 1902 A, 445.

Cope, E. D. 1871 C, 563.

Hay, O. P. 1908 A, 226, 270.

Nopcea, F. 1923 F, 8, 14, 15.

Williston, S. W. 1925 B, 226.

### **Baptemys fluviatilis** Hay.

Hay, O. P. 1908 A, 277, pl. xlii, figs. 1, 2; text-figs. 350, 351.

Middle Eocene? (Bridger?); Colorado?

### **Baptemys tricarinata** Hay.

Hay, O. P. 1908 A, 275, text-figs. 346-349.

Cooper, C. F. 1922 C, 156.

Cope, E. D. 1881 D, 184 (*"Dermatemys"*).

Nopcea, F. 1922 D, 156.

Middle Eocene (Wind River); Wyoming.

### **Baptemys wyomingensis** Leidy.

Hay, O. P. 1902 A, 445 (*B. wyom.*); 438 (*Baëna?* ponderosa).

1904 A, 265, pl. xiii, figs. 1-3; text-fig. 2.

1905 G, 331 (*Baëna?* ponderosa).

1908 A, 270, pl. xxxvii, figs. 11-13; pl. xxxviii, fig. 10; pl. xl, fig. 1; pl. xli, figs. 1, 2; text-figs. 337-345.

Hayden, F. V. 1871 A, 145.

Lambe, L. M. 1906 B, 233 (*Baëna ponderosa*).

Merrill, G. P. 1907 A, 64 (*Baëna ponderosa*).

Middle Eocene (Bridger); Wyoming.

### **Baptemys** sp. indet.

Lee, W. T. 1917 A, 141.

Upper Cretaceous (Vermejo); Colorado.

### **XENOCHELYS** Hay. Type *X. formosa* Hay.

Hay, O. P. 1906 B, 29.

1908 A, 226, 282.

Williston, S. W. 1925 B, 226.

Zittel and Broili 1911 A, 256.

### **Xenochelys formosa** Hay.

Hay, O. P. 1906 B, 29, text-figs. 2, 3.

1904 A, 282, text-figs. 355, 356.

O'Harra, C. C. 1920 A, 160.

Oligocene (Chadron); South Dakota.

### **ANOSTEIRIDÆ** Hay.

Hay, O. P. 1902 A, 446.

Baur, G. 1891 B, 420 (*Anosteirinae*).

Harrassowitz, H. 1922 A, 209, 210, 212.

Hay, O. P. 1905 G, 332.

Nopcea, F. 1923 H, 122 (*Anosteirinae*).

1928 A, 167 (*Anosteirinae*).

### **ANOSTEIRA** Leidy. Type *A. ornata* Leidy.

Hay, O. P. 1902 A, 447.

Ardt, T. 1907 D, 276 (*Anostira*).

Dollo, L. 1887 B, 393 (*Anostira*).

Harrassowitz, H. 1919 A, 148.

1922 A, 132-239.

1922 B, 93.

Hay, O. P. 1905 G, 332.

1908 A, 226, 279.

Leidy, J. 1872 B, 870.

Lemoine, V. 1889 A, 237 (*Anostira*).

Lydekker, R. 1886 G, 523.

1889 M, 54 (*Anostira*).

Nopcea, F. 1923 H, 33, 34, 36, 150.

1928 A, 167.

Versluys, J. 1922 C, 98.

Walther, W. G. 1922 A, 76, 81, 85, 90.

- Williston, S. W. 1925 B, 226.  
 Zittel and Broili 1911 A, 256.  
 1923 A, 312.  
 Zittel, Eastman, etc. 1902 A, 201 (Anostira).

**Anosteira ornata** Leidy.

- Hay, O. P. 1902 A, 447.  
 Gilmore, C. W. 1917 A, 121 (This species?).  
 Harrassowitz, H. 1922 A, 140, 152, 202, pl. i, figs. 3, 4.  
 Hay, O. P. 1905 G, 332.  
 1906 C, 157, text-figs. 2, 3.  
 1908 A, 279, pl. xliii, figs. 1, 2; text-figs. 352-354.

- Lambe, L. M. 1908 A, 9, 17, pl. i, figs. 17-19.  
 Middle Eocene (Bridger); Wyoming: (Uinta?); Utah.

**Anosteira radulina** Cope.

- Cope, E. D. 1872 UU, 1.  
 Hay, O. P. 1902 A, 447.  
 Harrassowitz, H. 1922 A, 141.  
 Hay, O. P. 1905 G, 332.  
 1908 A, 281.  
 Merrill, G. P. 1907 A, 63.  
 Middle Eocene (Bridger); Wyoming.

## KINOSTERNIDÆ.

- Agassiz, L. 1857 B, 418 (Cinosternoidæ).  
 Arldt, T. 1909 D, 654 ("kinosterniden").  
 Baur, G. 1891 E, 632 (Cinosternidæ).  
 1896 D, 314.  
 Boulenger, G. A. 1889 A, 33 (Cinosternidæ).  
 Brown, A. E. 1904 A, 468 (Cinosternidæ).  
 Cooper, C. F. 1922 C, 155 (Cinosternidæ).  
 Cope, E. D. 1882 E, 144 (Cinosternidæ).  
 Gilmore, C. W. 1923 A, 1.  
 Harrassowitz, H. 1922 A, 141 (Cinosternidæ).  
 Kingsley, J. S. 1925 A, 15 (Cinosternidæ).

- Nopcsa, F. 1922 D, 155 (Cinosternidæ).  
 1923 E, 1045 (Cinosternidæ).  
 1923 F, 13, 18 (Cinosternidæ).  
 1923 H, 36, 39, 122, 168 (Cinosterninæ).  
 1926 A, 657 (Cinosternidæ).  
 1923 A, 166 (Cinosterninæ).  
 Siebenrock, F. 1902 A, 807-846 (Cinosternidæ).  
 1907 A (Cinosternidæ).  
 1909 A, 436, 438 (Cinosternidæ).  
 Woodward, A. S. 1888 O, 353 (Cinosternidæ).  
 Zittel and Broili 1923 A, 311 (Cinosternidæ).

**KINOSTERNON** Spix. Type *K. longicaudatum* = *K. scorpioides* = *Testudo tricarinata* Merrem.

- Spix, J. B. 1824, Testud. Brazil, 17.  
 Agassiz, L. 1857 B, 423 (Gonochelys); 424 (Ozotheca); 426 (Cinosternum); 427 (Thyrosteronum); 429 (Platythyra).  
 Gilmore, C. W. 1923 A, 1.  
 Gray, J. E. 1844, Cat. Tort., 32.  
 1855 A.  
 1873 D, 164, pl. v, fig. 6.  
 1873 E, 70.  
 Harrassowitz, H. 1922 A, 200 (Cinosternum).  
 Le Conte, J. 1854 A, 180 (Kinosternum).  
 Nopcsa, F. 1923 F, 6 (Cinosternum).  
 1923 H, 34, 186, 187 (Cinosternum).  
 1926 A, 657 (Cinosternum).

- Siebenrock, F. 1907 A (Cinosternum).  
 1909 A, 439 (Cinosternum).  
 Stannius, H. 1856 A, 7, 32 (Cinosternum).  
 Stejneger, L. 1902 A, 237.  
 1923 A, 3.  
 Zdansky, O. 1924 A, 102 (Cinosternon).  
**Kinosternon arizonense** Gilmore.  
 Gilmore, C. W. 1923 A, 2, pls. i-v; text-figs. 1-7.  
 Hay, O. P. 1927 D, 136.  
 Nopcsa, F. 1926 A, 658, text-fig. 9 (Cinosternum).  
 Pleistocene (San Pedro Valley); Arizona.

## EMYDIDÆ Gray.

- Hay, O. P. 1902 A, 447.  
 Allis, E. P. 1919 A, 383 (Emys).  
 Arldt, T. 1907 D, 652.  
 1909 D, 654 ("emydiden").  
 1912 A, 712, 758.  
 Bender, O. 1911 A, 170 (Emys).  
 1913 A, 284 (Emys).  
 Blainville, H. M. D. 1835 A, 240 (Emyda).  
 Bôtes, I. G. 1921 A, 84 (Testudinidæ, in part).  
 Broom, R. 1924 B, 54, fig. 5 (Emys).  
 Brown, A. E. 1904 A, 467 (Emys).  
 Carus, V. 1875 A, 397.  
 Cuvier, G. 1825 A, v, 2, 227 ("emydes").  
 Dollo, L. 1889 B, 672 (Testudinidæ).  
 1903 A, 770 (Testudinidæ).  
 Filatoff, D. 1906 A, 628 (Emys).  
 1907 A, 289 (Emys).  
 Fraas, E. 1905 B, 364 (Emydæ).  
 Fuchs, H. 1907 C, 19 (Emys).  
 1907 D, 33 (Emys).

- Fuchs, H. 1909 B, 152 ("emyden").  
 1909 D, 38, fig. 13 (Emys).  
 1913 A, 59 (Emys).  
 1913 B, 301 (Emys).  
 Gadow, H. 1901 B, 350 (Emys).  
 Gaupp, E. 1910 C, 412 (Emys).  
 1911 B, 109 (Emys).  
 Gegenbaur, C. 1863 A, 464 (Emys).  
 Gray, J. E. 1825 A, 210.  
 1855 A, 14.  
 1873 D, 165, 169.  
 Harkness, R. 1852 A, 250 ("emydian family").  
 Hasse, C. 1871 A, figs. (Emys).  
 Hay, O. P. 1905 A, 151.  
 1905 G, 332, 339.  
 1908 A, 2, 33, 284.  
 1928 A, 6.  
 Heilprin, A. 1887 A, 314, 315 (Emydæ).  
 Hoffmann, C. K. 1879 B, 63 (Emydæ).  
 Kehrer, F. A. 1896 A, 353 ("emyden").

- Kingsley, J. S. 1925 A, 145.  
 Kostlin, O. 1844 A (Emys).  
 Kunkel, B. W. 1911 A, 356, figs. 1-3 (Emys).  
 1912 A, 693 (Emys).  
 Matthew, W. D. 1914 B, 387.  
 1915 A, 283.  
 1921 D, 214.  
 Meckel, J. F. 1825 A (Emys).  
 Mehnert, E. 1891 A, 131 (Emys).  
 Nopcsa, F. 1923 F (Emydidae, Emydinae).  
 1923 H, 31, 32, 34-36 ("emydiden"); 39 (Emychidae).  
 1923 A, 167 (Emydinae).  
 Owen, R. 1848 B, 201, pl. II (Emys).  
 Paramore, R. H. 1910 A, 1397, figs. 7, 8 (Emys).  
 Pictet, F. J. 1853 A, 446.  
 Rabl, C. 1903 A, 185 ("emyden").  
 Rathke, H. 1846 A, 161, 163 (Emys).  
 Scharff, R. F. 1911 A, 134.  
 Sewertzoff, A. N. 1908 A, 149, 262, 309 (Emydæ).  
 Siebenrock, F. 1907 A, 536.  
 1909 A, 451 (Emydinae).  
 Sieglbauer, F. 1911 A, 265 (Emys).  
 Smith, L. W. 1914 A, 549 (Emydæ).  
 Stannius, H. 1856 A (Emydea).  
 Stefano, G. 1917 A, 281, 286.  
 Stehli, G. 1910 A, 785 ("emyden").  
 Steiner, H. 1922 A, 335, fig. 12 (Emys).  
 Stejneger, L. 1907 C, 488 (Emydinae).  
 Stejneger and Barbour 1917 A, 113 (Testudinidae in part).  
 Toimier, G. 1913 B, 365.  
 Vaillant, L. 1877 A, 15 (Emys).  
 1877 C, 56 (Emys).  
 Versluys, J. 1919 A, 14.  
 Virchow, H. 1914 D, 321, fig. 2 (Emys).  
 1926 A, 216, fig. 3 (Emys).  
 Watson, D. M. S. 1916 A, 341 (Emys).  
 Williston, S. W. 1914 A, 226.  
 1925 B, 226.  
 Zittel and Broili 1911 A, 251.  
 1923 A, 306 (Emydinae).  
 Zittel, Eastman, etc. 1902 A, 202.  
 Zuckerkandl, E. 1908 A, 497 (Emys).

*Gyremys* Hay. Type *G. spectabilis* Hay.

- Hay, O. P. 1908 A, 288.  
 Williston, S. W. 1925 B, 226.

*Gyremys spectabilis* Hay.

- Hay, O. P. 1908 A, 288, pl. XLIV, figs. 1, 2;  
 text-figs. 357, 358.  
 Bowen, C. F. 1915 A, 126.  
 Upper Cretaceous (Judith River); Montana.

*Clemmys* Ritgen. Type *Testudo punctata Schoepff* = *T. guttata* Schneider.

- Hay, O. P. 1902 A, 449.  
 Ammon, L. 1911 A, 27, figs.  
 Botez, I. G. 1921 A, 85.  
 Bronn, H. G. 1849 A, 694.  
 Carus, V. 1875 A, 397.  
 Fitzinger, L. 1836 A, 114.  
 Gadow, H. 1901 B, 356.  
 Gaupp, E. 1905 D, 1018, fig. 39.  
 1911 B, 109.  
 1913 A, 53.  
 Goette, A. 1899 A, 418, 419.  
 Hay, O. P. 1908 A, 287, 290.  
 1928 A, 8, pl. II, fig. 2.  
 Klaauw, C. J. 1924 B, 592.  
 Osborn, H. F. 1909 D, 58.  
 Scharff, R. F. 1911 A, 132, 222.  
 Sewertzoff, A. N. 1908 A, 272.  
 Siebenrock, F. 1909 A, 479.  
 Stejneger, L. 1907 A, 492.  
 Williston, S. W. 1925 B, 226, 227.

*Clemmys hesperia* Hay.

- Hay, O. P. 1903 E, 238, text-figs. 1-5.  
 1908 A, 292, pl. XLV, figs. 4-7; text-figs.  
 361-365.  
 Merriam, J. C. 1911 B, 230.  
 Osborn, H. F. 1909 D, 81.  
 Pliocene (Rattlesnake); Oregon.

*Clemmys insculpta* Le Conte.

- Hay, O. P. 1902 A, 449.

- Baker, F. C. 1920 A, 208, 213, 394.  
 Hay, O. P. 1908 A, 295.  
 1923 A, 312, 322.  
 Peterson, O. A. 1926 A, 253.  
 Scharff, R. F. 1911 A, 133.  
 Pleistocene (Early); Pennsylvania.

*Clemmys morrisiae* Hay.

- Hay, O. P. 1908 A, 290, pl. XLV, figs. 1-3; text-figs. 359-360.  
 Scharff, R. F. 1911 A, 133.  
 Middle Eocene (Bridger); Wyoming.

*Clemmys? percrassa* Cope.

- Hay, O. P. 1902 A, 449.  
 Baker, F. C. 1920 A, 208, 213, 394.  
 Hay, O. P. 1908 A, 294.  
 1923 A, 312.  
 Schlosser, M. 1902 H, 143.  
 Pleistocene (Early); Pennsylvania.

*Clemmys saxea* Hay.

- Hay, O. P. 1903 E, 241, text-fig. 6.  
 1908 A, 294, pl. XLV, figs. 8-10; text-fig. 366.  
 Merriam and Sinclair 1907 A, 196.  
 Middle Miocene (Mascall); Oregon.

*Clemmys* sp. indet.

- Merriam, J. C. 1911 B, 205, 214, 233, fig. 2.  
 Middle Miocene (Virgin Valley); Nevada.

ECHMATEMYS Hay. Type *Emys septaria* Cope.

Hay, O. P. 1906 B, 27.

Gilmore, C. W. 1915 H, 123.

Hay, O. P. 1908 A, 287, 295, text-figs. 367-374 (E. sp. indet.).

Huene, F. 1910 C, 302 (Echmatemys).

Nopcea, F. 1923 F, 15.

Sauvage, H. E. 1906 A, 150, 252 (Echinatemys).

Williston, S. W. 1925 B, 226.

**Echmatemys ægle Hay.**

Hay, O. P. 1908 A, 298, 431, text-figs. 436-441.

Middle Eocene (Bridger); Wyoming.

**Echmatemys arethusa Hay.**

Hay, O. P. 1908 A, 298, 323, pl. xlix, figs. 1, 2; text-figs. 421, 422.

Middle Eocene (Bridger); Wyoming.

**Echmatemys callopyge Hay.**

Hay, O. P. 1908 A, 298, 340, pl. li, figs. 1, 2; text-figs. 447, 448.

Gilmore, C. W. 1915 H, 123, pl. xxi; text-figs. 9, 10.

Upper Eocene (Uinta); Utah.

**Echmatemys cibollensis (Cope).**

Hay, O. P. 1902 A, 447 (Emys).

Gilmore, C. W. 1915 H, 139.

1919 C, 129.

Hay, O. P. 1908 A, 298, 300, text-fig. 379.

Merrill, G. P. 1907 A, 70 (Emys).

Lower Eocene (Wasatch); New Mexico.

**Echmatemys cyane Hay.**

Hay, O. P. 1908 A, 298, 324, text-figs. 423-427.

Middle Eocene (Bridger); Wyoming.

**Echmatemys depressa Gilmore.**

Gilmore, C. W. 1915 H, 139, pl. xxiii, fig. 2; text-fig. 16.

Upper Eocene (Uinta); Utah.

**Echmatemys douglassi Gilmore.**

Gilmore, C. W. 1915 H, 123, pl. xxii; text-figs. 11, 12.

Upper Eocene (Uinta); Utah.

**Echmatemys euthneta (Cope).**

Hay, O. P. 1902 A, 447 (Emys).

Cope, E. D. 1874 B, 436, 437 (Emys).

Gilmore, C. W. 1915 H, 139.

1919 C, 129.

Hay, O. P. 1908 A, 298, 305, pl. xlvi, fig. 1; text-figs. 389-391.

Loomis, F. B. 1907 B, 358 (Emys).

Merrill, G. P. 1907 A, 70 (Emys).

Lower Eocene (Wasatch); Wyoming.

**Echmatemys haydeni (Leidy).**

Hay, O. P. 1902 A, 448 (Emys).

1908 A, 298, 313, pl. xlvii, fig. 2; text-figs. 404-410.

Merrill, G. P. 1907 A, 71.

Middle Eocene (Bridger); Wyoming.

**Echmatemys hollandi Gilmore.**

Gilmore, C. W. 1915 H, 133, pl. xxiii, fig. 1; text-fig. 13.

Upper Eocene (Uinta); Utah.

**Echmatemys? latilabiata (Cope).**

Cope, E. D. 1872 PP, 3 (Emys).

Hay, O. P. 1902 A, 448 (Emys).

1908 A, 298, 339

Merrill, G. P. 1907 A, 71 (Emys).

Middle Eocene (Bridger); Wyoming.

**Echmatemys lativertebralis (Cope).**

Hay, O. P. 1902 A, 448 (Emys)

1908 A, 298, text-figs. 375-378

Merrill, G. P. 1907 A, 71 (Emys).

Lower Eocene (Wasatch); New Mexico.

**Echmatemys? megaulax (Cope).**

Hay, O. P. 1902 A, 448 (Emys).

Cope, E. D. 1874 B, 436 (Emys megaulax, E. pachylomus).

Gilmore, C. W. 1915 H, 139, 141.

1919 C, 125-129, pl. xxxvi; text-figs. 6, 7.

Hay, O. P. 1908 A, 298, 301, pl. xlv, figs. 14, 15; text-figs. 380-383.

Merrill, G. P. 1907 A, 71 (Emys).

Lower Eocene (Wasatch); Wyoming.

**Echmatemys naomi Hay.**

Hay, O. P. 1908 A, 298, 335, pl. li, figs. 1, 2; text-figs. 442-444.

Middle Eocene (Bridger); Wyoming.

**Echmatemys obscura Gilmore.**

Gilmore, C. W. 1915 H, 135, pl. xxiv; text-figs. 14, 15.

Upper Eocene (Uinta); Utah.

**Echmatemys ocyrrhoë Hay.**

Hay, O. P. 1908 A, 298, 329, text-figs. 432, 435.

Middle Eocene (Bridger); Wyoming.

**Echmatemys pusilla Hay.**

Hay, O. P. 1908 A, 298, 337, text-figs. 445, 446.

Gilmore, C. W. 1915 H, 142, fig. 17. (This species?).

Leidy, J. 1873 B, 148 (Emys wyomingensis, juv.).

Middle Eocene (Bridger); Wyoming: (Uinta); Utah.

**Echmatemys rivalis Hay.**

Hay, O. P. 1908 D, 164, text-figs. 2, 3.

Lower Eocene (Wasatch?); Wyoming.

**Echmatemys septaria (Cope).**

Hay, O. P. 1902 A, 448 (Emys).

Gilmore, C. W. 1915 H, 123, 124.

Hay, O. P. 1906 B, 28, text-fig. 1.

1908 A, 298, 319, text-figs. 414-420.

Leidy, J. 1870 E, 5 (Emys stevensonianus, in part).

Merrill, G. P. 1907 A, 71 (Emys).

Middle Eocene (Bridger); Wyoming.



**Echmatemys shaughnessiana** (Cope).

Hay, O. P. 1902 A, 448 (Emys).  
1908 A, 298, 327, pl. 1, figs. 1, 2; text-figs. 428-431.

Middle Eocene (Bridger); Wyoming.

**Echmatemys stevensoniana** (Leidy).

Hay, O. P. 1902 A, 448 (Emys septaria, in part).  
Hayden, F. V. 1871 A, 145 (Emys stevensonensis).

Merrill, G. P. 1907 A, 72 (Emys).

Hay, O. P. 1908 A, 298, 316, pl. xlvii, figs. 1, 2; text-figs. 411-413.

Middle Eocene (Bridger); Wyoming.

**Echmatemys testudinea** (Cope).

Hay, O. P. 1902 A, 448 (Emys).

Cope, E. D. 1874 B, 441 (Emys).

Gilmore, C. W. 1919 C, 129.

Hay, O. P. 1908 A, 298, 303, pl. xlv, figs. 16, 17; text-figs. 383-388.

Merrill, G. P. 1907 A, 72 (Emys); 74 (Noto-morpha).

Lower Eocene (Wasatch); Wyoming.

**Echmatemys uintensis** Hay.

Hay, O. P. 1908 A, 298, 342, pl. liii, figs. 1, 2.

Gilmore, C. W. 1915 H, 127.

Upper Eocene (Uinta); Wyoming.

**Echmatemys wyomingensis** (Leidy).

Hay, O. P. 1902 A, 448 (Emys).

1904 A, 267, pl. xiv; text-figs. 3, 4 (Chrysemys).

1908 A, 298, 308, pl. xlvii, fig. 1; text-figs. 392-403.

Merrill, G. P. 1907 A, 71 (Emys jeanses); 72 (E. wyomingensis).

Middle Eocene (Bridger); Wyoming.

**PALÆOTHECA** Cope. Type *P. polycypha* Cope.

Cope, E. D. 1872 NN, 4.

Hay, O. P. 1902 A, 447 (Emys, in part).  
1908 A, 287, 343.

Nopcea, F. 1928 A, 167 (Palæotheka).

Williston, S. W. 1925 B, 226.

**Palæotheka polycypha** Cope.

Cope, E. D. 1872 NN, 4.

Hay, O. P. 1902 A, 448 (Emys).

Gilmore, C. W. 1915 H, 139.

Hay, O. P. 1908 A, 343.

Merrill, G. P. 1907 A, 71 (Emys); 75 (Palæotheka).

Middle Eocene (Bridger); Wyoming.

**Palæotheka terrestris** Cope.

Cope, E. D. 1872 NN, 5.

Hay, O. P. 1902 A, 448 (Emys).

Cope, E. D. 1902 A, 448.

Gilmore, C. W. 1915 H, 139.

Hay, O. P. 1908 A, 344.

Merrill, G. P. 1907 A, 72 (Emys); 75 (Palæotheka).

Middle Eocene (Bridger); Wyoming.

**HYBEMYS** Leidy. Type *H. arenarius* Leidy.

Hay, O. P. 1902 A, 448.

1908 A, 287, 344.

**Hybemys arenarius** Leidy.

Hay, O. P. 1902 A, 448.

1908 A, 345.

Middle Eocene (Bridger); Wyoming.

**CHRYSEMYS** Gray. Type *Testudo picta* Schneider.

Gray, J. E. 1844, Cat. Tortoises, etc. Brit. Mus., 27.

Agassiz, L. 1857 B, 438.

Baur, G. 1896 E, 569.

Beer, G. R. 1926 A, 319.

Botez, I. G. 1921 A, 85.

Brown, A. E. 1904 A, 468.

Fuchs, H. 1907 B, 429.

Gadow, H. 1901 B, 346.

Gray, J. E. 1855 A, 32.

1873 F, 321, pl. xii, fig. 7.

Hay, O. P. 1905 A, 143.

1908 A, 288, 345.

Heilprin, A. 1887 A, 314.

Huene, F. 1920 D, 166.

Nopcea, F. 1923 F, 12.

Scharff, R. F. 1911 A, 132.

Thäfer, K. 1910 A, 490, figs. 24-35.

Sewertzoff, A. N. 1908 A, 272.

Shaner, R. F. 1926 A, 343, figs. 1-16.

Siebenrock, F. 1909 A, 459.

Smith, L. W. 1914 A, 549.

Stejneger and Barbour 1917 A, 118.

Williston, S. W. 1925 A, 103, 188, figs. 80, 154.  
1925 B, 226, 227.

**Chrysemys marginata bellii** (Gray).

Gray, J. E. 1831, Syn. Rept., 31 (Emys bellii).

Boulenger, G. A. 1889 A, 74 (C. cinerea bellii).

Hay, O. P. 1923 B, 118, pl. ix, fig. 1 (C. bellii).

Stejneger and Barbour 1917 A, 118.

See Boulenger for synonymy and literature.

Recent; Upper Michigan to Vancouver Island, on Great Plains to New Mexico and Mexico: Pleistocene; Texas.

**Chrysemys timida** Hay.

Hay, O. P. 1908 A, 345, pl. xlvii, fig. 2.

Pleistocene (Aftonian); Nebraska.

**DEIROCHELYS** Agassiz. Type *D. reticulata* (Daudin).

- Agassiz, L. 1857 B, 441.  
 Hay, O. P. 1908 A, 288, 346.  
 Siebenrock, F. 1909 A, 485.  
 Stejneger and Barbour 1917 A, 121.  
 Williston, S. W. 1925 B, 227.

**Deirochelys floridana** Hay.

- Hay, O. P. 1908 A, 346, pl. liv, figs. 1, 2; text-fig. 450.  
 1923 A, 379.  
 Pleistocene (Early); Florida.

**TRACHEMYS** Agassiz. Type *T. scripta* Schoepff.

- Hay, O. P. 1902 A, 449.  
 Baur, G. 1892 D, 208, fig. 3.  
 1896 E, 569.  
 Gray, J. E. 1873 F, 321, pl. xii, fig. 8.  
 Hay, O. P. 1908 A, 288, 347.  
 Matthew, W. D. 1918 I, 662 (Graphemys).  
 1919 B, 170 (Chrysemys, Trachemys).  
 Sewertzoff, A. N. 1908 A, 262.  
 Williston, S. W. 1914 A, 221, figs. 115, 116.  
 1925 B, 227.

**Trachemys bisornata** (Cope).

- Hay, O. P. 1902 A, 449.  
 1908 A, 353, pl. lvi, fig. 1.  
 1916 C, 67, 75, pl. vii, figs. 2-7.  
 1923 A, 384.  
 1924 D, 248.  
 Sellards, E. H. 1916 C, 145.  
 Pleistocene (Early); Texas, Florida.

**Trachemys delicata** Hay.

- Hay, O. P. 1916 C, 66, pl. vii, fig. 1 (This genus?).  
 Pliocene?; Florida.

**Trachemys euglypha** (Leidy).

- Hay, O. P. 1902 A, 447 (Emys).  
 1908 A, 350, pl. liv, fig. 3.  
 1916 C, 70, pl. iv, fig. 6 (This species?).  
 1923 A, 379, 381.  
 Matson and Clapp 1909 A, 136 (Emys).  
 Spencer, J. W. 1895 A, 137 (Emys).  
 Pleistocene (Peace Creek); Florida.

**Trachemys hilli** (Cope).

- Hay, O. P. 1902 A, 449.  
 1908 A, 348, pl. lv, figs. 1, 2; text-figs. 451, 452.  
 Upper Miocene or Lower Pliocene (Republican River); Kansas.

**Trachemys? jarmani** Hay.

- Hay, O. P. 1908 A, 351, pl. liv, figs. 10-12.  
 1923 A, 379.  
 Pleistocene (Early); Florida.

**Trachemys? nuchocarinata** Hay.

- Hay, O. P. 1916 C, 70, pl. vi, fig. 5 (This genus?).  
 1917 E, 44, 47 (This genus?).  
 1923 A, 374, 382.  
 1927 D, 274.  
 Pleistocene (Early and Middle); Florida.

**Trachemys petrolei** (Leidy).

- Hay, O. P. 1902 A, 448 (Emys).  
 1908 A, 352, pl. xlvi, figs. 3, 4.  
 1924 D, 242.  
 Pleistocene (Early); Texas.

**Trachemys sculpta** Hay.

- Hay, O. P. 1908 A, 351, pl. liv, figs. 4-9.  
 1916 C, 68, 75, pl. vii, figs. 8-10.  
 1923 A, 497.  
 1927 D, 274.  
 Sellards, E. H. 1916 C, 145.  
 Pleistocene (Early); Florida.

**Trachemys trulla** Hay.

- Hay, O. P. 1908 A, 355, pl. lvi, figs. 2-6; text-fig. 453.  
 1924 D, 242.  
 Pleistocene (Early); Texas.

**Trachemys sp. indet.**

- Hay, O. P. 1923 A, 197. Pleistocene (Early); Florida.

**PSEUDEMYS** Gray. Type *Testudo concinna* Le Conte.

- Gray, J. E. 1856, Proc. Zool. Soc. Lond., 1855 (1856), 197.  
 Baur, G. 1896 E, 569.  
 Boulenger, G. R. 1889 A, 69 (Chrysemys, part).  
 Foote, J. S. 1916 A, 58, pl. iv.  
 Gray, J. E. 1855 A, 34.  
 1873 F, 321, pl. xii, fig. 9.  
 Hay, O. P. 1908 A, 288, 356.  
 Heilprin, A. 1887 A, 314.  
 Stejneger and Barbour 1917 A, 119.  
 Williston, S. W. 1925 B, 227.

**Pseudemys caelata** Hay.

- Hay, O. P. 1908 A, 356, pl. lvii, figs. 1-6; text-fig. 454.  
 1916 C, 64, pl. ii, figs. 1-7.  
 1923 A, 375, 379.  
 1927 D, 274.  
 Pleistocene (Early); Florida.

**Pseudemys extincta** Hay.

- Hay, O. P. 1908 A, 356, pl. liv, fig. 13.  
 1923 A, 379.  
 Pleistocene (Early); Florida.

**Pseudemys floridana persimilis Hay.**

Hay, O. P. 1916 C, 71, 75, pl. v, figs. 6-8.

1917 E, 44.

1923 A, 382.

Sellards, E. H. 1916 C, 147, 148.

Pleistocene (Middle or Late); Florida.

**Pseudemys sp. indet.**

Hay, O. P. 1923 A, 363. Pleistocene; South Carolina.

**GRAPTEMYS Agassiz. Type *Testudo geographica* Le Sueur.**

Agassiz, L. 1857 B, 438.

Hay, O. P. 1908 A, 288, 358.

Stejneger and Barbour 1917 A, 117.

Williston, S. W. 1914 A, 218, figs. 111, 112.

**Graptemys? inornata (Loomis).**

Loomis, F. B. 1904 A, 429, figs. 10, 11 (Chrysemys).

Hay, O. P. 1908 A, 358, text-figs. 455, 456.

Lambe, L. M. 1905 D, 366 A (Chrysemys).

O'Harra, C. C. 1920 A, 160.

Oligocene (Titanotherium); South Dakota.

**TERRAPENE Merrem. Type *Testudo carolina* Linnæus.**

Hay, O. P. 1902 A, 449.

Adams, L. A. 1919 A, 89 (Cistudo).

Botez, I. G. 1921 A, 85 (Cistudo).

Boulenger, G. A. 1895 D, 330 (Cistudo).

Broom, R. 1922 A, 21.

Brown, A. E. 1904 A, 468.

Carus, V. 1875 A, 397.

Cooper, C. F. 1922 C, 157.

Durand, J. P. 1898 A, 294 ("cistude").

Fuchs, H. 1907 B, 461, pl. xx, fig. 10 (Cistudo).

1911 B, 394 (Cistudo).

1920 A, 368 (Cistudo).

Gadow, H. 1901 B, 361 (Cistudo).

1905 A, 210 (Cistudo).

Gilmore, C. W. 1927 E.

Gray, J. E. 1825 A, 211 (Terrapene).

1855 A, 39 (Cistudo).

1873 D, 163 ("box tortoises").

Hay, O. P. 1905 A, 149.

1908 A, 18, 288, 359.

1912 D, 553.

Heilprin, A. 1887 A, 313-315 (Cistudo).

Le Conte, J. 1854 A, 189.

Leunis and Ludwig 1883 A, 533.

Moodie, R. L. 1908 D, 445 (Cistudo).

Nopcea, F. 1922 D, 157.

1923 F, 6, 18 (Terrapene, Cistudo).

1923 H, 36 (Terrapene).

Owen, R. 1848 B, 192 (Cistudo).

Perna, G. 1906 A, 138, pl. vii, fig. 28 (Cistudo).

Rabl, C. 1903 A, 170, pl. i, fig. 9 (Cistudo).

Rathke, H. 1846 A, 163 (Terrapene).

Scharff, R. F. 1911 A, 134.

Shufeldt, R. 1921 A, 220.

Siebenrock, F. 1909 A, 489.

Stannius, H. 1856 A, 32, seq. (Cistudo).

Stejneger, L. 1902 A, 235, 236.

Stejneger and Barbour 1917 A, 115.

Vaillant, L. 1877 B, 36 (Cistudo).

1877 C, 57.

1881 A, 15, 103.

Wallace, A. R. 1876 A, II, 408.

Watson, D. M. S. 1914 H, 1012 (Cistudo).

Williston, S. W. 1925 A, 188, fig. 154 (Cistudo).

1925 B, 227 (Terrapene).

Zdansky, O. 1924 A, 110.

Zittel, Eastman, etc. 1902 A, 203 (Cistudo).

**Terrapene bulweri Hay.**

Hay, O. P. 1920 B, 133, pl. x, fig. 1; text-fig. 4.

1924 D, 247.

Pleistocene (Middle or Early); Texas.

**Terrapene canaliculata Hay.**

Hay, O. P. 1907 B, 850, figs. 5-7.

Gidley, J. W. 1927 E, 274.

Gilmore, C. W. 1927 E, 4, pls. ii-v; text-figs. 2-4.

Hay, O. P. 1908 A, 360, 363, text-figs. 463-465.

1916 C, 58, 75, pl. iv, figs. 4, 5; pl. v, figs.

1-5 (T. antipex); 61 (T. canaliculata).

1917 B, 10 (T. antipex).

1917 E, 44 (T. antipex).

1923 A, 371 (T. canaliculata); 497 (T. antipex).

1927 D, 274 (T. antipex, T. canaliculata).

Sellards, E. H. 1916 C, 147 (T. antipex).

Pleistocene (Early); Georgia, Florida.

**Terrapene carolina (Linnæus).**

Linnæus, C. 1758 A, 198 (Testudo).

Hay, O. P. 1902 A, 449 (T. clausa).

Baker, F. C. 1920 A, 311, 341, 394.

Boulenger, G. A. 1895 D, 331 (Cistudo).

Fuchs, H. 1927 A, 324.

Gadow, H. 1901 B, 361 (Cistudo).

Gray, J. E. 1855 A, 39 (Cistudo).

Hay, O. P. 1902 C, 386.

1912 D, 553, text-fig. 1.

1923 A, 310, 311.

Leidy, J. 1839 H, 6 (Cistudo clausa).

Mercer, H. 1884 A, 98 ("box turtle").

Owen, R. 1848 B, 192 (Cistudo clausa).

Siebenrock, F. 1909 A, 492.

Stejneger and Barbour 1917 A, 115.

Vaillant, L. 1881 A, 15, pl. xxvi (T. carinata).

Zdansky, O. 1924 A, 111.

Recent; Maine to Georgia, west to Mississippi River: Pleistocene (Early); Pennsylvania: (Middle); Indiana: (Late); Pennsylvania.

**Terrapene eurypygia (Cope).**

Hay, O. P. 1902 A, 449 (T. eurypygia, T. anguillulata).

Baker, F. C. 1920 A, 208, 213, 394 (T. angululatus).

Cope, E. D. 1869 E, 178.

Hay, O. P. 1902 C, 385, figs. 6, 7.

1906 D, 169, pl. xl, fig. 2.

1908 A, 360, 364, text-figs. 466-470.

1916 C, 64.

1923 A, 312, 347.

Miller, B. L. 1912 A, 5 (Cistudo).

Vaillant, L. 1881 A, 15.

Pleistocene (Early or Middle); Maryland:  
(Early); Pennsylvania.

### ***Terrapene formosa* Hay.**

Hay, O. P. 1916 C, 57, pl. iv, fig. 3.

Gilmore, C. W. 1927 E, 3.

Hay, O. P. 1923 A, 378.

Pleistocene (Early); Florida.

### ***Terrapene impressa* Hay.**

Hay, O. P. 1924 D, 245, fig. 5.

Pleistocene (Early); Texas.

### ***Terrapene innoxia* Hay.**

Hay, O. P. 1916 C, 61, 75, 76, pl. vi, figs. 1-4.

Chamberlin, R. T. 1916 A, 38.

Gilmore, C. W. 1927 E, 3.

Hay, O. P. 1916 E, 53.

1917 E, 44.

1923 A, 382.

Sellards, E. H. 1916 C, 145, 147.

Pleistocene (Early and Middle); Florida.

### ***Terrapene longinsulæ* Hay.**

Hay, O. P. 1908 D, 166, pl. xxvi, figs. 1-3.

Lower Pliocene (Republican River); Kansas.

### ***Terrapene marnochii* (Cope).**

Hay, O. P. 1902 A, 449.

Dumble, E. T. 1894 A, 564 (Cistudo).

Hay, O. P. 1908 A, 360, 362, pl. lviii, figs. 1, 2.

1917 B, 9.

Pleistocene (Early); Texas.

### ***Terrapene putnami* Hay.**

Hay, O. P. 1906 B, 30, text-figs. 4-7.

Gilmore, C. W. 1927 E, 3.

Hay, O. P. 1908 A, 360, pl. lvi, figs. 7, 8; text-figs. 459-462.

1916 C, 61.

1923 A, 197, 379.

Sauvage, H. E. 1906 A, 150 (T. putnami).

Scharff, R. F. 1911 A, 114.

Pleistocene (Early); Florida.

### ***Terrapene singletoni* Gilmore.**

Gilmore, C. W. 1927 E, 1, pl. i; text-fig. 1.

Pleistocene (Early); Florida.

### ***Terrapene whitneyi* Hay.**

Hay, O. P. 1917 B, pl. i, figs. 4, 5; pl. ii, fig. 1.

Bassler, R. S. 1919 A, 61.

Deussen, A. 1924 A, 116.

Hay, O. P. 1920 B, 133.

1923 B, 117.

1924 D, 245, 247.

1927 D, 234.

Pleistocene (Early or Middle); Texas.

### ***Terrapene* sp. indet.**

Gidley, J. W. 1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1923 A, 353.

1927 D, 274. Pleistocene; Florida.

Matthew, W. D. 1925 A, 97. Pleistocene

(Early); Florida.

## TESTUDINIDÆ Gray.

Gray, J. E. 1825 A, 210.

Hay, O. P. 1902 A, 449.

Ardt, T. 1909 D, 654 ("testudiniden").

1912 A, 712, 758.

Bates, D. M. A. 1914 A, 100 ("land tortoises").

Blainville, H. M. D. 1835 A, 240 (Testudinea).

Bonaparte, C. L. 1831 A, 63.

Botez, I. G. 1921 A, 84.

Carus, V. 1875 A, 396 (Chersemydæ).

Dollo, L. 1889 B.

1903 A, 770 (Testudinidæ, including Emydidæ).

1903 C.

Frech, F. 1906 A, 494 ("landschildkröten").

Fuchs, H. 1907 B, 428.

1920 A, 367.

Gadow, H. 1901 B, 345.

Gray, J. E. 1855 A, 4.

Günther, A. C. 1898 A ("land tortoises").

Harrassowitz, H. 1922 A, 183 ("testudinaten").

Hay, O. P. 1905 G, 333.

1908 A, 33, 367.

Hoffmann, C. K. 1879 B, 65 (Testudinei).

Jaekel, O. 1915 A, 104 ("testudiniden").

Koken, E. 1898 A, 141 ("schildkröten").

Lobley, J. L. 1908 A, 203, 208.

Lydekker, R. 1886 G, 521 ("chelonians").

1903 C, 54 ("land tortoises").

1910 A, 302 ("giant tortoises").

1912 C, 498 (Chelonia).

Mantell, G. A. 1844 A, 771 (Testudinata).

Matthew, W. D. 1914 B, 387.

1915 A, 283.

1921 D, 214.

Middleton, J. 1844 A, 286.

Nopcea, F. 1923 F (Testudininae, Emydidæ).

1923 H, 34, 39, 122, 166 (Testudininae).

1928 A, 167 (Emydinae, Testudininae).

Osborn, H. F. 1909 D, 58.

Rabl, C. 1903 A, 160 ("testudiniden").

Siebenrock, F. 1907 A, 532.

1909 A, 508 (Testudinea).

Stannius, H. 1856 A (Testudinea).

Stefano, G. 1917 A, 281, 286.

Stejneger, L. 1907 C, 498.

Stejneger and Barbour 1917 A, 113 (including Emydidæ).

Tornier, G. 1913 A, 336.

1913 B, 365.

Versluys, J. 1912 A, 491 ("schildkröten").

Wagner, R. 1843 A ("landschildkröten").  
Wallace, A. R. 1876 A, II, 407.  
Williston, S. W. 1914 A, 227.  
1925 B, 227.

Zittel and Broili 1911 A, 252 (Testudininae).  
1923 A, 306 (Testudininae).  
Zittel, Eastman, etc. 1902 A, 202 (Testudinidae);  
203 (Testudinoidea).

#### HADRIANUS Cope. Type *H. octonarius* Cope.

Cope, E. D. 1872 OO, 3.  
Hay, O. P. 1902 A, 450.  
Gilmore, C. W. 1917 A, 143.  
Harrassowitz, H. 1922 A, 183.  
Hay, O. P. 1905 G, 341.  
1908 A, 373.

Nopcsa, F. 1923 F, 13, 18.  
Turner, G. 1913 B, 365.  
Wieland, G. R. 1923 A, 13.  
Williston, S. W. 1925 B, 227.  
Zittel and Broili 1911 A, 252.  
1923 A, 306.

Zittel, Eastman, etc. 1902 A, 203.

#### *Hadrianus corsoni* (Leidy).

Hay, O. P. 1902 A, 450 (*H. corsoni*, *H. octonarius*).

Cope, E. D. 1872 M, 463 (Testudo *hadriana*).  
1872 NN, 4 (Testudo *hadriana*).  
1872 OO, 3 (*H. octonaria*, *H. quadratus*).  
1872 PP, 3 (*H. octonarius*, *H. quadratus*).

Gilmore, C. W. 1915 H, 143, fig. 18; 145 (*H. corsoni*, *H. octonarius*).

Hay, O. P. 1904 A, 272.  
1905 G, 333.  
1908 A, 374, 376, pls. lx, lxi; text-figs. 473-479.

Leidy, J. 1873 B, 132, 339, pl. xi, figs. 1, 2; pl. xv, fig. 7; pl. xxix, figs. 2-4; pl. xxx, figs. 1-4 (Testudo; on pl. xi, *Emys carteri*).

Merrill, G. P. 1907 A, 72 (*H. corsoni*, *H. octonarius*).  
Middle Eocene (Bridger); Wyoming: Upper (Uinta); Utah.

#### *Hadrianus majusculus* Hay.

Hay, O. P. 1904 A, 271, pl. xv; text-fig. 5.  
Gilmore, C. W. 1915 H, 150.  
Hay, O. P. 1905 G, 340.  
1908 A, 374, pl. lix, fig. 1; text-fig. 472.  
Lower Eocene (Wasatch); New Mexico.

#### *Hadrianus robustus* Gilmore.

Gilmore, C. W. 1915 H, 146, pl. xxv, fig. 2; text-fig. 19.  
Upper Eocene (Uinta); Utah.

#### *Hadrianus schucherti* Hay.

Hay, O. P. 1902 A, 450.  
1908 A, 374, 382, text-fig. 481.  
Merrill, G. P. 1907 A, 73.  
Sauvage, H. E. 1900 A, 5.  
Eocene (Jackson); Alabama.

#### *Hadrianus tumidus* Hay.

Hay, O. P. 1903 A, 374, 380, text-fig. 480.  
Gilmore, C. W. 1915 H, 148.  
Upper Eocene (Uinta); Utah.

#### *Hadrianus utahensis* Gilmore.

Gilmore, C. W. 1915 H, 148, pl. xxvi, fig. 1; text-fig. 20.  
Upper Eocene (Uinta); Utah.

#### *Hadrianus* sp. indet.

Merrill, G. P. 1907 A, 73. Lower Eocene (Wasatch); New Mexico.

#### ACHILEMYS Hay. Type *Hadrianus allabatiatus* Cope.

Hay, O. P. 1908 A, 373, 383.  
Williston, S. W. 1925 B, 227.  
Zittel and Broili 1911 A, 252.  
1923 A, 306.

#### *Achilemys allabati* (Cope).

Cope, E. D. 1872 PP, 3 (*Hadrianus*).  
Hay, O. P. 1902 A, 450 (*Hadrianus*).  
1905 G, 333.  
1908 A, 383, figs. 482, 485.  
Merrill, G. P. 1907 A, 72 (*Hadrianus*).  
Middle Eocene (Bridger); Wyoming.

#### BYSTRA Hay. Type *B. nanus* Hay.

Hay, O. P. 1916 C, 53.  
Nopcsa, F. 1928 A, 167 (Bystira).

#### *Bystra nanus* Hay.

Hay, O. P. 1916 C, 53, pl. i.  
Miocene, Pliocene or Lower Pleistocene (Dunnellon); Florida.

#### STYLEMYS Leidy. Type *S. nebrascensis* Leidy.

Hay, O. P. 1902 A, 450.  
Dall and Harris 1892 A, 289.  
Gilmore, C. W. 1915 H, 155.  
Hay, O. P. 1908 A, 373, 385.  
1912 E, 213.  
Matthew, W. D. 1915 A, 280.  
Oertel, W. 1924 A, 44.

Osborn, H. F. 1909 D, 58, 66.  
Sinclair, W. J. 1903 B, 246.  
Williston, S. W. 1925 B, 227.  
Zittel and Broili 1911 A, 252.  
1923 A, 306.  
Zittel, Eastman, etc. 1902 A, 203.

**Stylemys calaverensis** Sinclair.

Sinclair, W. J. 1903 B, 244, figs. 1, 2.

Hay, O. P. 1908 A, 386, 396, text-figs. 502, 503.

Lindgren, W. 1911 A, 52.

Miocene? (Auriferous gravels); California.

**Stylemys capax** Hay.

Hay, O. P. 1908 A, 386, 392, pl. lxiii, figs. 1, 2; text-figs. 498, 499.

Upper Miocene (John Day); Oregon.

**Stylemys conspecta** Hay.

Hay, O. P. 1908 A, 386, 393, pl. lxiv, figs. 1, 2; text-figs. 500, 501.

Upper Oligocene (John Day); Oregon.

**Stylemys nebrascensis** Leidy.

Hay, O. P. 1902 A, 450.

Case, E. C. 1919 A, 435, figs. 1-5.

1920 C, 119.

1925 A, 87, figs. 1-7.

Darton, N. H. 1901 A, 543.

1905 A, 45.

Fraas, E. 1901 A, 211 ("Testudo").

Greene, G. K. 1881 A, 60 (Testudo oweni).

Hatcher, J. B. 1902 D, 127 ("land tortoises").

Hay, O. P. 1905 G, 342.

1906 A, 19, text-figs. 9-11.

1908 A, 386, pl. lxx, figs. 2-4; pl. lxix, figs. 1, 2; text-figs. 486-497.

Hayden, F. V. 1871 A, 105 ("turtles").

Lambe, L. M. 1904 C, 27, 38, 47 (This turtle?).

Lambe, L. M. 1905 D, 366 A.

1908 A, 9, 18.

1913 B, 57, pls. vi, vii.

1914 H, 402.

Merrill, G. P. 1907 A, 78 (Testudo neb.); 71 (Emys hemispherica, T. neb.).

O'Harra, C. C. 1910 A, 119, pl. L, fig. 2; text-fig. 19.

1920 A, 140, 160, fig. 73.

Reinach, A. 1900 A, 18, 127 (Testudo neb., T. culbertsoni).

Sinclair, W. J. 1903 B, 247.

1923 A, 101, 133.

Sternberg, C. H. 1913 A, 46.

Van Straelen, V. 1928 A, 300.

Wanless, H. R. 1923 A, 219.

Wieland, G. R. 1923 A, 10.

Zittel and Broili 1911 A, 252, fig. 398.

1923 A, 307, fig. 419.

Oligocene (White River); South Dakota, Nebraska, Colorado, Wyoming.

**Stylemys oregonensis** Leidy.

Hay, O. P. 1902 A, 451.

McClung, C. E. 1906 A, 69 ("turtles").

Merriam and Sinclair 1907 A, 187.

Sinclair, W. J. 1903 B, 247.

Sternberg, C. H. 1881 A, 542 ("turtles").

Upper Oligocene (John Day); Oregon.

**Stylemys** sp. indet.

Merriam and Sinclair 1907 A, 188, 190, 192.

Oligocene (John Day); Oregon.

**GOPHERUS** Rafinesque. Type *Testudo polyphemus* Daudin.

Rafinesque, C. S. 1832, Atlantic Jour., I, 64.

Case, E. C. 1919 A, 435.

Foote, J. S. 1916 A, 59.

Stejneger and Barbour 1917 A, 121.

**Gopherus atascosæ** Hay.

Hay, O. P. 1902 C, 383, figs. 1-5 (Testudo).

1908 A, 393, 464, text-figs. 627, 628 (Testudo).

1916 C, 56.

1920 B, 134.

1924 D, 247, 248, 249 (Testudo, Gopherus).

Pleistocene (Early); Texas.

**Gopherus polyphemus** (Daudin).

Daudin, F. M. 1803, Hist. Nat. Rept., II, 256.

Abel, O. 1912 F, 254, fig. 185 (Testudo).

Agassiz, L. 1857 B, 447 (Xerobates).

Boulenger, G. A. 1889 A, 155 (Testudo).

Hay, O. R. 1916 C, 47, 55, 75, 76.

1917 E, 44.

1923 A, 382.

Holbrook, J. E. 1842, N. Amer. Herpet., 25, pl. i (Testudo).

Sellards, E. H. 1916 C, 147.

Shaler, N. S. 1888 A, 37 (G. carolinus).

Stejneger, L. 1893, N. Amer. Fauna, No. 7, 161.

Stejneger and Barbour 1917 A, 121.

Recent; South Carolina to Florida, west to southern Arkansas: Pleistocene (Middle?); Florida.

**Gopherus precedens** Hay.

Hay, O. P. 1916 C, 55, 75, pl. iv, figs. 1, 2.

Gidley, J. W. 1927 E, 274.

Hay, O. P. 1923 A, 383.

1927 D, 274.

Sellards, E. H. 1916 C, 145.

Pleistocene (Early); Florida.

**TESTUDO** Linnæus. Type *T. græca* Linnæus.

Hay, O. P. 1902 A, 451.

Abel, O. 1912 F, 356, 703, fig. 184.

Andrews, C. W. 1896 B, 148.

1903 A.

1906 A, xxiv, fig. 277.

Arlt, T. 1907 D, 684.

Bates, D. M. A. 1914 A, 100.

Bender, O. 1911 A, 161.

1912 A, 3.

Beyer, H. 1907 A, 289, fig. 7.

Boas, J. E. V. 1914 C, 290, fig. 79.

Bojanus, L. H. 1819 A, 1362, pl. xvi, figs. 2, 3.

Bronn, H. G. 1848 B, 1259.

1849 A, 693.

Broom, R. 1921 A, 154, fig. 23.

Brown, A. E. 1904 A, 467.

Dollo, L. 1903 C.

Douglass, E. 1905 A, 211.

Fitzinger, L. 1836 A, 112.

Fraas, E. 1913 B, 17.

- Frassetto, F. 1915 A, fig. 37.  
 Fries, C. 1924 A, 277.  
 Fuchs, H. 1907 B, 429, pl. xx, figs. 9, 9a.  
     1913 A, 59.  
     1920 A, 370.  
     1927 A, 313, fig. 5.  
 Gadow, H. 1896 A, 42.  
     1901 B, 365.  
     1905 B, 63, fig. 45.  
 Garman, S. 1917 A.  
 Gaupp, E. 1899 A, 1091.  
     1905 D, 1018.  
     1906 B, 788.  
     1908 B.  
 Gervais, P. 1852 A, 243.  
     1859 A, 408.  
 Gill, T. 1907 A, 492.  
 Gilmore, C. W. 1917 A, 154.  
 Gray, J. E. 1855 A, 4.  
     1873 D, 162, pl. iv.  
 Gregory and Camp 1918 A, 14.  
 Günther, A. C. 1898 A, 14.  
 Hasse, C. 1871 A, figs.  
 Hay, O. P. 1905 A, 149.  
     1908 A, 373, 397.  
     1926 E, 338.  
     1928 A, 7, 10.  
 Heilprin, A. 1887 A, 314, 315.  
 Hoffmann, C. K. 1879 B, 53.  
 Huene, F. 1920 D, 166.  
 Huxley, T. H. 1887 C, 236.  
 Jaekel, O. 1907 B, 63, fig. 45.  
     1915 A, 105, fig. 8.  
     1916 A, 41, 49, 58.  
 Kehrer, F. A. 1896 A, 354, figs. 20, 21.  
 Klaauw, C. J. 1924 B, 592.  
 Köstlin, O. 1844 A.  
 Le Conte, J. 1854 A, 188.  
 Leidy, J. 1877 A, 232 (*Eupachemys*, type *E. obtusa* Leidy).  
 Lorenz, L. E. F. 1807 A, 5.  
 Lull, R. S. 1924 A, 275.  
 Lydekker, R. 1903 C, 54, figs. 1, 2.  
     1907 E, 680.  
     1910 A, 302.  
 Matthew, W. D. 1915 A, 280.  
     1918 I, 662.  
 Meckel, J. F. 1825 A.  
 Moodie, R. L. 1908 D, 445.  
 Nopcsa, F. 1923 F.  
     1923 H, 12, 13, 30, 34, pl. i, fig. 5.  
     1926 A, 653.  
 Osborn, H. F. 1909 D, 58, 136.  
 Oswald, F. 1909 A, 125.  
 Owen, R. 1848 B, 99.  
     1866 A.  
     1868 A, 911.  
 Paramore, R. H. 1910 A, 1398, fig. 9.  
 Pictet, F. J. 1853 A, 443.  
 Plieninger, F. 1906 A, 406.  
 Proctor, J. B. 1922 A, 483.  
 Rabl, C. 1903 A, 170, pl. i, fig. 7.  
 Rathke, H. 1846 A, 161, 163.  
 Rice, E. L. 1920 A.  
 Rogers, A. F. 1924 A, 544 (*Zerobates*).  
 Safford, W. E. 1911 A, 731.  
 Scharff, R. F. 1911 A, 304, 329 ("giant tortoises").  
     1922 A, 69.  
 Schöne, G. 1902 A, 12, fig. 3.  
 Seeley, H. G. 1876 C, 174, 177, 181.  
     1886 A, 512.  
 Sewertzoff, A. N. 1908 A, 310.  
 Seydel, O. 1899 A, 487, figs. 16, 20.  
 Shufeldt, R. 1921 A, 220.  
 Shumard, B. F. 1863 A, 141.  
 Siebenrock, F. 1900 A, 441.  
     1906 A, 821.  
     1909 A, 515.  
     1919 A, 275.  
 Siegelbauer, F. 1909 A, 184.  
 Smith, L. W. 1914 A, 557.  
 Strecker, C. 1887 A, 303.  
 Stromer, E. 1906 A, 209, 212.  
     1916 A, 402.  
 Taschenberg, O. 1894 A, 3646.  
 Tornier, G. 1913 B, 365.  
 Vallant, L. 1877 A, 14.  
     1877 C, 56.  
     1881 A, 25-27, 102, pl. xxvii.  
     1903 A, 705.  
 Virchow, H. 1919 A, 304, 315, fig. 5.  
     1926 A, 216, figs. 1, 2.  
 Wallace, A. R. 1876 A, 11, 408.  
 Wiedersheim, R. 1892 A, 52.  
 Wieland, G. R. 1923 A, 10.  
 Williston, S. W. 1918 A, 78, 81, fig. 3.  
     1925 A, 133, 153, 180, figs. 109, 127, 146.  
     1925 B, 227.  
 Woodward, H. 1904 B, 143.  
 Zdansky, O. 1924 A, 92.  
 Zittel and Broili 1911 A, 252.  
     1923 A, 307.  
 Zittel, Eastman, etc. 1902 A, 203.  
 Zuckerkandl, E. 1908 A, 497.  
**Testudo amphithorax** Cope.  
 Hay, O. P. 1902 A, 451.  
 Gilmore, C. W. 1915 H, 155.  
 Hay, O. P. 1908 A, 397, 407, text-figs. 526-531.  
     Lower Oligocene (Chadron); Colorado, Wyoming?  
**Testudo annæ** Hay.  
 Hay, O. P. 1923 B, 114, pl. viii, fig. 4.  
 Cahn, A. R. 1922 A, 23 (*T. crassiscutata*).  
 Hay, O. P. 1917 B, 11, pl. i, fig. 3; pl. ii, figs. 2-5; pl. iii, fig. 1 (*T. crassiscutata*?).  
     1924 D, 227, 241, 245.  
     Plenstocene (Aftonian); Texas.  
**Testudo arenivaga** Hay.  
 Hay, O. P. 1906 A, 16, text-figs. 6-8.  
 Abel, O. 1926 B, 358.  
 Hay, O. P. 1908 A, 398, 430, text-figs. 563-565.  
 Loomis, F. B. 1909 A, 17, figs. 1-4.  
 O'Harra, C. C. 1920 A, 160.  
     Lower Miocene (Harrison); Nebraska.  
**Testudo brevisterna** Loomis.  
 Loomis, F. B. 1909 A, 21, figs. 5-8.  
 Abel, O. 1926 B, 358.  
     Lower Miocene (Harrison); Wyoming.

**Testudo brontops Marsh.**

- Hay, O. P. 1902 A, 451.  
 Gilmore, C. W. 1915 H, 154.  
 Hay, O. P. 1904 A, 272, text-figs. 6, 7.  
 1908 A, 397, 398, pl. lxxv, figs. 1, 2; text-figs. 504, 505.  
 O'Harra, C. C. 1920 A, 160.  
 Osborn, H. F. 1909 D, 58.  
 Lower Oligocene (Chadron); South Dakota.

**Testudo campester Hay.**

- Hay, O. P. 1908 A, 398, 455, text-figs. 610-613.  
 Gidley, J. W. 1903 C, 627.  
 Hay, O. P. 1924 D, 239.  
 Troxell, E. L. 1915 A, 616.  
 Phocene (Blanco); Texas: Pleistocene?; Texas.

**Testudo crassiscutata Leidy.**

- Hay, O. P. 1902 A, 451.  
 1908 A, 398, 459, text-figs. 616-622.  
 1916 C, 50.  
 1923 A, 497.  
 1923 B, 116.

- Matson and Clapp 1909 A, 136.  
 Merrill, G. P. 1907 A, 77.  
 Sellards, E. H. 1916 A, 235.  
 Spencer, J. W. 1895 A, 137.  
 Pleistocene (Peace Creek); Florida.

**Testudo cultrata Cope.**

- Hay, O. P. 1902 A, 451.  
 1908 A, 397, 411.  
 Lower Oligocene (Chadron); Colorado.

**Testudo distans Hay.**

- Hay, O. P. 1916 C, 48, pl. iii, fig. 9.  
 1923 A, 378.  
 Pleistocene (Early); Florida.

**Testudo edæ Hay.**

- Hay, O. P. 1906 A, 19, pls. vii, viii.  
 1908 A, 398, 450, pl. lxxxiii, figs. 1, 2.  
 Loomis, F. B. 1909 A, 17.  
 O'Harra, C. C. 1910 A, 119 (T. edæ).  
 1920 A, 160.  
 Peterson, O. A. 1906 C, 56.  
 Lower Miocene (Upper Harrison); Nebraska.

**Testudo emiliæ Hay.**

- Hay, O. P. 1908 A, 398, 419, pl. lxx, figs. 1, 2.  
 O'Harra, C. C. 1920 A, 160.  
 Lower Miocene (Rosebud); South Dakota.

**Testudo equicomis Hay.**

- Hay, O. P. 1917 D, 40, pl. i, figs. 1-3; pl. iii, fig. 1.  
 1924 D, 270.  
 Pleistocene (Sheridan); Kansas.

**Testudo exornata Lambe.**

- Lambe, L. M. 1906 A, 187, pl. iii, figs. 1-3.  
 Hay, O. P. 1908 A, 397, 401, pl. lxxv, figs. 6, 7; text-figs. 506-508.  
 Lambe, L. M. 1908 A, 9, 18, pl. i, figs. 20-22.  
 Oligocene (White River); Assiniboia.

**Testudo farri Hay.**

- Hay, O. P. 1908 A, 398, 418, pl. lxxix, figs. 1, 2; text-figs. 548, 549.  
 Middle Miocene (Deep River); Montana.

**Testudo francisi Hay.**

- Hay, O. P. 1923 B, 116, pl. lviii, figs. 4, 5.  
 1924 D, 162, 242, 243.  
 Pleistocene (Aftonian); Texas.

**Testudo gilbertii Hay.**

- Hay, O. P. 1902 A, 451.  
 1908 A, 398, 449, pl. lxxx, figs. 2-5.  
 Matthew, W. D. 1924 C, 210 (T. gilbertii).  
 Miocene (Republican River); Kansas.

**Testudo hayi Sellards.**

- Sellards, E. H. 1916 A, 235, fig. 1.  
 Hay, O. P. 1916 C, 52.  
 1923 A, 380.  
 1923 B, 116.  
 Sellards, E. H. 1915 D, 70, 73, 75, figs. 7, 9 ("land tortoise").  
 Phocene? (Bone Valley); Florida.

**Testudo hexagonata Cope.**

- Hay, O. P. 1902 A, 451.  
 Dumble, E. T. 1894 A, 564.  
 Gidley, J. W. 1903 C, 623.  
 Hay, O. P. 1908 A, 398, 463, text-figs. 625, 626.  
 1924 D, 239.  
 Montgomery, T. H. 1904 A, 57.  
 Pleistocene (Sheridan); Texas.

**Testudo hollandi Hay.**

- Hay, O. P. 1906 A, 18, pls. v, vi.  
 Douglass, E. 1907 A, 809.  
 Hay, O. P. 1908 A, 398, 451, pl. lxxxiv, figs. 1, 2.  
 Loomis, F. B. 1909 A, 17.  
 O'Harra, C. C. 1920 A, 160.  
 Peterson, O. A. 1906 C, 56.  
 Lower Miocene (Upper Harrison); Nebraska.

**Testudo impensa Hay.**

- Hay, O. P. 1908 A, 398, 431, pls. lxxvi, lxxvii; text-figs. 566-572.  
 Loomis, F. B. 1927 A, 438.  
 Merriam, J. C. 1919 A, 461.  
 Upper Miocene (Arikaree); Montana.

**Testudo incisa Hay.**

- Hay, O. P. 1916 C, 46, pl. iii, figs. 5-8.  
 1923 A, 378.  
 Pleistocene (Early); Florida.

**Testudo inusitata Hay.**

- Hay, O. P. 1906 A, 18, pls. iii, iv.  
 1908 A, 398, 417, pl. lxxvii, figs. 1, 2.  
 Middle Miocene (Deep River); Montana.

**Testudo klettiana Cope.**

- Hay, O. P. 1902 A, 451.  
 1908 A, 398, 436, text-figs. 574.  
 Merriam, J. C. 1919 A, 461.  
 Merrill, G. P. 1907 A, 78.  
 Upper Miocene (Santa Fe?); New Mexico.



**Testudo laticaudata** Cope.

- Hay, O. P. 1902 A, 451.  
 Dumble, E. T. 1894 A, 564.  
 Gidley, J. W. 1903 C, 623.  
 Hay, O. P. 1908 A, 398, 462, text-figs. 623-624.  
 1924 D, 239.  
 Montgomery, T. H. 1904 A, 57.  
 Pleistocene (Sheridan); Texas.

**Testudo laticunea** Cope.

- Hay, O. P. 1902 A, 451.  
 Cope, E. D. 1891 N, 40, fig. 18.  
 Hay, O. P. 1908 A, 397, 402, pl. lxvii, figs. 1, 2;  
 text-figs. 509-515.  
 Sternberg, C. H. 1913 A, 46.  
 Toulas, F. 1896 A, 918.  
 Lower Oligocene (Chadron); Colorado.

**Testudo ligonia** Cope.

- Hay, O. P. 1902 A, 451.  
 1908 A, 397, 405, text-figs. 516-525.  
 Lower Oligocene (Chadron); Colorado.

**Testudo luciae** Hay.

- Hay, O. P. 1918 C, 52, 75, pl. ix, fig. 5.  
 1923 A, 383.  
 1923 B, 116.  
 Loomis, F. B. 1927 A, 435.  
 Sellards, E. H. 1916 C, 145.  
 Pleistocene (Early); Florida.

**Testudo mohavensis** Merriam, J. C.

- Merriam, J. C. 1919 A, 450, 456, 527, 533, figs  
 4-6.  
 Upper Miocene (Barstow); California.

**Testudo munda** Hay.

- Hay, O. P. 1920 B, 86, pl. iii, figs. 1-3.  
 1923 A, 395.  
 Pleistocene (Middle); Tennessee.

**Testudo niobrarensis** Leidy.

- Hay, O. P. 1902 A, 450 (Stylemys).  
 Cope, E. D. 1874 B, 532 (Stylemys).  
 Hay, O. P. 1908 A, 398, 437, text-figs. 575-578.  
 Leidy, J. 1873 B, 225, 340, pl. iii, figs. 4-6; pl.  
 xix, figs. 6, 8.  
 Merrill, G. P. 1907 A, 78.  
 O'Harra, C. C. 1920 A, 160.  
 Pleistocene (Sheridan); Nebraska.

**Testudo obtusa** Leidy.

- Hay, O. P. 1902 A, 448 (Eupachemys).  
 1908 A, 398, 458, text-figs. 614, 615.  
 1923 A, 381, 384.  
 Matson and Clapp 1909 A, 136 (Eupachemys  
 sp.).  
 Tertiary or Pleistocene; South Carolina.

**Testudo ocalana** Hay.

- Hay, O. P. 1916 C, 45, pl. iii, figs. 1-4; pl. ix.  
 figs. 1-3.  
 1923 A, 378, 379.  
 Pleistocene (Early); Florida.

**Testudo orthopygia** (Cope).

- Hay, O. P. 1902 A, 451 (T. orthopygia, T.  
 cyclopygia, T. snoviana).  
 Barbour, E. H. 1914 B, 189.  
 1914 C, 221.  
 1915 A, 92.  
 1915 C, 335, figs. 1, 2.  
 Barbour and Cook 1917 A, 172.  
 Hay, O. P. 1908 A, 398, 438, pl. xix, figs. 6, 7;  
 pls. lxxviii-lxxx, lxxxii, lxxxiii; text-figs. 579-  
 606, 607?, 608?.  
 Matthew, W. D. 1902 D, 295 (Caryoderma  
 snoviana).  
 1924 C, 68, 210 (This species?).  
 Schaiff, R. F. 1909 A, 515 (Caryoderma).  
 Sternberg, C. H. 1906 A, 72 T (Xerobates).  
 1909 C, 122, 138, 269, fig. 22.  
 Upper Miocene and Lower Pliocene (Repub-  
 lican River); Kansas: (Snake Creek); Ne-  
 braska.

**Testudo orthopygia angusticeps** Mat-  
thew.

- Matthew, W. D. 1924 C, 68, 210.  
 Middle Miocene (Sheep Creek); Nebraska.

**Testudo osborniana** Hay.

- Hay, O. P. 1904 C, 503.  
 1908 A, 398, 422, pls. lxxii-lxxv; text-figs.  
 552-562.  
 Huene, F. 1920 D, 166.  
 Loomis, F. B. 1927 A, 439.  
 Matthew, W. D. 1924 C, 210.  
 Safford, W. E. 1911 A, 751.  
 Upper Miocene (Pawnee Creek); Colorado.

**Testudo pansa** Hay.

- Hay, O. P. 1908 A, 398, 420, pl. lxxi, figs. 1, 2;  
 text-figs. 550, 551.  
 Merriam, J. C. 1919 A, 461.  
 Upper Miocene (Pawnee Creek); Colorado.

**Testudo peragrans** Hay.

- Hay, O. P. 1906 A, 15, text-figs. 1-5.  
 1908 A, 398, 412, text-figs. 534-538.  
 Tertiary (Oligocene or Miocene); Montana.

**Testudo pertenuis** Cope.

- Hay, O. P. 1902 A, 451.  
 Dumble, E. T. 1894 A, 559.  
 Gidley, J. W. 1903 C, 627.  
 Hay, O. P. 1908 A, 398, 454, text-fig. 609.  
 Matthew, W. D. 1918 I, 662.  
 Montgomery, T. H. 1904 A, 57.  
 Pliocene (Blanco); Texas.

**Testudo præextans** Lambe.

- Lambe, L. M. 1913 B, 61, pls. iv, v.  
 Lydekker, R. 1914 A, 644.  
 Oligocene (Chadron or Brule); Wyoming.

**Testudo quadrata** Cope.

- Hay, O. P. 1902 A, 451.  
 1908 A, 397, 410, text-figs. 532, 533.  
 Seeley, H. G. 1886 A, 512.  
 Lower Oligocene (Chadron); Colorado.

**Testudo sellardsi Hay.**

- Hay, O. P. 1916 C, 49, 50, 75, pl. viii, figs. 6-8.  
 1917 B, 13.  
 1923 A, 382.  
 1923 B, 116.  
 1927 C, 232 ("tortoises").  
 Loomis, F. B. 1927 A, 435, figs. 1, 2.  
 Sellards, E. H. 1916 C, 145.  
 Pleistocene (Early); Florida.

**Testudo snoviana (Cope).**

- Hay, O. P. 1902 A, 451.  
 Böse, E. 1905 A, 67, 68 ("Caryoderma").  
 Gregory, J. W. 1895 A, 304 ("Caryoderma").  
 Miocene?; Kansas.

**Testudo thomsoni Hay.**

- Hay, O. P. 1908 A, 397, 400, pl. lxvi, figs. 1-5.  
 Lambe, L. M. 1913 B, 57.  
 Matthew, W. D. 1924 C, 210.  
 O'Hara, C. C. 1920 A, 160.  
 Lower Oligocene (Chadron); S. Dakota.

**Testudo turgida Cope.**

- Hay, O. P. 1902 A, 452.  
 Dumble, E. T. 1894 A, 559.  
 Gidley, J. W. 1903 C, 627.  
 Hay, O. P. 1908 A, 398, 453.  
 Montgomery, T. H. 1904 A, 57.  
 Pliocene (Blanco); Texas.

**Testudo uintensis Gilmore.**

- Gilmore, C. W. 1915 H, 150, pl. xxvii; text-figs. 21, 22.  
 Upper Eocene (Uinta); Utah.

**Testudo undabuna Loomis.**

- Loomis, F. B. 1909 A, 25, fig. 9.  
 Abel, O. 1926 B, 358 (T. unabuna).  
 Lower Miocene (Harrison); Wyoming.

**Testudo undata Cope.**

- Hay, O. P. 1902 A, 452.  
 Dames, W. 1899 A, 365.  
 Hay, O. P. 1908 A, 398, 435, text-fig. 573.  
 Merriam, J. C. 1919 A, 461.  
 Merrill, G. P. 1907 A, 78.  
 Upper Miocene (Santa Fe); New Mexico.

**Testudo vaga Hay.**

- Hay, O. P. 1908 A, 398, 414, pl. xix, fig. 5; text-figs. 539-547.  
 Middle Miocene (Deep River); Wyoming.

**Testudo sp. indet.**

- Cooper, J. G. 1875 A, 390 (This genus?). Pliocene? California.  
 Deussen, A. 1924 A, 97 (This genus?). Miocene (Oakville); Texas.  
 Frick, C. 1921 A, 334, figs. 42, 44. Pliocene (San Timoteo); California.  
 1923 A, 40.  
 Gidley, J. W. 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1902 A, 452. Pleistocene (Peace Creek); Florida.  
 1924 D, 384. Pleistocene; Texas.  
 1926 C, 1. Pleistocene (Early); Texas.  
 1927 D, 313. Pleistocene; California, Florida, Texas.  
 Matthew, W. D. 1915 L, 472. Miocene (Fleming); Texas.  
 Merriam, J. C. 1917 A, 425, 430, 437. Pliocene (Etchegoin); California: (Ricardo); California: Pliocene (Snake Creek); Nebraska.  
 Merriam and Buwalda 1917 A, 258 (Oregon, in Ellensburg formation).  
 Sinclair, W. J. 1915 A, 77 ("land tortoise"). Pliocene (Snake Creek); Nebraska.  
 Spencer, J. W. 1895 A, 137 (Eupachemys sp.). Pleistocene (Peace River); Florida.

**Superfamily TRIONYCHOIDÆ Stannius.**

- Stannius, H. 1854 A, 8 (As a family).  
 Hay, O. P. 1902 A, 452 (Trionychia).  
 Abel, O. 1919 A, 414.  
 1920 A, 367 (Trionychoidea).  
 Arldt, T. 1907 D, 146, 331 (Trionychia).  
 Baur, G. 1891 E, 633 (Trionychia).  
 Bonaparte, C. L. 1833 B, 1183 (Trionychoidea).  
 Cope, E. D. 1891 N, 39 (Trionychoidea).  
 Cuvier, G. 1825 A, v, 2, 221 (Trionyx).  
 Dollo, L. 1886 B, 131.  
 1889 B, 669, 676.  
 1913 A, 50 ("trionychoidea").  
 Fuchs, H. 1907 B, 435.  
 1908 C, 155 ("trionychoidea").  
 Gadow, H. 1901 B, 404.  
 Harrassowitz, H. 1922 A, 142, 211, 217, 221, 222 (Trionychoidea).  
 Hay, O. P. 1905 A, 162.  
 1905 G, 333, 338.  
 1908 A, 10, 17, 43, 465.  
 1928 A, 6 (Trionychoidea).  
 Jaekel, O. 1902 B, 136 (Trionychida).  
 1911 A, 186 (Trionychii).  
 Lydekker, R. 1912 C, 28.

- Mantell, G. A. 1844 A, 766 (Trionyes).  
 Nopcsa, F. 1923 H, 33, 34, 35, 36, 122, 150, 166, 172 (Trionychoidea, Trionychinae).  
 Ogushi, K. 1911 A, 2.  
 Oswald, F. 1911 A, 410.  
 Rabl, C. 1903 A ("trionychiden").  
 Reynolds, S. H. 1897 A, 194 (Trionychia).  
 Siebenrock, F. 1909 A, 586.  
 Stehli, G. 1910 A, 787 (Trionychia).  
 Steinmann, G. 1907 A, 435.  
 Stejneger, L. 1907 C, 513 (Chilotæ).  
 Tornier, G. 1913 B, 366 (Trionychia).  
 Vaillant, L. 1877 C, 55 (Trionychida).  
 1881 A, 99 (Trionychoidea).  
 Walther, W. G. 1922 A, 85, 86 (Trionychoidea).  
 Williston, S. W. 1908 G, 804.  
 1914 A, 16, 45, 222, 244.  
 1925 A, 198.  
 1925 B, 210, 223, 227 (Trionychoidea).  
 Woodward, A. S. 1898 B, 176 (Trionychia).  
 Zdansky, O. 1924 A, 91 (Trionychoidea).  
 Zittel and Broili 1911 A, 311.  
 1923 A, 811.  
 Zittel, Eastman, etc. 1902 A, 195.

## PLASTOMENIDÆ Hay.

Hay, O. P. 1902 A, 452.

Ardt, T. 1912 A, 712.

Haeckel, E. 1895 A, 322 (Plastomenida).

Harrassowitz, H. 1922 A, 142.

Hay, O. P. 1905 G, 333.

1908 A, 11, 466.

Matthew, W. D. 1921 D, 211, 214.

Teppner, W. 1914 A, 637.

Walther, W. G. 1922 A, 85, 86, 87.

Williston, S. W. 1925 B, 227.

Zittel and Broili 1923 A, 312.

PLASTOMENUS Cope. Type *P. thomasi* Cope.

Hay, O. P. 1902 A, 452.

Gilmore, C. W. 1916 C, 646.

1920 A, 52.

Hay, O. P. 1903 H, 350.

1905 G, 334.

1906 C, 156.

1908 A, 466.

Hummel, K. 1927 A, 94.

Lambe, L. M. 1899 A, 185.

Nopcsa, F. 1923 H, 150.

1928 A, 167.

Osborn, H. F. 1902 I, 16.

Peale, A. C. 1876 A, 154.

Whiteaves, J. F. 1901 A, 185.

Williston, S. W. 1925 B, 227.

**Plastomenus acupictus** Hay.

Hay, O. P. 1907 B, 852, pl. liv, figs. 1-3; text-fig. 8.

Gardner, J. H. 1910 A, 731.

Gilmore, C. W. 1920 A, 10.

Hay, O. P. 1908 A, 467, 470, text-fig. 629.

Hummel, K. 1927 A, 72.

Reeside, J. B. 1924 A, 42.

Paleocene (Torrejon); New Mexico.

**Plastomenus catenatus** Cope.

Hay, O. P. 1902 A, 453 (*P. thomasi*, in part).

1908 A, 467, 470, pl. lxxxvi, fig. 1.

Lower Eocene (Wasatch); New Mexico.

**Plastomenus communis** Cope.

Hay, O. P. 1902 A, 452.

Gardner, J. H. 1910 A, 731.

Hay, O. P. 1908 A, 467, 473, pl. lxxxvi, figs. 6-8.

Loomis, F. B. 1907 B, 358.

Merrill, G. P. 1907 A, 75.

Lower Eocene (Wasatch); New Mexico.

**Plastomenus corrugatus** Cope.

Hay, O. P. 1902 A, 452.

1908 A, 467, 473, pl. lxxxvi, fig. 5.

Loomis, F. B. 1907 B, 358.

Lower Eocene (Wasatch); New Mexico.

**Plastomenus costatus** Cope.

Hay, O. P. 1902 A, 452.

Bowen, C. F. 1915 A, 126.

Hatcher, J. B. 1905 B, 74.

Hay, O. P. 1903 D, 119.

1908 A, 467, pl. lxxxv, figs. 1, 2.

Knowlton, F. H. 1911 C, 55, 63.

Lambe, L. M. 1904 C, 22, 37, 47.

1906 A, 195.

Osborn, H. F. 1902 I, 12, 16.

Upper Cretaceous (Belly River); Assiniboia: (Hell Creek); Montana.

**Plastomenus? fractus** Cope.

Hay, O. P. 1902 A, 452.

1908 A, 467, 472, pl. lxxxvi, fig. 4.

Loomis, F. B. 1907 B, 358.

Lower Eocene (Wasatch); New Mexico.

**Plastomenus insignis** Cope.

Hay, O. P. 1902 A, 452.

Bowen, C. F. 1915 A, 126.

Cope, E. D. 1874 B, 433, 454.

Hatcher, J. B. 1905 B, 75.

Hay, O. P. 1908 A, 467, 469.

Knowlton, F. H. 1911 C, 56, 62.

Osborn, H. F. 1902 I, 12.

Upper Cretaceous (Arapahoe?); Colorado.

**Plastomenus? lachrymalis** Cope.

Hay, O. P. 1902 A, 452.

1908 A, 467, 472, pl. lxxxvi, fig. 3.

Hummel, K. 1927 A, 72.

Lower Eocene (Wasatch); New Mexico.

**Plastomenus? leptomitrus** (Cope).

Hay, O. P. 1902 A, 454 (*Trionyx*).

1908 A, 467, 470, pl. lxxxvi, fig. 2; text-fig. 630.

Loomis, F. B. 1907 B, 358 (*Trionyx*).

Merrill, G. P. 1907 A, 80 (*Trionyx*).

Lower Eocene (Wasatch); New Mexico.

**Plastomenus molopinus** Cope.

Cope, E. D. 1872 NN, 2 (*Anostira*).

Hay, O. P. 1902 A, 452.

1908 A, 467, 481, pl. lxxxv, fig. 3; text-fig. 642.

Hummel, K. 1927 A, 72.

Middle Eocene (Bridger); Wyoming.

**Plastomenus cedemius** Cope.

Cope, E. D. 1872 NN, 2 (*Anostira*).

Hay, O. P. 1902 A, 453.

Harrassowitz, H. 1922 A, pl. ii, fig. 6 (*P. cedemius*).

Hay, O. P. 1905 G, 334.

1908 A, 467, 479, figs. 640, 641.

Hummel, K. 1927 A, 72.

Middle Eocene (Bridger); Wyoming.

**Plastomenus? punctulatus** Cope.

Hay, O. P. 1902 A, 453.

Bowen, C. F. 1915 A, 126.

Hatcher, J. B. 1905 B, 74.

Hay, O. P. 1908 A, 467, 468.

Knowlton, F. H. 1911 C, 56, 62.

Osborn, H. F. 1902 I, 12, 16.

Upper Cretaceous (Arapahoe); Colorado: (Lance?); North Dakota?

**Plastomenus robustus** Gilmore.

Gilmore, C. W. 1920 A, 8, 10, 53, pl. xvii, fig. 1; text-figs. 23, 24.

Reeside, J. B. 1924 A, 23.

Upper Cretaceous (Kirtland); New Mexico.

**Plastomenus tantillus** Hay.

Hay, O. P. 1908 A, 467, 478, text-figs. 638, 639.

Middle Eocene (Bridger); Wyoming.

**Plastomenus thomasi** Cope.

Cope, E. D. 1872 NN, 3 (Trionyx).

Hay, O. P. 1902 A, 453.

1905 G, 334, fig.

1908 A, 467, 474, text-figs. 631-635.

Hummel, K. 1927 A, 18.

Merrill, G. P. 1907 A, 75 (P. multifoveatus).

Middle Eocene (Bridger); Wyoming, New Mexico.

**Plastomenus torreonensis** Gilmore.

Gilmore, C. W. 1920 A, 10, 55, pl. xix, fig. 2; text-fig. 25.

Paleocene (Torrejon); New Mexico.

**Plastomenus visendus** Hay.

Hay, O. P. 1908 A, 467, 476, pl. lxxvii, figs. 1, 2; text-figs. 606, 637.

Hummel, K. 1927 A, 73.

Middle Eocene (Bridger); Wyoming.

**Plastomenus** sp. indet.

Gilmore, C. W. 1916 D, 299, pl. lxxvii, fig. 1. Upper Cretaceous (Puerco); New Mexico.

Reeside, J. B. 1924 A, 38. Upper Cretaceous (Puerco); New Mexico.

## TRIONYCHIDÆ Bonaparte.

Bonaparte, C. L. 1838 A, 136.

Hay, O. P. 1902 A, 453 (Trionychidæ, Trionyx).

Abel, O. 1907 A, 226 ("trionychiden").

1912 F, 221, 705 ("trionychiden").

1928 A, 373 ("trionychiden").

Ammon, L. 1911 A, 10.

Ardt, T. 1907 D, 686.

1909 D, 654 ("trionychier").

1912 A, 712.

Baur, G. 1891 E, 636.

Blainville, H. M. D. 1835 A, 241 (Amyda).

Bluntschli, H. 1912 B, 386 ("trionychiden").

Bonaparte, C. L. 1831 A, 63 (Trionychidæ).

Bronn, H. G. 1849 A, 780, seq.

Broom, R. 1922 A, 21 (Trionyx).

Carus, V. 1875 A, 399.

Dollo, L. 1889 B, 676.

1903 A.

1903 C.

Fraas, E. 1903 A, 96.

1905 B, 364.

Fuchs, H. 1909 B, 144, fig. 21 (Trionyx).

1920 A, 361.

1920 B, 29.

Gaupp, E. 1905 D, 1020.

1906 B, 791.

1911 C, 449.

1913 A, 95.

Geoffroy St. Hilaire, E. F. 1832 A, 352 ("trionyx").

Gray, J. E. 1825 A, 212 (Trionichidæ).

1855 A, 62 (Trionychidæ).

1873 D, 167, 170.

Harkness, R. 1852 A, 253 (Trionychidæ).

Harrassowitz, H. 1919 A, 153 ("trionychiden").

1922 A, 141, 142, 210, 212.

1922 B, 93 ("trionychiden").

Hatcher, J. B. 1902 D, 124.

Hay, O. P. 1903 C, 268.

1904 B, 254.

1905 G, 333.

1908 A, 11, 17, 35, 483.

1928 A, 5.

Heilprin, A. 1887 A, 314.

Hoernes, R. 1886 A, 588 (Trionyx).

Hoffmann, C. K. 1879 B, 61 (Trionychidæ).

Hummel, K. 1927 A, 6 ("trionychiden").

Jaekel, O. 1905 C, 142, figs. 11, 12 (Trionyx).

1907 B, 59, fig. 42 ("trionychiden").

1916 A, 207 (Trionychin).

Kesteven, H. 1916 A, 305 (Trionyx).

1919 A, 234, fig. 13 (Trionyx).

Kingsley, J. S. 1925 A, 15, 148, 149, figs. 13, 27, 157, 158.

Köstlin, O. 1844 A (Trionyx).

Lane, H. H. 1910 B, 345.

Leunis and Ludwig 1833 A, 536.

Lobley, J. L. 1908 A, 203, 208.

Lydekker, R. 1886 G, 523.

1912 C, 34, 109, 125.

Matthew, W. D. 1914 B, 387.

1915 A, 284.

1921 D, 211, 214.

Meckel, J. F. 1825 A (Trionyx).

Newman, H. H. 1906 A, 74.

Nopcsa, F. 1923 F.

1923 H, 39, 122.

1926 A, 654.

1928 A, 167 (Trionychinæ).

Ogushi, K. 1911 A, 1 ("trionychoiden").

1913 A, 299 ("trionichiden").

Owen, R. 1842 F, 72 (Trionyces).

1868 A, 912 (Trionyx).

Palacký, J. 1894 A, 133 ("trionychiden").

Peters, W. 1889 A, 7 (Trionychides).

Pictet, F. J. 1853 A, 455.

Rabl, C. 1903 A, 165 ("trionychiden"); 170, pl. i, fig. 6 (Trionyx).

Schmidt, W. J. 1920 A, 10-20 ("trionychiden").

Sewertzoff, A. N. 1908 A, 273, 309.

Siebenrock, F. 1902 A, 807 (Trionychidæ); 815 (Trionyx).

1906 A, 827 (Trionyx).

1909 A, 589.

1923 A, 180.

Siegelbauer, F. 1909 A, 185.

Stehli, G. 1910 A, 783 ("trionychiden").

Stejneger, L. 1905 A, 228.

1907 A, 514.

Stromer, E. 1916 A, 402, 413.

Taschenberg, O. 1894 A, 3647.

Teppner, W. 1914 A, 628 ("trionychiden").

- Tornier, G. 1913 A, 336.  
 Vaillant, L. 1877 A, 14 (Trionyx).  
 1881 A, 53 ("potamites," Trionyx).  
 Versluys, J. 1914 B, 335.  
 1919 A, 15, fig. 13 (Trionyx).  
 Wagner, R. 1843 A (Trionyx).  
 Waite, E. R. 1905 A, 116.  
 Wallace, A. R. 1876 A, rr, 409.  
 Walther, W. G. 1922 A, 83, 86, 88.

#### HELOPANOPLIA Hay. Type *H. distincta* Hay.

- Hay, O. P. 1908 A, 483, 485.  
 1910-B, 294.  
 Nopcsa, F. 1928 A, 167.  
 Teppner, W. 1914 A, 638.  
 Williston, S. W. 1925 B, 227.

#### ASPIDERETES Hay. Type *Trionyx gangeticus* Cuvier.

- Hay, O. P. 1903 C, 274.  
 Boulenger, G. A. 1889 G, 244, I. B. 1 (Trionyx, part).  
 Gadow, H. 1896 A, 42, fig. 45 (Trionyx).  
 Gilmore, C. W. 1920 A, 56.  
 Hay, O. P. 1906 C, 156.  
 1908 A, 483, 485.  
 1928 A, 5.  
 Hummel, K. 1927 A, 47, 94.  
 Rabl, C. 1903 A, 177, fig. 19 (Trionyx).  
 Rathke, H. 1846 A, 161, 165 (Trionyx).  
 Rogers, A. F. 1924 A, 546 (Aspideretes).  
 Siebenrock, F. 1909 A, 595 (Trionyx).  
 Teppner, W. 1914 A, 637.  
 Williston, S. W. 1914 A, 246, figs. 130, 131.  
 1925 B, 227.

##### *Aspideretes allani* Gilmore.

- Gilmore, C. W. 1923 D, 1, pls. i-v.  
 Upper Cretaceous (Belly River); Alberta.

##### *Aspideretes amnigenus* Hay.

- Hay, O. P. 1910 A, 324, pl. xi, fig. 4.  
 Upper Cretaceous (Lance); South Dakota.

##### *Aspideretes austerus* Hay.

- Hay, O. P. 1908 A, 486, 495, text-fig. 649, 650.  
 Gilmore, C. W. 1916 D, 299, 300, pl. lxxvii, fig. 1; text-figs. 40, 41.  
 1920 A, 9.  
 1923 D, 4.  
 Reeside, J. B. 1924 A, 31.  
 Upper Cretaceous (Ojo Alamo); New Mexico.

##### *Aspideretes beecheri* Hay.

- Hay, O. P. 1904 A, 274, pl. xvi.  
 Baur, G. 1891 B, 418 (Trionyx foveatus).  
 Bowen, C. F. 1915 A, 124, 149.  
 Brown, B. 1907 A, 842.  
 1914 E, 358.  
 Gilmore, C. W. 1923 D, 6.  
 Hay, O. P. 1905 A, 170.  
 1905 B, 178.  
 1905 G, 338.  
 1908 A, 486, 492, pl. xc, fig. 2; pl. xcii, figs. 1, 2; pl. xcvi, figs. 1, 2; text-fig. 647.  
 1910 B, 298.  
 Huene, F. 1920 D, 166.

- Watson, D. M. S. 1914 H, 1012 (Trionyx).  
 Wieland, G. R. 1902 A, 103 (Trionyx).  
 Williston, S. W. 1914 A, 245, fig. 129 (Trionyx).  
 1925 B, 227.  
 Woodward, A. S. 1888 O, 353.  
 Zdansky, O. 1924 A, 104.  
 Zittel and Broili 1911 A, 257 (Trionychidae).  
 \* 1923 A, 312 (Trionychidae).  
 Zittel, Eastman, etc. 1902 A, 196.

##### *Helopanopia distincta* Hay.

- Hay, O. P. 1908 A, 485, pl. lxxxviii, figs. 4, 5.  
 Bowen, C. F. 1915 A, 126.  
 Brown, B. 1914 E, 358.  
 Upper Cretaceous (Lance); Wyoming.

##### *Aspideretes coalescens* (Cope).

- Hay, O. P. 1902 A, 454 (Trionyx).  
 Bowen, C. F. 1915 A, 126.  
 Cope, E. D. 1875 E, 27, 93, 261, pl. viii, figs. 6, 7 (Plastomenus).  
 1875 W, 337 (Trionyx).  
 Gilmore, C. W. 1923 D, 3, 5.  
 Hatcher, J. B. 1905 B, 74 (Plastomenus).  
 Hay, O. P. 1908 A, 486, 488, pl. lxxxviii, fig. 6; pl. xc, fig. 1; text-fig. 645.  
 Knowlton, F. H. 1911 C, 53, 63 (Plastomenus).  
 Lambe, L. M. 1899 B, 184, 188, 189 (Plastomenus).  
 1902 B, 3, pls. iii, iv (Trionyx vagans).  
 1904 C, 22, 37, 48 (Trionyx vagans).  
 1906 A, 193 (Trionyx coalescens).  
 Osborn, H. F. 1902 I, 12, 16 (Plastomenus).  
 Whiteaves, J. F. 1901 A, 185, 188 (Plastomenus).  
 Upper Cretaceous (Belly River); Alberta.

##### *Aspideretes ellipticus* Hay.

- Hay, O. P. 1908 A, 486, 505, pl. xcv, figs. 1-3; text-figs. 665-666.  
 Middle Eocene (Bridger); Utah.

##### *Aspideretes fontanus* Hay.

- Hay, O. P. 1908 A, 486, 494, text-fig. 648.  
 Gilmore, C. W. 1916 D, 299, 301, fig. 42.  
 1920 A, 9.  
 1923 D, 4.  
 Reeside, J. B. 1924 A, 31.  
 Upper Cretaceous (Ojo Alamo); New Mexico.

##### *Aspideretes foveatus* (Leidy).

- Hay, O. P. 1902 A, 454 (Trionyx).  
 Bowen, C. F. 1915 A, 124, 149.  
 Brown, B. 1907 A, 842.  
 1914 E, 358, 378.  
 Gilmore, C. W. 1917 A, 4.  
 1923 D, 5.  
 Hatcher, J. B. 1905 B, 72 (Trionyx).  
 Hay, O. P. 1903 D, 119 (Trionyx).  
 1908 A, 486, pl. lxxxix, fig. 2, text-fig. 644.  
 1910 B, 298.

- Knowlton, F. H. 1911 C, 52, 61.  
 Lambe, L. M. 1902 A, 33, pl. i, figs. 1, 2 (Trionyx).  
 1902 B, 1, pls. i, ii (Trionyx).  
 1904 C, 22, 37, 48 (Trionyx).  
 1906 A, 193 (Trionyx).  
 1907 B, 179 (Trionyx).  
 Matthew, W. D. 1916 A, 454.  
 Merrill, G. P. 1907 A, 80 (Trionyx).  
 Osborn, H. F. 1902 H, 674 (Trionyx).  
 1902 I, 12 (Trionyx).  
 Peale, A. C. 1912 A, 754 (Trionyx).  
 Sternberg, C. H. 1914 A, 134 (Trionyx).  
 Teppner, W. 1914 A, 637.  
 Upper Cretaceous (Judith River, Hell Creek, Two Medicine); Montana (Belly River); Alberta (Lance); North Dakota.
- Aspideretes grangeri Hay.**  
 Hay, O. P. 1908 A, 486, 507, pl. xcvi, fig. 1; text-fig. 667.  
 Middle Eocene (Bridger); Wyoming.
- Aspideretes granifer Hay.**  
 Hay, O. P. 1908 D, 168, pl. xxvii, figs. 4, 5.  
 Bowen, C. F. 1915 A, 124.  
 Gilmore, C. W. 1923 D, 5.  
 Upper Cretaceous (Judith River); Montana.
- Aspideretes? guttatus (Leidy).**  
 Hay, O. P. 1902 A, 454 (Trionyx).  
 1905 G, 335.  
 1908 A, 486, 503, text-figs. 663, 664.  
 Hayden, F. V. 1871 A, 145 (Trionyx).  
 Merrill, G. P. 1907 A, 80 (Trionyx).  
 Middle Eocene (Bridger); Wyoming.
- Aspideretes lancensis Gilmore.**  
 Gilmore, C. W. 1916 C, 643, pls. xxxiv, xxxv.  
 Upper Cretaceous (Lance); Wyoming.
- Aspideretes latus Gilmore.**  
 Gilmore, C. W. 1919 C, 129-131, pl. xxxvii; text-fig. 8.  
 1923 D, 2, 5.  
 Upper Cretaceous (Belly River); Alberta.
- Aspideretes maturus Lambe.**  
 Lambe, L. M. 1914 A, 13.  
 Hay, O. P. 1908 A, 487, pl. 89, fig. 1; text-fig. 643 (A. foveatus).  
 Gilmore, C. W. 1923 D, 5.  
 Upper Cretaceous (Belly River); Alberta.
- Aspideretes nassau Hay.**  
 Hay, O. P. 1908 A, 486, 498, text-fig. 653.  
 Matthew, W. D. 1914 B, 389.  
 Upper Cretaceous (Fort Union); Montana.
- Aspideretes perplexus Gilmore.**  
 Gilmore, C. W. 1920 A, 10, 60, pl. xix, fig. 1; text-fig. 30.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.
- Aspideretes puercensis Hay.**  
 Hay, O. P. 1908 A, 486, 499, pl. xciv, figs. 1-3; pl. civ, figs. 2, 3; text-figs. 654-655.
- Gilmore, C. W. 1920 A, 10.  
 Matthew, W. D. 1914 B, 383.  
 Reeside, J. B. 1924 A, 38.  
 Teppner, W. 1914 A, 637.  
 Paleocene (Puerco); New Mexico.
- Aspideretes quadratus Gilmore.**  
 Gilmore, C. W. 1920 A, 10, 59, pl. xxii; text-fig. 29.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.
- Aspideretes reesidei Gilmore.**  
 Gilmore, C. W. 1920 A, 10, 56, pl. xx; text-fig. 26.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.
- Aspideretes sagatus Hay.**  
 Hay, O. P. 1908 A, 486, 497, text-fig. 652 (A. sagatus); pl. xciii, figs. 1-3 (A. foveatus, *errore*).  
 Gilmore, C. W. 1920 A, 10, 61, pl. xxiii, fig. 1; text-fig. 31.  
 Matthew, W. D. 1914 B, 383.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.
- Aspideretes singularis Hay.**  
 Hay, O. P. 1907 B, 853, pl. liv, fig. 4; text-figs. 9-17.  
 Gardner, J. H. 1910 A, 731.  
 Gilmore, C. W. 1920 A, 10.  
 1923 D, 6.  
 Gratacap, L. P. 1908 A, 922.  
 Hay, O. P. 1908 A, 486, 501, text-figs. 656-662.  
 Huene, F. 1920 D, 166.  
 Hummel, K. 1927 A, 15, 86 (Trionyx).  
 Matthew, W. D. 1914 B, 383.  
 Reeside, J. B. 1924 A, 42.  
 Paleocene (Torrejon); New Mexico.
- Aspideretes splendidus Hay.**  
 Hay, O. P. 1908 A, 486, 490, pl. lxxxviii, figs. 7-9; pl. xci; text-fig. 646.  
 Bowen, C. F. 1915 A, 124.  
 Gilmore, C. W. 1919 C, 131.  
 1923 D, 3, 4, 5.  
 Teppner, W. 1914 A, 637.  
 Upper Cretaceous (Judith River); Montana.
- Aspideretes subquadratus Lambe.**  
 Lambe, L. M. 1914 A, 11, pl. i.  
 Gilmore, C. W. 1923 D, 3, 4, 5.  
 Lambe, L. M. 1914 F, 297.  
 Upper Cretaceous (Belly River); Alberta.
- Aspideretes? vagans (Cope).**  
 Hay, O. P. 1902 A, 454 (Trionyx).  
 Bowen, C. F. 1915 A, 124.  
 Cross, W. 1896 A, 244 ("Trionyx").  
 Hatcher, J. B. 1905 B, 73 (Trionyx).  
 Hay, O. P. 1903 D, 119 (Trionyx).  
 1908 A, 486, 497, pl. xcvi, fig. 3.  
 Knowlton, F. H. 1911 C, 53, 62 (Trionyx).  
 Lambe, L. M. 1902 A, 36, pl. i, figs. 3, 4; text-fig. 3 (Trionyx).  
 Merrill, G. P. 1907 A, 80 (Trionyx).

Osborn, H. F. 1902 H, 674 (Trionyx).  
1902 I, 12 (Trionyx).  
Sternberg, C. H. 1914 A, 134 (Trionyx).  
Upper Cretaceous (Arapahoe or Denver);  
Colorado, Montana: (Laramie); North Dakota: (Belly River); Canada.

**Aspideretes vegetus** Gilmore.

Gilmore, C. W. 1920 A, 10, 57, pl. xviii, fig. 2;  
pl. xxi; text-figs. 27, 28.  
Reeside, J. B. 1924 A, 38.  
Paleocene (Puerco); New Mexico.

**Aspideretes vorax** Hay.

Hay, O. P. 1903 A, 486, 496, text-fig. 651.  
Gilmore, C. W. 1916 D, 299, pl. lxxvii, fig. 3;  
text-fig. 39.

Gilmore, C. W. 1920 A, 9.  
1923 D, 4.  
Reeside, J. B. 1924 A, 31.  
Upper Cretaceous (Ojo Alamo); New Mexico.

**Aspideretes sp. indet.**

Gilmore, C. W. 1917 A, 4. Upper Cretaceous  
(Two Medicine); Montana.  
1924 D, 27. Upper Cretaceous (Lance);  
Saskatchewan.  
Reeside, J. B. 1924 A, 21. Upper Cretaceous  
(Fruitland); New Mexico.  
Sternberg, C. M. 1924 A, 68. Upper Cretaceous  
(Lance); Saskatchewan.  
1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

**AXESTEMYS** Hay. Type *Axestus byssinus* Cope.

Hay, O. P. 1902 A, 455.  
1905 G, 337.  
1908 A, 433, 508.  
Teppner, W. 1914 A, 638.  
Williston, S. W. 1925 B, 227.

**Axestemys byssinus** (Cope).

Cope, E. D. 1872 NN, 3 (*Axestus byssinus*).  
Hay, O. P. 1902 A, 455.  
1905 G, 337.  
1908 A, 509, pl. civ, fig. 4; text-figs. 668,  
669.  
Merrill, G. P. 1907 A, 63 (*Axestus*).  
Middle Eocene (Bridger); Wyoming.

**CONCHOCHELYS** Hay. Type *C. admirabilis* Hay.

Hay, O. P. 1905 F, 338.  
1908 A, 433.  
1910 B, 294.  
Teppner, W. 1914 A, 638.  
Williston, S. W. 1925 B, 227.

**Conchocelys admirabilis** Hay.

Hay, O. P. 1905 F, 335, text-figs. 1-3.  
Gardner, J. H. 1910 A, 731.  
Gilmore, C. W. 1920 A, 10.  
Hay, O. P. 1908 A, 433, pl. lxxxviii, figs. 1-3.  
Hummel, K. 1927 A, 15 (Trionyx).  
Matthew, W. D. 1914 B, 333.  
Reeside, J. B. 1924 A, 33 (Conochelys).  
Paleocene (Puerco); New Mexico.

**AMYDA** Oken. Type *Trionyx euphraticus* Daudin.

Oken, L. 1816, Lehrbuch Zool., II, 348.  
Ammon, L. 1911 A, 11.  
Brown, A. E. 1904 A, 467 (Trionyx).  
Dollo, L. 1887 B, 393 (Trionyx).  
Fitzinger, L. 1836 A, 120.  
Foote, J. S. 1916 A, 57.  
Fuchs, H. 1907 B, 436, pl. xxi, fig. 18 (Trionyx).  
Gilmore, C. W. 1917 A, 155.  
1920 A, 62.  
Hay, O. P. 1903 C, 268.  
1905 A, 155.  
1905 G, 335.  
1908 A, 433, 510.  
1910 B, 294.  
Hoernes, R. 1836 A, 538 (Trionyx).  
Hummel, K. 1927 A, 1-96, pls. 1-xi [Trionyx  
(Amyda)].  
Kasper, A. 1903 A, 171, fig. 2 (Trionyx).  
Klaauw, C. J. 1924 B, 592 (Trionyx).  
Moodie, R. L. 1908 C, 322 (Trionyx).  
Newman, H. H. 1906 A, 74 (Aspidonectes).  
Ogushi, K. 1911 A, 1 (Trionyx).  
1911 B, 127 (Trionyx).  
1913 A, 299 (Trionyx).  
Oswald, F. 1909 A, 124 (Trionyx).  
Shufeldt, R. 1921 A, 218.

Siebenrock, F. 1909 A, 595 (Trionyx).  
Stejneger, L. 1905 A, 229.  
1907 A, 514.  
Stejneger and Barbour 1917 A, 124.  
Teppner, W. 1914 A, 637.  
Thäter, K. 1910 A, 492 ("testudo," "trionyx").  
Williston, S. W. 1925 B, 227.

**Amyda æqua** Hay.

Hay, O. P. 1908 A, 511, 517, pl. xcix, figs. 1-3;  
text-figs. 672, 673.  
1902 A, 454 (Trionyx radulus, in part).  
1905 G, 336 (Amyda radulus, in part).  
Hummel, K. 1927 A, 50 (Trionyx).  
Eocene (Bridger); Wyoming.

**Amyda? buiei** (Cope).

Hay, O. P. 1902 A, 453 (Trionyx).  
1908 A, 511, 534, pl. xcvi, fig. 12 (Amyda?).  
Miocene (Duplin); North Carolina.

**Amyda? cariosa** (Cope).

Hay, O. P. 1902 A, 453 (Trionyx).  
1908 A, 511, 515, pl. lxxvi, figs. 9, 10  
(Amyda?).  
Merrill, G. P. 1907 A, 79 (Trionyx).  
Lower Eocene (Wasatch); New Mexico.

***Amyda? cellulosa* (Cope).**

Hay, O. P. 1902 A, 453.

1908 A, 511, 534 (*Amyda?*).

Case, E. C. 1904 D, 62 (*Trionyx*).

Shattuck, G. B. 1904 A, xciv.

Middle or Upper Miocene (Calvert); Maryland.

***Amyda concentrica* (Cope).**

Cope, E. D. 1872 NN, 2 (*Trionyx*).

Hay, O. P. 1902 A, 454 (*Trionyx*).

1905 G, 336.

1908 A, 511, 522, pl. xcvi, figs. 7-10.

Merrill, G. P. 1907 A, 79 (*Trionyx*).

Middle Eocene (Bridger); Wyoming.

***Amyda crassa* Hay.**

Hay, O. P. 1908 A, 511, 532, pl. cviii; text-fig. 692.

Gilmore, C. W. 1915 H, 155.

Hummel, K. 1927 A, 50 (*Trionyx*).

Upper Eocene (Uinta); Utah.

***Amyda egregia* Hay.**

Hay, O. P. 1908 A, 511-531, pl. cvii, figs. 1-3; text-fig. 691.

Gilmore, C. W. 1915 H, 156.

Harrassowitz, H. 1919 A, 153 (*Trionyx*).

Hummel, K. 1927 A, 50 (*Trionyx*).

Eocene (Washakie); Wyoming: (Uinta); Utah.

***Amyda eloisæ* Gilmore.**

Gilmore, C. W. 1920 A, 10, 63, pl. xxiv; text-fig. 63.

Reeside, J. B. 1924 A, 42.

Paleocene (Puerco); New Mexico.

***Amyda? exquisita* Hay.**

Hay, O. P. 1908 A, 511, 525, text-figs. 681-683 (*Amyda?*).

Case, E. C. 1927 C, 223.

Middle Eocene (Bridger); Wyoming.

***Amyda franciscæ* Hay.**

Hay, O. P. 1908 A, 511, 523; pls. cii, ciii; text-figs. 678, 679.

Gilmore, C. W. 1923 D, 6.

Hummel, K. 1927 A, 50 (*Trionyx*).

Middle Eocene (Bridger); Wyoming.

***Amyda? halophila* (Cope).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

1908 A, 511, 513, pl. xvi, figs. 4, 5 (*Amyda?*).

Upper Cretaceous ("Lower marl bed"); Delaware and New Jersey.

***Amyda? lima* (Cope).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

1908 A, 511, 533, pl. xcvi, fig. 11 (*Amyda?*).

Miocene (Kirkwood); New Jersey: (St. Mary's); North Carolina. *Fide* Gilmore.

***Amyda mira* Hay.**

Hay, O. P. 1908 A, 511, 526, pl. cv, fig. 1; pl. cvi; text-figs. 684-686.

Hummel, K. 1927 A, 16, 18, 50 (*Trionyx*).

Middle Eocene (Bridger); Wyoming.

***Amyda nelsoni* Case.**

Case, E. C. 1927 C, 223, pl. i; text-figs. 1-3.

Middle Eocene (Bridger); Wyoming.

***Amyda? prisca* (Leidy).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

1908 A, 511, 512, pl. xcvi, figs. 2-6 (*Amyda?*).

Upper Cretaceous (Navesink?); New Jersey.

***Amyda radula* (Cope).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

1905 G, 336.

1908 A, 511, 517, pl. lxxxvi, figs. 11, 12.

Merrill, G. P. 1907 A, 80 (*Trionyx*).

Lower Eocene (Wasatch); New Mexico.

***Amyda salebrosa* Hay.**

Hay, O. P. 1908 A, 511, 524, pl. civ, fig. 1; text-fig. 680.

Case, E. C. 1927 C, 223.

Gilmore, C. W. 1920 A, 63.

Hummel, K. 1927 A, 50 (*Trionyx*).

Teppner, W. 1914 A, 638.

Middle Eocene (Bridger); Wyoming.

***Amyda scutumantiquum* (Cope).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

Cope, E. D. 1874 B, 436, 441 (*Trionyx*).

Gilmore, C. W. 1915 H, 157, pl. xxvi, fig. 2.

Hay, O. P. 1905 G, 336.

1908 A, 511, 521, pl. c, figs. 2-4; pl. ci, fig. 1; text-figs. 676, 677.

Loomis, F. B. 1907 B, 358 (*Trionyx*. This species?).

Middle Eocene (Bridger, Wasatch?); Upper (Uinta?); Wyoming.

***Amyda? tritor* Hay.**

Hay, O. P. 1904 B, 254 (*Aspidonectes*).

1905 G, 336 (*Amyda?*).

1908 A, 511, 529, text-figs. 687-689 (*Amyda?*).

Hummel, K. 1927 A, 16, 50 (*Trionyx*).

Stejneger, L. 1905 A, 299 (*Aspidonectes*).

Middle Eocene (Bridger); Wyoming.

***Amyda uintaënsis* (Leidy).**

Hay, O. P. 1902 A, 454 (*Trionyx*).

1905 G, 336.

1908 A, 511, 519, pl. c, fig. 1; text-figs. 674, 675.

Hummel, K. 1927 A, 50 (*Trionyx*).

Middle Eocene (Bridger); Wyoming.

***Amyda? ventricosa* (Cope).**

Hay, O. P. 1902 A, 455 (*Trionyx*).

Cope, E. D. 1877 K, 45, pl. lxiv, figs. 7-13 (*Trionyx*).

Hay, O. P. 1908 A, 511, 516, pl. xcvi, figs. 1-6 (*Amyda?*).

Merrill, G. P. 1907 A, 80 (*Trionyx*).

Lower Eocene (Wasatch); New Mexico.



**Amyda? virginiana** (Clark).

- Hay, O. P. 1902 A, 455 (Trionyx).  
 Case, E. C. 1901 A, 97, pl. xi, figs. 1, 2 (Trionyx).  
 Clark and Miller 1912 A, 117, 118 (Trionyx).  
 Hay, O. P. 1908 A, 511, 515, pl. xcvi, figs. 7, 8; text-figs. 670, 671 (Amyda?).  
 Lower Eocene (Aquia); Virginia.

**Amyda sp. indet.**

- Gilmore, C. W. 1915 H, 104.

Hay, O. P. 1902 A, 455 (This genus?). Tertiary; Maryland, South Carolina, New Mexico, Wyoming.

- 1923 A, 353. Pleistocene; Virginia.  
 1923 B, 118, pl. ix, figs. 2-4. Pleistocene; Texas.  
 1927 D, 274. Pleistocene; Florida.  
 Shattuck, G. B. 1904 A, xciv ("Trionyx").  
 Miocene (Calvert); Maryland.  
 Shufeldt, R. W. 1918 A, 358 (Apideretes ferox?, Amyda ferox). Pleistocene (Early); Florida.

**TEMNOTRIONYX** Hay. Type *T. manducans* Hay.

- Hay, O. P. 1908 A, 534.  
 Teppner, W. 1914 A, 638.

**Temnotrionyx manducans** Hay.

- Hay, O. P. 1908 A, 534, pl. cv, figs. 2, 3; text-figs. 690.  
 Middle Eocene (Bridger); Wyoming.

**PLATYPELTIS** Fitzinger. Type *Testudo ferox* Schneider.

- Fitzinger, L. 1836 A, 120, 127.  
 Agassiz, L. 1857 B, 400 (Platypeltis); 403 (Aspidonectes).  
 Baur, G. 1894 B, 349, figs. 1-6.  
 Gray, J. E. 1873 A, 58.  
 Hay, O. P. 1905 G, 336.  
 1908 A, 483, 536.  
 Hayek, H. 1924 A, 151.  
 Hummel, K. 1927 A, 47.  
 Lane, H. H. 1910 B, 345 (Trionyx).  
 Palacký, J. 1894 A, 133 (Aspidonectes).  
 Schmidt, W. J. 1920 A, 10 (Trionyx).  
 Siebenrock, F. 1909 A, 595 (Trionyx).  
 Teppner, W. 1914 A, 638.  
 Williston, S. W. 1925 A, 43, 44, 93, figs. 31, 32.  
 1925 B, 227.

**Platypeltis amnicola** Hay.

- Hay, O. P. 1907 B, 860, pl. liv, figs. 5, 6; text-fig. 19.  
 1908 A, 536, 540, fig. 697.  
 Lower Eocene (Wasatch); Wyoming.

**Platypeltis antiqua** Hay.

- Hay, O. P. 1907 B, 859, text-fig. 18.  
 Gardner, J. H. 1910 A, 731.  
 Gilmore, C. W. 1920 A, 10.  
 Hay, O. P. 1908 A, 536, 537, text-fig. 693.  
 Hummel, K. 1927 A, 86.  
 Reeside, J. B. 1924 A, 42.  
 Paleocene (Torrejon); New Mexico.

**Platypeltis extensa** Hay.

- Hay, O. P. 1908 A, 537, 545, pl. cxii; text-fig. 703.  
 Middle Eocene (Bridger); Wyoming.

**Platypeltis ferox** (Schneider).

- Schneider, J. G. 1783, Schildkröt., 330 (Testudo).  
 Boulenger, G. A. 1889 A, 259 (Trionyx).  
 Fuchs, H. 1907 B, 437 (Amyda).  
 Gray, J. E. 1855 A, 68 (Trionyx).  
 1873 A, 58, fig. 9.  
 Hay, O. P. 1908 A, 537, 548.  
 1923 A, 379.  
 Shufeldt, R. W. 1918 A, 358 (Trionyx, Amyda).  
 1921 A, 218.  
 Siebenrock, F. 1909 A, 603 (Trionyx).

- Siebenrock, F. 1923 A, 180 (Trionyx).  
 Siegelbauer, F. 1909 A, 185 (Trionyx).  
 Recent; North America east of Mississippi River; Pleistocene (Early); Florida.

**Platypeltis heteroglypta** (Cope).

- Hay, O. P. 1902 A, 454 (Trionyx).  
 1905 G, 336.  
 1908 A, 537, 543, pl. xcvi, fig. 14; pl. ci, fig. 2; text-figs. 701, 702.  
 Middle Eocene (Bridger); Wyoming.

**Platypeltis leucopotamica** (Cope).

- Hay, O. P. 1902 A, 454 (Trionyx leuc., 'T. punctiger').  
 1908 A, 537, 546, pl. cxiii, figs. 1-3; text-fig. 704.

Lambe, L. M. 1904 C, 27, 38 (Trionyx).

- 1905 D, 366 A (Trionyx).  
 1908 A, 9, 19 (Trionyx).  
 Teppner, W. 1914 A, 638.  
 Oligocene (White River); Assiniboia.

**Platypeltis miocæna** Matthew.

- Matthew, W. D. 1924 C, 68, 207, fig. 62.  
 Upper Miocene (Lower Snake Creek); Nebraska.

**Platypeltis postera** Hay.

- Hay, O. P. 1908 A, 537, 545, pl. cxi, figs. 1, 2.  
 Teppner, W. 1914 A, 638.  
 Middle Eocene (Bridger); Wyoming.

**Platypeltis serialis** (Cope).

- Hay, O. P. 1902 A, 453 (Plastomenus).  
 1905 G, 337.  
 1908 A, 536, 537, pl. xcvi, fig. 13; pl. cix, figs. 1-4; text-figs. 694-696.  
 Hummel, K. 1927 A, 86.  
 Lower Eocene (Wasatch); New Mexico:  
 Middle Eocene (Bridger); Wyoming.

**Platypeltis trepida** Hay.

- Hay, O. P. 1907 B, 862, pl. liv, fig. 7; text-fig. 20.  
 1908 A, 536, 541, text-fig. 698.  
 Middle Eocene (Bridger); Wyoming.

**Platypeltis trionychoides (Cope).**

Cope, E. D. 1872 NN, 2 (Anostira).

Hay, O. P. 1902 A, 453 (Plastomenus).  
1905 G, 336.Hay, O. P. 1908 A, 537, 541, pl. cx, figs. 1, 2;  
text-figs. 699, 700.Merrill, G. P. 1907 A, 62 (Anostira); 76  
(Plastomenus).

Middle Eocene (Bridger); Wyoming.

## UNDETERMINED TRIONYCHIDÆ.

Hay, O. P. 1902 A, 455.

*Superorder CATACRITOSAURIA, new name.*

## Order PLESIOSAURIA Blainville.

Blainville, H. M. D. 1835 A, 241.

Hay, O. P. 1902 A, 455.

Abel, O. 1904 B, 741 (Sauropterygia).

1907 A, 225 (Sauropterygia).

1909 F, 463 (Sauropterygia).

1910 B, (186).

1912 F, 78, 136, 149, 221, 693 (Sauropterygia).

1919 A, 481 (Sauropterygia).

1920 A, 375 (Sauropterygia).

1922 C, 546, figs. ("plesiosaurier").

Agassiz, L. 1844 D, 137 ("plesiosaures").

Anderson, R. J. 1909 B, 745 (Sauropterygia).

Andrews, C. W. 1896 B, 145 ("plesiosaurs").

1909 B, 418.

1910 A, 77.

1911 A, 160, 163.

1913 A, vii (Sauropterygia).

Anthony, R. 1913 A, 267 ("sauropterygiens").

Ardt, T. 1907 D, 680 (Sauropterygia).

Arthaber, G. 1924 A, 442, 452 (Sauropterygia).

Bardeleben, K. 1907 A, 37 ("sauropterygier").

Baur, G. 1889 L, 312.

1897 D, 52.

1898 A, 147.

Boas, J. E. V. 1914 B, 560 ("plesiosaurier").

Boule, M. 1902 B, 905, fig. 5 ("plésiosaures").

Boulenger, G. A. 1904 C, 479, 480.

1917 D, 1045 ("plésiosaures").

1917 E, 221.

1917 F, 456 ("plésiosaurens").

1918 E, 517 ("plésiosaurens").

Brandt, J. F. 1865 A, 17 (Sauropterygia).

Brauns, D. 1890 A, 161, 162, 187 (Sauropterygia).

Broili, F. 1913 B, 519 ("sauropterygier").

1920 A, 320 ("sauropterygier").

Broom, R. 1901 A, 188.

1903 I, 554.

1904 C, 109 ("plesiosaurs").

1907 A, 37 ("plesiosaurs").

1908 A, 1054 ("plesiosaurs").

1917 A, 973 ("plesiosaurs").

1922 A, 17, 20, 25.

1924 C, 75.

Brown, B. 1904 A, 185 ("plesiosaurs").

1914 E, 378.

Carus, V. 1875 A, 410 (Sauropterygia).

Case, E. C. 1898 C, 713 (Sauropterygia).

1905 E, 180 ("plesiosaurs").

1923 A, 517 (Sauropterygia).

Cope, E. D. 1880 U, 146 ("sauropterygées").

1891 N, 35, 39.

Dames, W. 1883 C, 398 (Sauropterygia).

1898 F, 43.

Diener, C. 1909 A, 41 ("sauropterygier").

Dollo, L. 1883 G, 594.

1885 D, 632.

1896 A, 83 ("plésiosaurens").

Drevermann, F. 1922 A, 101 ("sauropterygier").

Eastman, C. R. 1904 G, 466 ("plesiosaur").

Fraas, E. 1901 B, cxxvi ("plesiosaurier").

1901 C, 417 ("sauropterygier").

1905 B, 360 ("plesiosaurier").

1910 A, 105 ("plesiosaurier").

Fuchs, H. 1907 A, 161 (Plesiosauria, Sauropterygia).

1909 B, 114, 141, 152 (Sauropterygia).

1911 B (Sauropterygia).

Fürbringer, M. 1902 B, 727 ("plesiosaurier").

1904 A, ("plesiosaurier").

Gadow, H. 1901 A, 410 ("plesiosaurs").

1901 B, 473, 477 (Plesiosaurs).

1902 B, 359.

Gaupp, E. 1913 A, 58 ("plesiosaurier").

Gegenbaur, C. 1870 A, 347 ("plesiosauren").

Gervais, P. 1852 A, 269 ("plésiosaurens").

1853 B, 35 ("plésiosaures").

1859 A, 473 ("plésiosaurens").

Goodrich, E. S. 1916 A, 263 (Sauropterygia).

Greene, J. R. 1861 A, 219, 226 (Sauropterygia).

Gregory, W. K. 1910 A, 114.

Haeckel, E. 1868 A, 455.

1873 A, 512.

Hares, C. J. 1917 A, 429 ("plesiosaurs").

Hatcher, J. B. 1905 B, 71.

Hay, O. P. 1905 D, 125 ("plesiosaurs").

1905 H, 296 ("plesiosaurs").

Henderson, J. 1904 A, 466.

Hilzheimer, M. 1913 A, 515 ("sauropterygier").

Hoernes, R. 1886 A, 593 (Sauropterygia).

1912 A, 661.

Howes, G. B. 1902 A, 524.

Howes and Swinerton 1901 A, 2, 68.

Hubrecht, A. A. W. 1908 A, 153 (Sauropterygia).

Huene, F. 1902 A, 39 ("sauropterygier").

1911 D, 46 ("sauropterygier").

1914 G, 47 ("plesiosaurier").

1920 B, 206 ("sauropterygier").

1921 A, 228 ("sauropterygier").

1925 D, 229, 235, 238 (Sauropterygia)

1926 I, 82 (Sauropterygia).

1927 E, 325 ("sauropterygier").

Huxley, T. H. 1858 F, 523 (Plesiosaurs).

1862 A, xlviii.

1870 F, 538.

Jaekel, O. 1902 A, 110 ("plesiosaurier").

1904 A, 33 ("plesiosaurier").

1907 B, 87.

1908 B, 464 ("plesiosaurier").

1910 C, 334 (Sauropterygia).

- Jaekel, O. 1910 D, 113 (Enaliosauria).  
 1911 A, 132 (Enaliosauria); 147 (Sauropterygii).  
 1912 A, 619 ("sauropterygiens").  
 1915 A, 99 ("sauropterygier").  
 Kinsley, J. S. 1912 B, 89, fig. 91 ("plesiosaurs").  
 1925 A, 45, 144, 245, 254, 282 (Sauropterygia).  
 Koken, E. 1893 B, 352 ("plesiosaurier").  
 1901 B, 221 ("plesiosaurier").  
 Kükenthal, W. 1891 C, 391, 397 ("plesiosauren").  
 Larger, R. 1913 A, 720.  
 Lavocat, A. 1885 A, 34 ("plesiosaures").  
 Leunis and Ludwig 1883 A, 598.  
 Linder, H. 1913 A, 339 ("plesiosaurier").  
 Lull, R. S. 1917 B, 322 (Sauropterygia).  
 Lydekker, R. 1912 C, 4, 22, 23, 133 (Sauropterygia).  
 1915 C, 626 ("plesiosaurs").  
 McGregor, J. H. 1905 A, 295 ("plesiosaurs").  
 1906 A, 88 (Sauropterygia).  
 Marsh, O. C. 1899 C, 72 ("plesiosaurs").  
 Matthew, W. D. 1921 D, 211 ("plesiosaurs").  
 Merriam, J. C. 1912 B, 221 ("plesiosaurs").  
 Moodie, R. L. 1908 C, 319 ("plesiosaurs").  
 1908 D, 446.  
 1909 G, 363 ("plesiosaurs").  
 1916 D, 402.  
 1916 F, 35 ("plesiosaurs").  
 Noack, T. 1880 A, 76 ("plesiosaurier").  
 Nopce, F. 1922 A, 112, 116 ("sauropterygier").  
 1923 E, 1048 ("sauropterygiens").  
 1923 H, 1-181, tab. (Sauropterygia).  
 1926 A, 638, 652 ("sauropterygia").  
 Osborn, H. F. 1902 H, 750 ("plesiosaurs").  
 1903 D, 313 ("plesiosaurs"); 453, 456, 465 (Sauropterygia).  
 1903 H, 453, 454, 456.  
 1904 H, 104 (Sauropterygia).  
 1904 N, 308 (Sauropterygia).  
 1905 C, 295 (Sauropterygia).  
 1905 N, 233 (Sauropterygia).  
 Osborn, R. C. 1906 A, 447.  
 Owen, R. 1839 E, 65 (Plesiosaui).  
 1840 A, 45.  
 1866 A, 51, 388 (Sauropterygia).  
 Parker and Haswell 1897 A, 314, 344 (Sauropterygia).  
 Perrier, E. 1920 A, 323 ("plesiosaurens").  
 Pompeckj, J. F. 1925 A, 6, 9, ("plesiosaurier").  
 Rabi, C. 1903 A, 155 ("plesiosaurier").  
 Reynolds, S. H. 1897 A, 273, 275, 286, 287, 554 (Sauropterygia).  
 Ridewood, W. G. 1897 D, 196 (Sauropterygia).  
 Rogenhofer, A. 1908 A, (42) ("plesiosaurier").  
 Ryder, J. 1887 A, 346 ("plesiosaurs").  
 Ryder, J. 1887 B, 438.  
 Sabatier, A. 1902 A, 100 ("plesiosaures").  
 Schaffer, F. X. 1912 A, 198 ("plesiosaurier").  
 Seeley, H. G. 1866 B, 351 ("plesiosaurs").  
 1882 A, 350.  
 1887 D, 341.  
 1887 E, 210.  
 Sewertzoff, A. N. 1908 A, (Sauropterygia).  
 Stemmman, J. 1907 A, 438 (Sauropterygia).  
 1908 A, 235, 237, 238.  
 1909 A, 86.  
 1912 A, 49 ("plesiosaurier").  
 1912 B, 721.  
 Sterling, S. 1910 C, 667 ("plesiosaurier").  
 Stromer, E. 1908 B, 170.  
 1912 A, 99, 126 (Sauropterygia).  
 Swinnerton and Howes 1901 A, 68.  
 Symington, J. 1905 A, 109 ("plesiosaurens").  
 Terra, P. 1811 A, 236 (Plesiosaui).  
 Thevenin, A. 1910 A, 59 ("sauroptérygiens").  
 Thyng, F. W. 1906 A, 63 (Sauropterygia).  
 Tornier, G. 1913 B, 352, 374 (Sauropterygia).  
 Versluys, J. 1912 A, 501 ("plesiosaurier").  
 1912 B, 550, 668, 687 (Sauropterygia).  
 1919 A, 12 (Sauropterygia).  
 Vogt, C. 1879 A, 243 ("plesiosaures").  
 Volz, W. 1902 A, 121 ("sauropterygier").  
 Watson, D. M. S. 1912 B, 584 (Sauropterygia).  
 1913 D, 27 ("plesiosaurs").  
 1917 B, 60 ("plesiosaurs").  
 1917 C, 178 (Sauropterygia).  
 1924 A, 885.  
 Wegner, R. N. 1922 A, 431 (Sauropterygia).  
 Williston, S. W. 1898 D, 110 ("plesiosaurs").  
 1902 F, 259 ("plesiosaurs").  
 1903 C, 980 ("plesiosaurs").  
 1904 B, 176 (Sauropterygia).  
 1904 E, 565 ("plesiosaurs").  
 1905 E, 294 (Sauropterygia).  
 1907 A, 477, 486 ("plesiosaurs").  
 1908 E, 726.  
 1909 A, 398 ("plesiosaurs").  
 1911 F, 661 (Sauropterygia).  
 1912 B, 650 (Sauropterygia).  
 1914 A, 17, 45, 73, 77 (Sauropterygia).  
 1917 C, 415 (Sauropterygia).  
 1918 A, 80.  
 1925 A, *passim* (Sauropterygia).  
 1925 B, 211, 246, 248 (Sauropterygia).  
 Woodward, A. S. 1898 E, 330.  
 1909 A, 327.  
 1922 C, 32, fig. 29.  
 Woodward, H. 1904 B, 143.  
 Zittel and Broili 1911 A, 229 (Sauropterygia).  
 1923 A, 278, 383 (Sauropterygia).  
 Zittel and Eastman 1902 A, 171 (Sauropterygia).

### Suborder PLESIOSAURIFORMES, new name.

The knowledge of the numerous genera of North American plesiosaurs is so unsatisfactory that the writer is not able to assign them to their families. Three families are recognized and to each is referred the type genus. Most of the other genera follow in their alphabetical order.

- Broom, R. 1924 B, 55, 64, fig. 13.  
 Jaekel, O. 1910 C, 325, 335 (Plesiosaui).  
 1911 A, 149 (Plesiosaui).

- Nopce, F. 1923 H, 1-181, tab. (Plesiosaui).  
 1923 A, 173 (Plesiosauroidea).  
 Williston, S. W. 1925 A, *passim* (Plesiosaui).  
 1925 B, *passim* (Plesiosaui).

## PLESIOSAURIDÆ Gray.

- Gray, J. E. 1825 A, 196.  
 Hay, O. P. 1902 A, 455.  
 Abel, O. 1919 A, 489.  
     1921 A, 222 ("plesiosaurier").  
     1922 C, 317.  
 Arldt, T. 1907 D, 674.  
 Arthaber, G. 1924 A, 447, 449.  
 Baur, G. 1898 A, 148.  
 Bogolubow, N. N. 1909 A, 43, 63.  
 Bonaparte, C. L. 1831 A, 64.  
     1833 B, 1183.  
 Cope, E. D. 1891 N, 39.  
 Fraas, E. 1902 B, 4 ("plesiosauriden").  
 Gadow, H. 1901 B, 478.  
 Gregory, W. K. 1904 B, 888 ("plesiosaurs").  
 Hay, O. P. 1905 H, 296 ("plesiosaurs").  
 Henderson, J. 1904 A, 466 ("plesiosaurs").  
 Hiltzheimer, M. 1913 A, 515.  
 Huene, F. 1921 A, 231 ("plesiosauriden").  
     1922 D, 273 ("plesiosauriden").  
 Jaekel, O. 1907 B, 39, fig. 24 ("plesiosauriden").  
     1909 D, 721 ("plesiosaurier").  
     1912 A, 614 ("plesiosauriden").  
 Matthew, W. D. 1910 I, 250 ("plesiosaurs").  
 Moodie, R. L. 1907 A, 90 ("plesiosaurs").  
     1911 D, 95 ("plesiosaurian").  
 Nopcsa, F. 1922 A, 112.  
     1923 A, 173 (Plesiosaurinæ).  
 Pravoslavlev, P. 1916 A, 332.  
 Reynolds, S. H. 1897 A, 192, 193, 278.  
 Tornier, G. 1913 B, 354.  
 Williston, S. W. 1903 A, 5 ("plesiosaurs").  
     1925 B, 243.  
 Zittel and Broili 1911 A, 235.  
     1923 A, 285.  
 Zittel, Eastman, etc. 1902 A, 175.

PLESIOSAURUS Conybeare. Type *P. dolichodeirus* Conybeare.

- Hay, O. P. 1902 A, 456.  
 Abel, O. 1908 E, 404.  
     1908 G, (44).  
     1909 F, 465.  
     1919 A, 493, figs. 389, 391, 392, 394.  
     1920 A, 375.  
     1921 A, 222, 227, fig. 80.  
     1925 A, 167, figs. 109-113.  
 Agassiz, L. 1835 B, 338.  
 Andrews, C. W. 1911 B, 309, pl. xviii; text-figs. 1-4.  
     1922 A, 235, pl. xiv; 2 text-figs.  
 Boas, J. E. V. 1914 C, 280.  
 Brauer, A. 1908 A, 88, figs. 3-5.  
 Brauns, D. 1890 A, 187, fig. 9.  
 Bronn, H. G. 1848 B, 996.  
     1849 A, 688.  
 Broom, R. 1899 A, 764.  
     1921 A, 155, figs. 24, 25.  
     1922 A, 20, fig. 2.  
     1924 B, 6, 9.  
 Carus, V. 1875 A, 412.  
 Conybeare, W. D. 1824 B, 381.  
 Cuvier, G. 1825 A, v, 2, 475-487, pls. xxxi-xxxii.  
 Dames, W. 1883 C, 398.  
     1898 F, 48, pl. iii.  
 De la Beche and Conybeare 1921 A, 560, 581.  
 Dollo, L. 1885 D, 633, 636.  
 Durand, J. P. 1898 A, 293 ("plésiosaure").  
 Edinger, T. 1923 A, 380, fig. 1.  
 Eimer, G. H. T. 1901 A, 261.  
 Fraas, E. 1910 A, 105.  
 Gaudry, A. 1896 A, 49.  
 Gegenbaur, C. 1870 A, 342.  
 Gervais, P. 1859 A, 478.  
 Giebel, C. G. 1855 A, 91.  
 Heilmann, G. 1913 B, 78.  
 Heilprin, A. 1887 A, 159, 162.  
 Hoernes, R. 1886 A, 594.  
 Hoffman, C. K. 1890 B, 1303, pl. lxi.  
 Huene, F. 1902 A, 39.  
 Humphry, G. M. 1876 A, 665.  
 Hutchinson, H. N. 1910 A, 76, pls. v, vi.  
 Huxley, T. H. 1858 E, 522.  
 Kesteven, H. 1916 A, 305 (Sauropterygia).  
 Kingsley, J. S. 1925 A, 150, fig. 159.  
 Lankester, E. R. 1905 A, 224, fig. 164.  
 Le Damany, P. 1902 A, 333 ("plésiosaure").  
     1903 G, 131, fig. 2. ("plésiosaure").  
 Lönnberg, E. 1910 A, 15.  
 Lydekker, R. 1912 C, 105.  
 McGregor, J. H. 1905 A, 295 ("plesiosaurs").  
 Mantell, G. A. 1844 A, 708.  
 Matthew, W. D. 1910 I, 250 ("plesiosaur").  
 Mivart, St. G. 1871 B, 388, fig. 2.  
     1873 B, 284.  
 Müller, J. 1832 A, 508.  
     1841 B, clii.  
 Nopcsa, F. 1923 B, 357.  
     1923 H, 64, 66, 195.  
 Osborn, H. F. 1917 B, 319 ("plesiosaur").  
 Oswald, F. 1911 A, 410.  
 Owen, R. 1839 E, 65.  
     1842 F, 72, 79.  
     1845 B, 280, pl. lxxiii, fig. 10; pl. lxxiv.  
     1848 B, 93.  
     1868 A, 902.  
 Pictet, F. J. 1853 A, 534.  
 Rabl, C. 1901 A, 521.  
 Reynolds, S. H. 1897 A, 28, 37, 192, 193, 272.  
 Ridewood, W. G. 1897 D, 194.  
 Rogenhofer, A. 1908 A, (44).  
 Schlesinger, C. 1909 A, (142).  
 Schuchert, C. 1913 B, 253.  
 Seeley, H. G. 1866 B, 352.  
     1882 A, 353.  
 Seitz, A. L. L. 1907 A, 274.  
 Serres, M. 1852 A, 114.  
 Sollas, W. J. 1916 A, 90.  
 Spencer, W. B. 1886 A, 233.  
 Steinmann, G. 1907 A, 439.  
 Sternberg, C. H. 1917 A, 175 ("plesiosaurs").  
 Stremme, H. 1909 A, 505.  
 Tornier, G. 1913 B, 354.  
 Trouessart, E. L. 1903 A, 306.  
 Versluys, J. 1909 A, 290.  
     1912 B, 672.  
     1919 A, 12, fig. 10.  
 Watson, D. M. S. 1925 A, 891, figs. 4-6, 10.  
 Williston, S. W. 1903 A, 7, 23, pl. xviii, fig. 5;  
     pl. xix, figs. 1-3; text-fig. 10.  
     1925 A, 57, figs. 46, 48.  
     1925 B, 243.  
 Williston and Moodie 1917 A, 61.

- Wiman, C. 1916 C, 225, fig. 3 ("plesiosaurier").  
 Wyman, J. 1867 B, 259, 274.  
 Zittel and Broili 1911 A, 235.  
 1923 A, 286, figs. 398, 399.  
 Zittel, Eastman, etc. 1902 A, 175.
- Plesiosaurus brevifemur** Cope.  
 Hay, O. P. 1902 A, 456.  
 Williston, S. W. 1902 D, 241.  
 1903 A, 6.  
 1908 C, 736.  
 Upper Cretaceous (Hornerstown); New Jersey.
- Plesiosaurus gouldii** Williston.  
 Hay, O. P. 1902 A, 456.  
 Sauvage, H. E. 1901 B, 12.  
 Williston, S. W. 1902 D, 241.  
 1903 A, 7, 72, pl. xxvii, figs. 2, 3.  
 1908 C, 736.  
 Lower Cretaceous (Comanche); Kansas.
- Plesiosaurus gulo** Cope.  
 Hay, O. P. 1902 A, 456.  
 Williston, S. W. 1902 D, 241.  
 1903 A, 7, text-fig. 7.  
 1908 A, 736.  
 Upper Cretaceous (Pierre); Kansas.
- Plesiosaurus mexicanus** Wieland.  
 Wieland, G. R. 1910 A, 359, pl. [P. (Polyptichodon)].  
 Jurassic; Mexico.
- Plesiosaurus mudgei** Cragin.  
 Hay, O. P. 1902 A, 456.
- Williston, S. W. 1902 D, 241.  
 1903 A, 7, 44, pl. xxvii, fig. 1; pl. xxix;  
 text-figs. 6, 11.  
 1908 C, 736.  
 Lower Cretaceous (Comanche); Kansas.
- Plesiosaurus shirleyensis** Knight.  
 Hay, O. P. 1902 A, 456.  
 Lydekker, R. 1913 A, 16.  
 Williston, S. W. 1902 D, 241.  
 1903 A, 7.  
 1904 A, 341.  
 1908 C, 736.  
 Upper Jurassic (Sundance); Wyoming.
- Plesiosaurus? vaccinsulensis** (Cope).  
*Cope, E. D.* 1876 I, 196 (Champsosaurus).  
 Unless otherwise indicated the authors, as quoted, call the fossil in question *Champsosaurus vaccinsulensis*.  
 Hay, O. P. 1902 A, 461.  
 Bowen, C. F. 1915 A, 128.  
 Brown, B. 1905 B, 6 ("plesiosaur").  
 Dollo, L. 1884 C, 155.  
 Hatcher, J. B. 1905 B, 81.  
 Osborn, H. F. 1902 I, 12.  
 Upper Cretaceous (Judith River); Montana.
- Plesiosaurus? sp. indet.**  
 Hill, R. T. 1901 A, 328. Lower Cretaceous (Eagle Ford); Texas.  
 Lambe, L. M. 1914 F, 298.  
 Lull, R. S. in Gregory, H. E. 1917 A, 74 ("plesiosaur." This genus?). Cretaceous (Mancos shales); Arizona.

## POLYCOTYLIDÆ Williston.

- Williston, S. W. 1908 E, 727.  
 Bogolubow, N. N. 1912 A, 175.  
 Cope, E. D. 1887 G, 564 (Polycotylinæ).
- Williston, S. W. 1903 A, 5 ("plesiosaurs").  
 1908 C, 735.  
 1925 B, 250.

POLYCOTYLUS Cope. Type *P. latipinnis* Cope.

- Hay, O. P. 1902 A, 457.  
 Abel, O. 1912 F, 81.  
 1919 A, 503.  
 1922 C, 320.
- Bogolubow, N. N. 1912 A, 174.  
 Brown, B. 1913 C, 606.  
 Cope, E. D. 1880 U, 146.  
 Moodie, R. L. 1911 D, 97, pl. i; text-fig. 7.  
 1916 D, 405, fig. 3.  
 Nopcsa, F. 1923 E, 1050, fig. 8.  
 Watson, D. M. S. 1924 A, 914, 916.  
 Wieland, G. R. 1906 C, 820.  
 Williston, S. W. 1902 D, 242.  
 1903 A, 10.  
 1905 C, 504.  
 1906 B, 221, 233, 234.  
 1908 C, 715, 735.  
 1914 A, 80, fig. 34.  
 1925 A, 115, fig. 89.  
 1925 B, 250.
- Williston and Moodie 1917 A, 61.  
 Zittel and Broili 1911 A, 238.  
 1923 A, 289.
- Polycotylus dolichopus** Williston.  
*Williston, S. W.* 1906 B, 235, pl. iii, fig. 2.  
 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas, Wyoming.
- Polycotylus latipinnis** Cope.  
 Hay, O. P. 1902 A, 457.  
 Moodie, R. L. 1911 D, 98.  
 Williston, S. W. 1902 D, 242.  
 1903 A, 10, 67, pl. xxi.  
 1906 B, 233, pl. iii, fig. 1; text-fig. 5.  
 1908 C, 715, 736, figs. 6, 13, 14.  
 Upper Cretaceous (Niobrara); Kansas, Wyoming.

TRINACROMERUM. Type *T. bentonianum* Cragin.

- Hay, O. P. 1902 A, 458.  
 Abel, O. 1912 F, 81.  
     1919 A, 502.  
     1922 C, 317.  
 Andrews, C. W. 1910 A, xv (Dolichorhynchopt)  
     1913 A, 3, 12, 41.  
 Anonymous 1906 D, 711.  
 Bogolubow, N. H. 1912 A, 174.  
 Brown, B. 1913 C, 606.  
 Linder, H. 1913 A, 405 (Dolichorhynchopt).  
 Moodie, R. L. 1911 D, 97.  
 Nopcsa, F. 1923 H, 12, 13, 63, 65, 66, 174, pl. ii,  
     fig. 5.  
     1925 A, 24.  
     1928 A, 173.  
 Osburn, R. C. 1906 A, 450 (Dolichorhynchopt a  
     syn.).  
 Steinmann, G. 1907 A, 439, fig. 769 (Dolicho-  
     rhynchopt).  
     1908 A, 238, fig. 141 (Dolichorhynchopt).  
 Versluys, J. 1912 B, 672 (Trinacromerum, Doli-  
     chorhynchopt).  
 Wieland, G. R. 1906 C, 820.  
 Williston, S. W. 1902 D, 242 (Trinacromerum);  
     243 (Dolichorhynchopt, type *D. osborni*).  
     1902 F, 262 (Dolichorhynchopt).  
     1903 A, 11 (Trinacromerum); 12, 14 (Doli-  
     chorhynchopt).  
     1906 B, 236.  
     1908 C, 715, 735.  
     1914 A, 81, figs. 35, 38, 41, 42.  
     1918 A, 79, fig. 3.  
     1925 A, 59, 103, 130, 194, figs. 48, 80, 102,  
     126, 159.  
     1925 B, 250.  
 Williston and Moodie 1917 A, 61.  
 Zittel and Broili 1911 A, 233 (Trinacromerum  
     Dolichorhynchopt).  
     1923 A, 289.  
 Zittel, Eastman, etc. 1902 A, 178 (Dolichorhyn-  
     chus).

**Trinacromerum anonymum** Williston.

- Williston, S. W. 1903 A, 20, 21, 44, pl. xxviii;  
     text-fig. 9.  
     1906 A, 10.  
     1906 B, 236.  
     1908 C, 729, 736, figs. 9-12.  
     Upper Cretaceous (Benton); Kansas.

**Trinacromerum bentonianum** Cragin.

- Hay, O. P. 1902 A, 458.  
 Abel, O. 1919 A, 499, figs. 393, 399.  
     1922 C, 318, fig. 275.  
 Koken and Linder 1913 A, 105.  
 Williston, S. W. 1902 D, 242.  
     1903 A, 11, 66.  
     1908 C, 716, figs. 1-5, 7, 8.  
     Upper Cretaceous (Benton); Kansas.

**Trinacromerum latimanus** Williston.

- Williston, S. W. 1908 C, 732, 736, fig. 15.  
     Upper Cretaceous (Benton); Wyoming.

**Trinacromerum osborni** Williston.

- Williston, S. W. 1902 D, 241, pl. xi (Dolicho-  
     rhynchopt).  
 Abel, O. 1922 C, 317, fig. 274.  
 Andrews, C. W. 1911 A, 162 (Dolichorhynchopt).  
     1922 A, 297 (Dolichorhynchopt).  
 Linder, H. 1913 A, 346, 402 (Dolichorhynchopt).  
 Osborn, H. F. 1903 G, 701 (Dolichorhynchopt).  
     1917 B, 208, fig.  
     1918 D, 634 (Dolichorhynchopt).  
 Sternberg, C. H. 1909 C, 111, fig. 20 (Dolicho-  
     rhynchopt).  
 Watson, D. M. S. 1924 A, 914, fig. 12.  
 Williston, S. W. 1903 A, 12, 13, pls. i-iv, vi-xvii,  
     xx; text-figs. 3, 5, 8, 12 (Dolichorhynchopt).  
     1907 A, 480.  
     1908 C, 715 (Dolichorhynchopt).  
     1914 A, 78, figs. 32, 36.  
     1914 D, 415, fig. 16.  
     1925 A, 39, 152, figs. 25, 125.  
     1925 B, 250, fig. 174.  
 Zittel and Broili 1923 A, 289, fig. 404.  
     Upper Cretaceous (Niobrara); Kansas.

## ELASMOSAURIDÆ Cope.

- Hay, O. P. 1902 A, 457.  
 Andrews, C. W. 1910 A, xiv, 77.  
 Baur, G. 1898 A, 148.  
 Gadow, H. 1901 B, 478.  
 Nopcsa, F. 1923 H, 66, 124, 195.

- Nopcsa, F. 1923 A, 173 (Elasmosauridæ, Elas-  
     mosaurinæ).  
 Pravoslavlev, P. A. 1916 A, 328.  
 Williston, S. W. 1908 E, 727.  
     1925 A, 138.  
     1925 B, 250.

ELASMOSAURUS Cope. Type *E. platyurus* Cope.

- Hay, O. P. 1902 A, 458.  
 Abel, O. 1912 F, 81.  
     1919 A, 500.  
     1922 C, 317.  
 Andrews, C. W. 1910 A, xvii.  
 Anonymous 1906 E, 411.  
 Bogolubow, N. N. 1912 A, 174.  
 Brown, B. 1913 C, 606.  
 Cope, E. D. 1880 U, 146.  
 Dollo, L. 1885 D, 633.

- Dombrowsky, B. 1913 A, 5.  
 Gadow, H. 1901 B, 478.  
 Hoffman, C. K. 1890 B, 1305.  
 Leidy, J. 1870 C, 248.  
 Matthew, W. D. 1910 I, 247, fig.  
 Moodie, R. L. 1911 D, 97, pl. i.  
 Nopcsa, F. 1923 E, 1051.  
     1923 H, 64-66.  
     1925 A, 24.  
     1926 A, 657.

- Osborn, H. F. 1917 B, 208, fig.  
 Pernier, E. 1920 A, 325.  
 Pompeckj, J. F. 1925 A, 17.  
 Pravoslavlev, P. A. 1916 A, 327, pl.  
 1918 A, 1955.  
 1918 B, 2325.  
 Pütter, A. 1923 A, 221.  
 Schuchert, C. 1915 A, 907, fig. 490.  
 Schuchert and Levene 1927 A, 306.  
 Seeley, H. G. 1877 A, 541.  
 Tornier, G. 1913 B, 346, fig. 17.  
 Watson, D. M. S. 1924 A, 886, 904, seq., fig. 1.  
 Williston, S. W. 1902 D, 242.  
 1902 F, 261.  
 1903 A, 9, 47, 67.  
 1906 B, 221, 223 ("plesiosaurs").  
 1914 A, 84, figs. 37, 39, 40.  
 1925 A, 58, 139, 153, figs. 48, 110, 126.  
 1925 B, 250.  
 Williston and Moodie 1917 A, 61.  
 Zittel and Broili 1911 A, 238.  
 1923 A, 238, fig. 401.  
 Zittel, Eastman, etc. 1902 A, 178.
- Elasmosaurus intermedius Cope.**  
 Hay, O. P. 1902 A, 458.  
 Pravoslavlev, P. A. 1918 A, 1963, 1968.  
 Williston, S. W. 1902 D, 242.  
 1903 A, 9.  
 1906 B, 227.  
 1908 C, 736.  
 Upper Cretaceous (Pierre); South Dakota.
- Elasmosaurus ischiadicus Williston.**  
 Williston, S. W. 1903 A, 10, 72, pls. x, xxvi (Polycotylus).  
 Abel, O. 1919 A, 502, fig. 397.  
 1922 C, 317, fig. 273.  
 Pravoslavlev, P. A. 1916 A, 333.  
 1918 A, 1962.  
 1918 B, 2325, 2330.  
 Williston, S. W. 1906 B, 231, pl. i; pl. ii, fig. 1.  
 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas.
- Elasmosaurus? marshi Williston.**  
 Williston, S. W. 1906 B, 229, pl. ii, fig. 2; text-fig. 4.  
 Pravoslavlev, P. A. 1916 A, 333 (E. marschi).  
 1918 A, 1962.  
 1918 B, 2325, 2330.  
 Williston, S. W. 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas.
- Elasmosaurus nobilis Williston.**  
 Williston, S. W. 1906 B, 232, pl. iv.  
 Pravoslavlev, P. A. 1916 A, 333.  
 1918 A, 1962.  
 1918 B, 2325, 2330.  
 Williston, S. W. 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas.
- Elasmosaurus orientalis Cope.**  
 Hay, O. P. 1902 A, 458.  
 Pravoslavlev, P. A. 1918 B, 2325.  
 Williston, S. W. 1902 D, 242.
- Williston, S. W. 1903 A, 9.  
 1906 B, 227.  
 1908 C, 736.  
 Upper Cretaceous (Navesink?); New Jersey.
- Elasmosaurus platyurus Cope.**  
 Hay, O. P. 1902 A, 458.  
 Abel, O. 1922 C, 316, fig. 272.  
 Ballou, W. H. 1897 A, 16, 23, fig.  
 Baur, G. 1897 D, 52.  
 Beard, J. C. 1901 B, 267, figure (E. platyurus).  
 Matthew, W. D. 1903 F ("long-necked plesiosaur").  
 Osborn, H. F. 1904 F, 44 ("Elasmosaurus").  
 Pravoslavlev, P. A. 1916 A, 327.  
 1918 A, 1963, 1968, 1971.  
 1918 B, 2325.  
 Ruschenberger and Tryon 1879 A, 15, 92.  
 Watson, D. M. S. 1924 A, 886, fig. 1.  
 Williston, S. W. 1898 L, 28.  
 1902 D, 242.  
 1903 A, 9, pl. xix, fig. 4.  
 1906 B, 225.  
 1907 C, 736, fig. 33.  
 1914 A, 79.  
 Upper Cretaceous (Pierre); Kansas.
- Elasmosaurus serpentinus Cope.**  
 Hay, O. P. 1902 A, 458.  
 Pravoslavlev, P. A. 1916 A, 328.  
 1918 A, 1962.  
 1918 B, 2325, 2330.  
 Watson, D. M. S. 1924 A, 904, fig. 9.  
 Williston, S. W. 1902 D, 242.  
 1903 A, 9.  
 1906 B, 227.  
 1908 C, 736.  
 Williston and Moodie 1917 A, 62.  
 Upper Cretaceous (Niobrara); Nebraska, Wyoming.
- Elasmosaurus snowii Williston.**  
 Williston, S. W. 1906 B, 226, 228, pl. iii, fig. 3; text-figs. 2, 3.  
 Abel, O. 1922 C, 316, fig. 271.  
 Pravoslavlev, P. A. 1916 A, 333 (E. snowi).  
 1918 A, 1962.  
 1918 B, 2325, 2330.  
 Wieland, G. R. 1906 C, 820.  
 Williston, S. W. 1907 A, 431.  
 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas.
- Elasmosaurus sternbergi Williston.**  
 Williston, S. W. 1906 B, 232.  
 Pravoslavlev, P. A. 1916 A.  
 1918 A, 1971.  
 1918 B, 2325, 2330.  
 Williston, S. W. 1908 C, 736.  
 Upper Cretaceous (Niobrara); Kansas.
- Elasmosaurus sp. indet.**  
 Hay, O. P. 1902 A, 458.  
 Watson, D. M. S. 1924 A, 906, fig. 10.  
 Williston, S. W. 1908 C, 736. Upper Cretaceous (Benton); Kansas.

OGMODIUS Williston and Moodie. Type *O. martinii* Williston and Moodie.

- Williston and Moodie 1913 A, 121 (March).  
 Nopcea, F. 1923 H, 65 (Leurospondylus a syn.).  
 1923 A, 173.  
 Williston, S. W. 1925 B, 250 (Ogmodeirus).

**Ogmodirus martinii** Williston and Moodie.

- Williston and Moodie 1917 A, 61, pls. i-iv; text-figs. 1, 2.  
 Moodie, R. L. 1916 D, 402, pl. i; text-figs. 1, 2, 4.  
 Upper Cretaceous (Niobrara); Kansas.

LEUROSPONDYLUS Brown. Type *L. ultimus* Brown.

- Brown, B. 1913 C, 605, 606 (December).  
 Eastman, C. R. 1914 B, 689.  
 Knowlton, F. H. 1922 A, 38.  
 Nopcea, F. 1923 H, 65 (Ogmodirus).  
 1923 A, 173.  
 Williston, S. W. 1925 B, 250.  
 Williston and Moodie 1917 A, 62.  
 Zittel and Broili 1923 A, 288.

**Leurospondylus ultimus** Brown.

- Brown, B. 1913 C, 606, figs. 1-7.  
 1914 E, 366.  
 Lydekker, R. 1914 A, 644.  
 1915 C, 632.  
 Sternberg, C. M. 1926 A, 104.  
 Williston and Moodie 1917 A, 68, fig. 3 ("Leurospondylus").  
 Upper Cretaceous (Edmonton); Alberta.

## BRACHAUCHENIIDÆ Williston.

- Williston, S. W. 1908 E, 727.  
 1925 B, 251.

BRACHAUCHENIUS Williston. Type *B. lucasi* Williston.

- Williston, S. W. 1903 A, 12.  
 Abel, O. 1919 A, 502.  
 Andrews, C. W. 1910 A, xv.  
 1913 A, 41.  
 Bogolubow, N. N. 1912 A, 174.  
 Brown, B. 1913 B, 606.  
 Linder, H. 1913 A, 344, 390.  
 Moodie, R. L. 1908 C, 320.  
 Nopcea, F. 1923 E, 1056, fig. 9.  
 1923 H, 64, 65 (Brachyauchenias).  
 1923 A, 173 (Brachyauchemas).  
 Versluys, J. 1912 B, 672.  
 Williston, S. W. 1907 A, 477, pls. xxxv-xxxvii.  
 1925 B, 251.

- Williston and Moodie 1917 A, 61.  
 Zittel and Broili 1911 A, 238.  
 1923 A, 289.

**Brachyauchenius lucasi** Williston.

- Williston, S. W. 1903 A, 12, 57, pls. xxiv, xxv.  
 Andrews, C. W. 1911 A, 162.  
 Lucas, F. A. 1903 D, 96, pl. xxviii.  
 Merrill, G. P. 1907 A, 64.  
 Williston, S. W. 1903 C, 980.  
 1907 A, 477, pl. xxxiv.  
 1908 C, 736.  
 Upper Cretaceous (Benton); Kansas, Texas.

BRIMOSAURUS Leidy. Type *B. grandis* Leidy.

- Leidy, J. 1854 B, 72.  
 Hay, O. P. 1902 A, 458 (Cimoliasaurus, in part).  
 Williston, S. W. 1902 D, 242.  
 1903 A, 8.  
 1925 B, 251.

**Brimosaurus grandis** Leidy.

- Leidy, J. 1854 B, pl. ii, figs. 1-3.  
 Hay, O. P. 1902 A, 459 (Cimoliasaurus).  
 Williston, S. W. 1902 D, 242.  
 1903 A, 8.  
 1908 C, 736.  
 Upper Cretaceous (Benton?); Arkansas.

CIMOLIASAURUS Leidy. Type *C. magnus* Leidy.

- Hay, O. P. 1902 A, 458.  
 Abel, O. 1912 F, 666.  
 Andrews, C. W. 1910 A, xv (Cimoliasaurus).  
 Bogolubow, N. N. 1912 A, 174.  
 Brown, B. 1913 A, 404 (Cimoliosaurus).  
 Case, E. C. 1898 C, 716.  
 Eimer, G. H. T. 1901 A, 21, 236.  
 Frassetto, F. 1915 A, 53, fig. 29.  
 Gadow, H. 1901 B, 478.  
 Koken and Linder 1913 A, 114 (Cimoliosaurus).  
 Linder, H. 1913 A, 404 (Cimoliosaurus).  
 Lydekker, R. 1912 C, 105 (Cimoliosaurus).  
 Mehl, M. G. 1912 B, 350 (Cimoliosaurus).  
 Nopcea, F. 1923 E, 1051 (Cimoliosaurus).

- Osborn, R. C. 1906 A, 450 (Cimoliosaurus).  
 Schuchert, C. 1913 B, 259.  
 Sternberg, C. H. 1917 A, 117.  
 Williston, S. W. 1902 D, 242.  
 1903 A, 7, pl. xviii, figs. 3, 4.  
 1904 B, 185, text-fig. 16.  
 1906 B, 221.  
 1925 B, 251 (Cimoliosaurus).

**Cimoliasaurus laramiensis** Knight.

- Hay, O. P. 1902 A, 459.  
 Lydekker, R. 1913 A, 16 (This genus?).  
 Mehl, M. G. 1912 B, 350 (Tricleidus?).  
 Williston, S. W. 1902 D, 242.



Williston, S. W. 1903 A, 7.

1905 B, 341.

1908 C, 736.

Upper Jurassic (Sundance); Wyoming.

**Cimoliasaurus magnus** Leidy.

Hay, O. P. 1902 A, 459.

Ballou, W. H. 1897 A, 23.

Bowen, C. F. 1915 A, 120, 149, 150.

Brown, B. 1914 E, 378.

Hatcher, J. B. 1905 B, 71.

Lambe, L. M. 1902 A, 32.

1904 C, 22, 37, 47.

Mehl, M. G. 1912 B, 350.

Osborn, H. F. 1902 I, 11, 16.

Williston, S. W. 1902 D, 242.

1903 A, 7.

1908 C, 736.

Upper Cretaceous (Greensand); New Jersey:  
(Belly River); Alberta.

**Cimoliasaurus snowii** Williston.

Hay, O. P. 1902 A, 459.

Linder, H. 1913 A, 346 (Cimoliosaurus).

Moodie, R. L. 1918 B, 384.

1923 B, 325.

Williston, S. W. 1902 D, 242.

1903 A, 7, 52, pl. v, fig. 5; text-fig. 13.

Upper Cretaceous (Niobrara); Kansas.

**Cimoliasaurus** sp. indet.

Hay, O. P. 1902 A, 459. Cretaceous; Kansas.

Hill, R. T. 1901 A, 328 (This genus?). Lower  
Cretaceous (Eagle Ford); Texas.

Sternberg, C. H. 1915 A, 132 (Cimoliosaurus. This  
genus?). Upper Cretaceous (Judith River);  
Montana.

**DISCOSAURUS** Leidy. Type *D. vetustus* Leidy.

Leidy, J. 1851 G, 326.

Hay, O. P. 1902 A, 459 (Cimoliasaurus, in part).

Mehl, M. G. 1912 B, 350.

Williston, S. W. 1902 D, 242.

1903 A, 8.

**Discosaurus planior** Leidy.

Hay, O. P. 1902 A, 459 (Cimoliasaurus).

Williston, S. W. 1902 D, 242 (Cimoliasaurus).

Williston, S. W. 1903 A, 7 (Cimoliasaurus).

1908 C, 736.

Upper Cretaceous; Mississippi, New Jersey.

**Discosaurus vetustus** Leidy.

Hay, O. P. 1902 A, 459 (Cimoliasaurus).

Williston, S. W. 1902 D, 242.

1903 A, 8.

Upper Cretaceous; New Jersey, Alabama.

**PLESIOSAURIA OF UNCERTAIN FAMILY POSITIONS.**

**EMBAPHIAS** Cope. Type *E. circulosus* Cope.

Hay, O. P. 1902 A, 459.

Williston, S. W. 1902 D, 242.

1903 A, 12.

1925 B, 251.

**Embaphias circulosus** Cope.

Hay, O. P. 1902 A, 459.

Williston, S. W. 1902 D, 242.

1903 A, 12.

1908 C, 736.

Williston and Moodie 1917 A, 71, pl. v.

Upper Cretaceous (Pierre); South Dakota.

**MEGALNEUSAURUS** Knight. Type *Cimoliosaurus rex* Knight.

Hay, O. P. 1902 A, 457.

Mehl, M. G. 1912 B, 348.

Williston, S. W. 1902 D, 242.

1903 A, 12.

1925 B, 251.

Zittel and Broili 1911 A, 238.

Zittel, Eastman, etc. 1902 A, 178.

**Megalneusaurus rex** Knight.

Hay, O. P. 1902 A, 457.

Gilmore, C. W. 1907 B, 193.

Williston, S. W. 1902 D, 242.

1903 A, 12.

1905 B, 341.

1908 C, 736.

Upper Jurassic (Sundance); Wyoming.

**MURÆNOSAURUS** Seeley. Type *M. leedsii* Seeley.

Seeley, H. G. 1874 B, 197, pl. xxi.

Andrews, C. W. 1896 B, 145, fig.

1909 B, 418.

1910 A, 4, 77.

1911 B, 311.

Broil and Fischer 1917 A, 408, fig. 13.

Lydekker, R. 1889 F, 180, 234 (Syn. of Cimo-  
losaurus).

Mehl, M. G. 1912 B, 344.

Nopcsa, F. 1928 A, 173.

Pravoslavlev, P. 1916 A, 328.

Seeley, H. G. 1874 A, 448, fig. 13.

1874 D, 197, pl. xxi.

Watson, D. M. S. 1924 A, 901.

Zittel and Broili 1911 A, 236.

1923 A, 287.

**Murænosaurus? reedii** Mehl.

Mehl, M. G. 1912 B, 344, figs. 1, 3 (This genus?).

Jurassic; Wyoming.

TAPHROSAURUS Cope. Type *T. lockwoodi* Cope.

Hay, O. P. 1902 A, 456 (Plesiosaurus in part).  
Williston, S. W. 1903 A, 10.  
1925 B, 251.

**Taphrosaurus lockwoodi** Cope.

Hay, O. P. 1902 A, 456 (Plesiosaurus).  
Williston, S. W. 1902 D, 241 (Plesiosaurus).  
1903 A, 10.  
1908 C, 736.  
Upper Cretaceous; New Jersey.

URONAUTES Cope. Type *U. cetiformis* Cope.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1925 B, 252.

**Uronautes cetiformis** Cope.

Hay, O. P. 1902 A, 457.  
Bowen, C. F. 1915 A, 120.  
Hatcher, J. B. 1905 B, 72 (Uronaites).  
Osborn, H. F. 1902 I, 11.

Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1908 C, 736.

Upper Cretaceous (Judith River); Montana.

**Uronautes** sp. indet.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1903 A, 11. Upper Cretaceous  
(Fox Hills); New Mexico.

OLIGOSIMUS Leidy. Type *O. grandævus* Leidy.

Hay, O. P. 1902 A, 459.  
Williston, S. W. 1902 D, 242.  
1903 A, 10.  
1925 B, 251.

**Oligosimus grandævus** Leidy.

Hay, O. P. 1902 A, 459.  
Merrill, G. P. 1907 A, 74.  
Williston, S. W. 1902 D, 242.  
1903 A, 10.  
1908 C, 736 (*O. primævus*).  
Horizon indefinite; Wyoming.

OROPHOSAURUS Cope. Type *O. pauciporus* Cope.

Hay, O. P. 1902 A, 459.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1925 B, 251.

**Orophosaurus pauciporus** Cope.

Hay, O. P. 1902 A, 459.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1908 C, 736 (Ophrosaurus).  
Upper Cretaceous (Fox Hills); New Mexico.

PANTOSAURUS Marsh. Type *Parasaurus striatus* Marsh.

Hay, O. P. 1902 A, 456.  
Williston, S. W. 1902 D, 242.  
1903 A, 12.  
1925 B, 251.

**Pantosaurus striatus** Marsh.

Hay, O. P. 1902 A, 456.  
Dames, W. 1898 B, 142.

Mehl, M. G. 1912 B, 348.  
Williston, S. W. 1902 A, 12.  
1902 D, 242.  
1905 B, 341.  
1906 B, 221.  
1908 C, 736.

Upper Jurassic (Sundance); Wyoming.

PIPTOMERUS Cope. Type *P. megalaporus* Cope.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1902 D, 243.  
1903 A, 11.  
1925 B, 251.

**Piptomerus hexagonus** Cope.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1908 C, 736.  
Upper Cretaceous (Fox Hills); New Mexico.

**Piptomerus megalaporus** Cope.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1908 C, 736.  
Upper Cretaceous (Fox Hills); New Mexico.

**Piptomerus microporus** Cope.

Hay, O. P. 1902 A, 457.  
Williston, S. W. 1902 D, 242.  
1903 A, 11.  
1908 C, 736.  
Upper Cretaceous (Fox Hills); New Mexico.

PIRATOSAURUS Leidy. Type *P. plicatus* Leidy.

- Hay, O. P. 1902 A, 456.  
 Williston, S. W. 1903 A, 10.  
     1908 C, 735.  
     1925 B, 250.

**Piratosaurus plicatus** Leidy.

- Hay, O. P. 1902 A, 456.  
 Merrill, G. P. 1907 A, 75.  
 Williston, S. W. 1903 A, 10.  
     1908 C, 736.  
 Upper Cretaceous; Manitoba.

ISCHYROTHERIUM Leidy. Type *I. antiquum* Leidy.

- Hay, O. P. 1902 A, 461.  
 Palmer, T. S. 1904 A, 352, 948.  
 Stanton and Hatcher 1905 A, 38.  
**Ischyrotherium antiquum** Leidy.  
 Hay, O. P. 1902 A, 461.  
 Bowen, C. F. 1915 A, 120, 149 (Ischyrosaurus).  
 Cope, E. D. 1874 B, 433 (Ischyrosaurus).  
 Dollo, L. 1889 G, 674.

- Hatcher, J. B. 1905 B, 72 (This species?).  
 Osborn, H. F. 1902 H, 674 (Ischyrosaurus).  
     1902 I, 11, 16 (Ischyrosaurus).  
 Parks, W. A. 1927 A, 10.  
 Peale, A. C. 1912 A, 754.  
 Stromer, E. 1910 B, 482.  
 Upper Cretaceous (Judith River); Montana:  
 (Pierre?); South Dakota?: (Lance); Wyo-  
 ming.

## Order ICHTHYOSAURIA Blainville.

- Blainville, H. M. D. 1835 A, 271.  
 Hay, O. P. 1902 A, 461.  
 Abel, O. 1901 B, 316 ("ichthyosaurier").  
     1904 B, 741.  
     1905 B, 202, 204.  
     1907 A, 226 (Ichthyopterygia).  
     1908 G, (42) ("ichthyosaurier").  
     1909 F, 465 ("ichthyosaurier").  
     1910 B, (186).  
     1912 F, 119, 468, 526, 679 ("ichthyosaurier").  
     1914 C, 341 ("ichthyosaurier").  
     1919 A, 453.  
     1920 A, 372.  
     1921 A, 145, 165, 203, 298 ("ichthyosaurier").  
     1923 B, 271 (Longipinnati, Latipinnati).  
     1925 A, 149 ("ichthyosaurier").  
 Agassiz, L. 1844 D, 137 ("ichthyosaures").  
 Ahlborn, F. 1896 B, 2.  
 Andrews, C. W. 1910 A, x, xii (Ichthyosauria);  
     1 (Ichthyopterygia).  
 Anonymous 1908 D, 349.  
 Arlitt, T. 1907 D, 660.  
 Arthaber, G. 1906 A, 307 ("ichthyosaurier").  
 Bauer, F. 1901 A, 46 (Ichthyopterygia).  
 Baur, G. 1889 L, 312.  
 Beddard, F. E. 1900 A, 20.  
 Boas, J. E. V. 1914 B, 560 ("ichthyosaurier").  
     1914 C, 280 ("ichthyosauren").  
 Böker, H. 1927 A, 38 ("ichthyosaurier").  
 Boule, M. 1902 B, 905 ("ichthyosaures").  
 Boulenger, G. A. 1904 C, 480.  
     1917 C, 456 ("ichthyosaurens").  
     1917 D, 1045 ("ichthyosaures").  
 Branca, W. 1908 A ("ichthyosauren").  
     1908 C, 392 ("ichthyosauren").  
 Brandt, J. F. 1885 A, 17 (Ichthyopterygia).  
 Brauer, A. 1908 A, 88 ("ichthyosaurier").  
 Brauns, D. 1890 A, 161, 187, 202.  
 Broili, F. 1909 A, 295 ("ichthyosaurier").  
     1916 A, 487 ("ichthyosaurier").  
     1920 A, 320 ("ichthyosaurier").  
 Bronn, H. G. 1849 A, 845, seq. ("ichthyosauren").  
 Broom, R. 1901 A, 188.  
     1902 D, 554.  
     1903 I, 554.

- Broom, R. 1904 C, 111 ("ichthyosaurs").  
     1922 A, 17, 22, 25.  
     1924 B, 64, fig. 13.  
     1924 C, 75.  
 Bryant, H. C. 1914 B, 155.  
 Camp, C. L. 1923 A, 348 ("ichthyosaurs").  
 Carus, V. 1875 A, 413 (Ichthyopterygia).  
 Case, E. C. 1898 C, 711.  
     1905 E, 180 ("ichthyosaurs").  
     1923 A, 517 (Ichthyopterygia).  
 Cope, E. D. 1891 N, 35, 40, fig. 19 (Ichthyop-  
 terygia).  
 Cunningham, J. T. 1897 A, 493 ("ichthyosaur-  
 ians").  
 Dabelow, A. 1926 A, 95 ("ichthyosaurier").  
 Day, H. 1915 A, 428.  
 Döderlein, L. 1900 A, 334.  
 Dollo, L. 1883 G, 594.  
     1885 C, 322.  
     1896 A.  
     1899 A, 203 ("ichthyosaures").  
     1904 A, 221 ("ichthyosaurens").  
     1906 A, 441 ("ichthyosaures").  
     1907 C, 157 ("ichthyosaurens").  
     1919 A, 30 ("ichthyosaurens").  
 Emery, C. 1897 D, 601 ("ichthyosaurier").  
 Fraas, E. 1905 B, 368.  
     1913 C, 1 ("ichthyosaurier").  
 Frech, F. 1906 A, 496 ("ichthyosaurier").  
 Fuchs, H. 1909 B, 114, 141.  
     1911 B.  
 Fürbringer, M. 1902 B, 727 ("ichthyosaurier").  
     1904 A.  
 Gadow, H. 1901 B, 478 (Ichthyosauria); 483  
     (suborder Ichthyosauri).  
     1902 B, 359.  
 Gegenbaur, C. 1870 A, 332 ("ichthyosaurier").  
 Gervais, P. 1852 A, 269 ("ichthyosaurens").  
     1853 B, 35 ("ichthyosaures").  
     1859 A, 481 ("ichthyosaurens").  
 Goodrich, E. S. 1916 A, 263.  
 Greene, J. R. 1861 A, 219, 225 (Ichthyop-  
 terygia).  
 Gregory, W. K. 1917 C, 975 ("ichthyosaurs").  
 Haeckel, E. 1868 A, 455.  
     1873 A, 512.

- Heilprin, A. 1887 A, 162, 172.  
 Hilzheimer, M. 1913 A, 513 ("ichthyosaurier").  
 Hoernes, R. 1886 A, 595 (Ichthyopterygia).  
 1912 A, 661.  
 Hoffmann, C. K. 1890 B, 1302 (Ichthyosauri).  
 Howes, G. B. 1893 C, 586.  
 Howes and Swinnerton 1901 A, 2, 29.  
 Hubrecht, A. A. W. 1908 A, 153 (Ichthyopterygia).  
 Huene, F. 1902 A, 10 ("ichthyopterygier").  
 1903 A, 441 ("ichthyosaurier").  
 1910 B, 45 ("ichthyosaurier").  
 1914 G, 47 ("ichthyosaurier").  
 1914 J, lxxxix ("ichthyosaurier").  
 1920 B, 206 ("ichthyosaurier").  
 1922 B ("ichthyosaurier").  
 1923 C, 463 (Ichthyopterygia).  
 1923 D, 265 ("ichthyosaurier").  
 1925 A, 90 ("ichthyosaurier").  
 1925 D, 233 ("ichthyosaurier"); 238 (Ichthyopterygia).  
 1925 F, 234 ("ichthyosaurier").  
 1926 A, 260, 266.  
 1926 C, 66, 81.  
 1926 I, 78 ("ichthyopterygier").  
 1927 A, 22 ("ichthyosaurier").  
 Huxley, T. H. 1862 A, xlviii.  
 1863 F, 529.  
 Jaekel, O. 1904 A, 27, 34 ("ichthyosaurier").  
 1905 B, 62 ("ichthyosaurier").  
 1908 B, 464 ("ichthyosaurier").  
 1910 C, 325, 334 (Ichthyosauri).  
 1910 D, 113 (Enaliosauria).  
 1911 A, 140 (Ichthyosauri).  
 1912 A, 619 ("ichthyosaurier").  
 1922 B, 120 ("ichthyosaurier").  
 1926 F, 62 ("ichthyosaurier").  
 Kingsley, J. S. 1912 B, 92 ("ichthyosaurs").  
 1925 A, 253 (Ichthyopterygia).  
 Knipe, H. R. 1912 A, 79, fig.  
 Koken, E. 1893 B, 353 ("ichthyosaurier").  
 1901 B, 221 ("ichthyosaurier").  
 Larger, R. 1913 A, 721 ("ichthyosaures").  
 Lavocat, A. 1885 A, 34 ("ichthyosaures").  
 Leunis and Ludwig 1883 A, 598.  
 Lucas, F. A. 1902 B, 136 ("ichthyosaurs").  
 Lull, R. S. 1917 B, 322, 330, 710.  
 Lydekker, R. 1912 C, 4, 27, 103, 133, 136 (Ichthyopterygia).  
 1915 C, 626 ("ichthyosaurs").  
 McGregor, J. H. 1901 A, 272.  
 1902 A, 27.  
 1905 A, 295.  
 1906 A, 88 (Ichthyopterygia).  
 Matthew, W. D. 1921 D, 211 ("ichthyosaurs").  
 Mehl, M. G. 1928 B, 19.  
 Merriam, J. C. 1908 D, 311.  
 1904 B, 218 (Latipinnati, Longipinnati).  
 1905 A, 33 ("ichthyosaurs").  
 1908 B, 659 ("ichthyosaurs").  
 1908 C, 12, 89.  
 1912 B, 221 ("ichthyosaurs").  
 1915 G, 97 ("ichthyosaurs").  
 Newton, E. T. 1900 A, 645.  
 Noack, T. 1880 A, 76 ("ichthyosaurier").  
 Nopcea, F. 1922 A, 112, 116 ("ichthyosaurier").  
 1923 B, 357 ("ichthyosaurier").  
 Nopcea, F. 1923 H, 1-165 (Ichthyosauria); 113, 121, 127, 171 (Ichthyopterygia).  
 1926 A, 651.  
 1928 A, 168.  
 Osborn, H. F. 1903 D, 313 ("ichthyosaurs").  
 1903 H, 454, 456, 504.  
 1904 D, 218.  
 1904 H, 113.  
 1904 N, 308.  
 1905 C, 295.  
 1905 M, 414 ("ichthyosaurs").  
 1911 C, 589, pl. i ("ichthyosaurs").  
 1917 B, 201.  
 1917 D, 660 ("ichthyosaurs").  
 Osburn, R. C. 1906 A, 447 ("ichthyosaurs").  
 Owen, R. 1845 B, 275 (Ichthyosauri).  
 1868 A, 886.  
 Palacký, J. 1902 B, 141 ("ichthyosaurier").  
 Parker and Haswell 1897 A, 314 (Ichthyopterygia).  
 Perrier, E. 1920 A, 324 ("ichthyoptérygiens").  
 Pompeckj, J. F. 1925 A, 6, 9 ("ichthyosaurier").  
 1926 B, 62 ("ichthyosaurier").  
 Pycraft, W. P. 1909 A, 205.  
 Rabl, C. 1901 A, 520 ("ichthyosauren").  
 1903 A, 155 ("ichthyosaurier").  
 Reynolds, S. H. 1897 A, 195, 272, 275, 276, 277, 286, 287, fig. 32.  
 Ridewood, W. G. 1897 D, 190 (Ichthyopterygia).  
 Rogenhofer, A. 1908 A (38) ("ichthyosaurier").  
 Ryder, J. 1887 A, 346 ("ichthyosaurs").  
 1887 B, 438.  
 Sabatier, A. 1902 A, 100 ("ictyosaures").  
 Schuchert, C. 1915 A, 856.  
 Seeley, H. G. 1887 D, 338 (Ichthyopterygia).  
 1908 A, 436.  
 1908 E, 441.  
 Semon, R. 1901 B, 130 ("ichthyosaurier").  
 Sewertsoff, A. N. 1908 A.  
 Steinmann, G. 1900 A, 280.  
 1907 A, 441.  
 1908 A, 235-237.  
 1909 A, 86.  
 1912 A, 49 ("ichthyosaurier").  
 1912 B, 718, 721.  
 Sterling, S. 1910 C, 667 ("ichthyosaurier").  
 Stromer, E. 1908 B, 170.  
 1912 A, 103, 126.  
 Sushkin, P. P. 1925 A, 180.  
 1927 A, 320 ("ichthyosaurs").  
 Symington, J. 1905 A, 109.  
 Terra, P. 1911 A, 235 (Ichthyosauri).  
 Thevenin, A. 1910 A, 59 ("ichthyoptérygiens").  
 Thilenius, G. 1897 A, 484 ("ichthyopterygier").  
 Tornier, G. 1913 B, 350, 374.  
 Versluys, J. 1912 A, 501 ("ichthyosaurier").  
 1912 B, 550, 573, 654, 687.  
 1919 A, 18, 24.  
 Vogt, C. 1879 A, 243 ("ichthyosaures").  
 Watson, D. M. S. 1912 B, 584.  
 1913 D, 27 ("ichthyosaurs").  
 1917 C, 178.  
 Wegner, R. N. 1922 A, 480.  
 Wilckens, O. 1911 A, 710 ("ichthyosaurier").  
 Williston, S. W. 1902 F, 263 ("ichthyosaurs").  
 1904 B, 176.

- Williston, S. W. 1908 A, 148.  
 1909 A, 394 ("ichthyosaurs").  
 1912 B, 651.  
 1912 E, 259 ("ichthyosaurs").  
 1914 A, 17, 45, 107.  
 1914 D, 391, 399.  
 1917 C, 416 (Ichthyosauria); 414, 416 (Parrapsida, in part).  
 1918 A, 79.  
 1925 A, *passim*.  
 1925 B, 212, 255.
- Wiman, C. 1912 A, 235 ("ichthyosaurier").  
 1921 A, 19.  
 1922 A, 119 ("ichthyosaurier").
- Wiman, C. 1923 B, 272 ("ichthyosaurier").  
 Woodward, A. S. 1898 E, 330.  
 1904 D, 144 (Ichthyopterygia).  
 1909 A, 325 ("ichthyosaurs").  
 1910 B, 465, 469.  
 1917 C, 540 ("ichthyosaurs").  
 1922 C, 37.  
 1923 A, 31.
- Woodward, H. 1904 B, 144 (Ichthyopterygia).  
 Yakowlew, N. 1903 A, 265 ("ichthyosaurier").  
 Zittel and Broili 1911 A, 220.  
 1923 A, 268, 383.  
 Zittel, Eastman, etc. 1902 A, 165.

## MIXOSAURIDÆ Baur.

- Baur, G. 1887 D, 839, 840.  
 Huene, F. 1923 C, 465 (Latipinnatidæ).  
 Merriam, J. C. 1908 C, 89.  
 Nopcsa, F. 1928 A, 168 (Mixosaurinæ).
- Watson, D. M. S. 1917 C, 178.  
 Zittel and Broili 1911 A, 228.  
 1923 A, 276.

## MIXOSAURINÆ.

- Merriam, J. C. 1908 C, 89.  
 Nopcsa, F. 1928 H, 27, 121.
- Watson, D. M. S. 1917 C, 179.

MIXOSAURUS Baur. Type *Ichthyosaurus cornalianus* Bassini.

- Baur, G. 1887, Ber. Oberh. Geol. Ver., xx, 19.  
 Abel, O. 1919 A, 461, 464, 474, 904, figs. 360, 365, 366, 376, 377.  
 Broom, R. 1921 A, 154.  
 Huene, F. 1916 A, 3, 36, pls. 1-3; text-figs. 37-54, 87, 88.  
 1922 B, 70, 71, pl. xx, fig. 6.  
 1923 D, 267.
- Huene, F. 1925 E, 289, figs. 1-3.  
 Merriam, J. C. 1908 C, *passim*, 94.  
 1910 B, 389.  
 1911 C, 318.  
 Nopcsa, F. 1923 H, 26, 27, 29.  
 1928 A, 168.  
 Watson, D. M. S. 1917 C, 179.  
 Wiman, C. 1912 A, 234.

## SHASTASAURIDÆ Merriam.

- Merriam, J. C. 1902 A, 87.  
 1903 A, 252.  
 Nopcsa, F. 1928 A, 168 (Shastosaurinæ).
- Williston, S. W. 1925 B, 256 (Shastosauridæ).  
 Zittel and Broili 1923 A, 276 (Mixosauridæ).

## SHASTASAURINÆ Merriam.

- Merriam, J. C. 1908 C, 89.  
 Nopcsa, F. 1923 H, 27, 121.
- Watson, D. M. S. 1917 C, 179.

PHALARODON Merriam, J. C. Type *P. fraasi* Merriam.

- Merriam, J. C. 1910 B, 382.  
 Huene, F. 1916 A, 21.  
 1922 B, 70, 71 (Mixosaurus).  
 Merriam, J. C. 1911 C, 325, 326.  
 Nopcsa, F. 1923 H, 76.  
 1928 A, 168.  
 Williston, S. W. 1925 B, 256.  
 Wiman, C. 1916 A, 66.  
 1923 B, 272, figs. 1, 2.
- Zittel and Broili 1911 A, 228.  
 1923 A, 277.
- Phalarodon *fraasi* Merriam, J. C.  
 Merriam, J. C. 1910 B, 382, pl. xl; text-figs. 1-3.  
 Huene, F. 1916 A, 21, 53, 65, text-fig. 85.  
 Wiman, C. 1916 A, 66.  
 Middle Triassic; Nevada.

CYMBOSPONDYLUS Leidy. Type *C. piscosus* Leidy.

- Hay, O. P. 1902 A, 463 (Cymbospondylus, Chonespondylus).  
 Abel, O. 1919 A, 473.  
 Andrews, C. W. 1910 A, xi.  
 Broili, F. 1916 A, 476-494.  
 Broom, R. 1922 A, 24.  
 Huene, F. 1914 J, lxxix.  
 1916 A, 21, 22, 36, 43, 47, pls. v, vi; text-figs. 37-47, 71, 76-81.  
 1922 B, 76.
- Huene, F. 1923 C, 465, 466.  
 1923 D, 267.  
 1925 H, 413.  
 Merriam, J. C. 1902 A, 64, 104, 107 (Chonespondylus a syn?).  
 1903 A, 251.  
 1908 C, 21, 103.  
 1910 B, 389.  
 Nopcsa, F. 1923 H, 27, 29, 162.  
 1926 A, 638.

- Nopcea, F. 1928 A, 168.  
 Osborn, H. F. 1902 H, 749.  
     1917 B, 311, figs.  
 Pompeckj, J. F. 1925 A, 13.  
 Watson, D. M. S. 1917 C, 179.  
 Williston, S. W. 1925 A, 103, 112, fig. 80.  
     1925 B, 256, fig. 178.  
 Wiman, C. 1910 B, 126 (This genus?).  
 Zittel and Broili 1911 A, 228.  
     1923 A, 277.

### **Cymbospondylus natans Merriam.**

- Merriam, J. C. 1908 C, 150, pl. x, fig. 1; pl. xiii, fig. 1; text-figs. 44, 152. (This genus?).  
 Fraas, E. 1911 A, 485.  
 Huene, F. 1916 A, 64.  
 Merriam, J. C. 1911 C, 319 (Cymbospondylus?); 326 (Mixosaurus?).  
 Wiman, C. 1910 B, 129.  
     1916 A, 66 (This genus?).  
     Triassic (Middle); Nevada.

### **Cymbospondylus nevadanus Merriam.**

- Merriam, J. C. 1908 C, 124, pl. xiii, figs. 2-4; text-figs. 138.  
 Wiman, C. 1910 B, 129.  
     Triassic (Middle); Nevada.

### **Cymbospondylus petrinus Leidy.**

- Hay, O. P. 1902 A, 463 (C. petrinus, Chonespondylus grandis).

- Abel, O. 1925 A, 163, fig. 104.  
 Broili, F. 1916 A, 483, fig. 2.  
 Camp, C. L. 1923 A, 348.  
 Fraas, E. 1911 A, 485.  
 Huene, F. 1916 A, 45, figs. 74, 89, 90.  
     1926 C, 85.  
 Merriam, J. C. 1902 A, 106, pl. xvi, figs. 4, 5.  
     1905 A, 34.  
     1908 C, 11, 104, pls. u-vi; pl. vii, fig. i; pls. viii, ix; pl. x, figs. 2-8; pls. xi, xii; 36 text-figs. (Chonespondylus grandis a syn.).  
     1915 G, 96, pl. x.  
 Versluys, J. 1919 A, 18, fig. 17.  
 Williston, S. W. 1918 A, 79, fig. 3.  
 Wiman, C. 1910 B, 129.  
     1912 A, 237.  
     1916 A, 67.  
     1921 A, 22.  
     Triassic (Middle); Nevada.

### **Cymbospondylus piscosus Leidy.**

- Hay, O. P. 1902 A, 463.  
 Merriam, J. C. 1902 A, 104, pl. xvi, figs. 1, 2.  
     1908 C, 123, figs. 136, 137.  
 Wiman, C. 1910 B, 129.  
     Triassic (Middle); Nevada.

### **Cymbospondylus sp. indet.**

- Abel, O. 1919 A, 475, fig. 378.

## **MERRIAMIA Boulenger. Type *Leptocheirus zitteli* Merriam.**

- Boulenger, G. A. 1904 B, 425 (To replace "Leptocheirus," preoccupied).  
 Abel, O. 1912 F, 144.  
     1919 A, 473.  
 Huene, F. 1916 A, 47, 52, fig. 84.  
     1923 C, 466.  
     1925 H, 417.  
 Lydekker, R. 1912 C, 134.  
 Merriam, J. C. 1903 A, 250, 253 (Leptocheirus, type L. zitteli).  
     1905 C, 23.  
     1908 C, 12, 129.  
 Nopcea, F. 1923 H, 26 (Merriam).  
     1928 A, 168.  
 Osburn, R. C. 1906 A, 453.  
 Watson, D. M. S. 1917 C, 179.
- Williston, S. W. 1903 D, 516 (Leptocheirus).  
     1914 A, 118, fig. 57.  
 Wiman, C. 1916 A, 71.  
 Zittel and Broili 1911 A, 228.  
     1923 A, 277.

### **Merriamia zitteli (Merriam).**

- Merriam, J. C. 1903 A, 250, 253, pls. xxi-xxiii (Leptocheirus).  
 Abel, O. 1912 F, 144, fig. 84.  
     1919 A, 462, fig. 361.  
 Lull, R. S. 1917 B, 330, fig. 68.  
 Merriam, J. C. 1908 C, 129, figs. 8, 79, 92, 99, 140-142.  
 Nopcea, F. 1926 A, 653, text-fig. 6 (Merriam).  
     Upper Triassic (Hosselkus); California.

## **TOROTECNEMUS Merriam.**

- Merriam, J. C. 1903 A, 250, 251, 259.  
 Abel, O. 1912 F, 144.  
 Broili, F. 1916 A, 491.  
 Huene, F. 1916 A, 35, 47.  
     1922 B, 73, 77.  
     1923 C, 466.  
     1923 D, 267.  
 Merriam, J. C. 1903 D, 312.  
     1905 C, 23.  
     1908 C, 12, 127.  
 Nopcea, F. 1923 H, 26, 27, 29.  
     1928 A, 168.  
 Osburn, R. C. 1906 A, 453.  
 Watson, D. M. S. 1917 C, 179.
- Williston, S. W. 1903 D, 516 (Torotecnemus).  
     1925 B, 256.  
 Wiman, C. 1916 A, 71.  
 Zittel and Broili 1911 A, 228.  
     1923 A, 277.

### **Toretcnemus californicus Merriam.**

- Merriam, J. C. 1903 A, 250, 260, pl. xxiv.  
 Huene, F. 1916 A, 35.  
     1922 B, 77, pl. xx, figs. 1-4.  
 Merriam, J. C. 1908 C, 128, pl. xiv, fig. 4; text-figs. 59, 69, 98, 139.  
 Osburn, R. C. 1906 A, pl. vii, fig. 6.  
     Upper Triassic (Hosselkus); California.

DELPHINOSAURUS Merriam. Type *Shastasaurus perrini* Merriam.

- Merriam, J. C. 1905 C, 24.  
 Broili, F. 1916 A, 489.  
 Huene, F. 1916 A, 35, 38, 47.  
 1925 H, 413.  
 Merriam, J. C. 1905 A, 34.  
 1905 G, 404 (*Shastasaurus*).  
 1908 C, 11, 131.  
 Nopcsa, F. 1923 E, 1051.  
 1923 H, 27.  
 Watson, D. M. S. 1917 C, 179.  
 Williston, S. W. 1925 B, 256.  
 Wiman, C. 1916 A, 71.

**Delphinosaurus perrini** Merriam.

- Merriam, J. C. 1902 A, 69, 89, pls. v-vii (*Shastasaurus*).  
 Fraas, E. 1911 A, 485.  
 Huene, F. 1926 C, 85, fig. 8.  
 Merriam, J. C. 1903 A, 250 (*Shastasaurus*).  
 1905 C, 24, fig. 3.  
 1908 C, 131, pl. vii, figs. 2, 3; pl. xiv, figs. 1-3; pl. xvii, fig. 2; 15 text-figs.  
 Osburn, R. C. 1906 A, 461, pl. vii, fig. 3.  
 Wiman, C. 1910 B, 133.  
 1921 A, 22.  
 Triassic (Hosselkus); California.

SHASTASAURUS Merriam. Type *S. pacificus* Merriam.

- Merriam, J. C. 1902 A, 64, 69.  
 Hay, O. P. 1902 A, 463.  
 Abel, O. 1919 A, 474.  
 1928 A, 369.  
 Andrews, C. W. 1910 A, xi, xiii.  
 Boulenger, G. A. 1904 B, 425.  
 Broili, F. 1916 A, 477-492.  
 Gilmore, C. W. 1905 A, 107.  
 Huene, F. 1902 A, 10.  
 1914 J, lxxxix.  
 1916 A, 21, 29, 37, 47, pl. viii; text-figs. 48-51, 53-54.  
 1922 B, 77, 82.  
 1922 D, 279.  
 1923 C, 466.  
 1925 H, 412.  
 Lucas, F. A. 1902 B, 138.  
 McGregor, J. H. 1906 A, 91.  
 Merriam, J. C. 1902 B, 411.  
 1903 A, 250, 251.  
 1903 D, 311.  
 1905 A, 34.  
 1908 A, 217.  
 1908 C, 11, 21, 137.  
 Nopcsa, F. 1923 E, 1051.  
 1923 H, 26, 27.  
 1928 A, 168.  
 Osborn, H. F. 1902 H, 749.  
 1905 L, 563 (*Shastasaurus*).  
 1905 M, 414.  
 Osburn, R. C. 1906 A, 461.  
 Philippi, Frech and Volz 1903 A, 15 (*Schastasaurus*).  
 Watson, D. M. S. 1917 C, 179.  
 Williston, S. W. 1903 A, 36.  
 1903 D, 515.  
 Wiman, C. 1916 A, 68.  
 Yakowlew, N. 1903 A, 265 (*Shastasaurus*).  
 Zittel and Broili 1911 A, 228.  
 1923 A, 277.  
 Zittel, Eastman, etc. 1902 A, 171.

**Shastasaurus alexandræ** Merriam.

- Merriam, J. C. 1902 A, 69, 98, pls. xii, xiii; text-fig. 2.

- Andrews, C. W. 1910 A, 47.  
 Merriam, J. C. 1905 C, 24.  
 1908 C, 142.  
 Triassic (Hosselkus); California.  
**Shastasaurus altispinus** Merriam.  
 Merriam, J. C. 1902 A, 69, 99, pl. xiv, fig. 5; pl. xv.  
 Huene, F. 1916 A, 32, text-figs. 55, 64.  
 1925 H, 412 (*S. altispinax*).  
 Merriam, J. C. 1908 C, 144, pl. xviii, figs. 1-4; text-figs. 33, 66, 149.  
 Triassic (Hosselkus); California.  
**Shastasaurus careyi** Merriam.  
 Merriam, J. C. 1902 A, 69, 98, pl. xvi, figs. 3-4.  
 1908 C, 145, pl. xv, fig. 2; pl. xviii, figs. 5, 6; text-figs. 29, 95 (This species?).  
 Triassic (Hosselkus); California.

**Shastasaurus osmonti** Merriam.

- Merriam, J. C. 1902 A, 69, 98, pls. viii-xi.  
 Andrews, C. W. 1910 A, 47.  
 Huene, F. 1916 A, 45, figs. 73, 91.  
 1926 C, 85.  
 Merriam, J. C. 1905 C, 23, fig. 4.  
 1908 C, 30, 138, pl. xv, figs. 1, 34; pl. xvii, fig. 1; 12 text-figs.  
 Osburn, R. C. 1906 A, pl. vii, fig. 4.  
 Wiman, C. 1910 B, 133.  
 1916 A, 68, fig. 3.  
 1921 A, 22.  
 1923 B, 272.  
 Triassic (Hosselkus); California.

**Shastasaurus pacificus** Merriam.

- Merriam, J. C. 1902 A, 102, pl. xiv, figs. 1, 2; text-fig. 1.  
 Hay, O. P. 1902 A, 463.  
 Huene, F. 1916 A, 31, 47, text-fig. 52.  
 Merriam, J. C. 1908 C, 143, pl. xvii, fig. 3; text-fig. 148.  
 Smith, J. P. 1894 A, 608 (*Nothosaurus* sp.).  
 Wiman, C. 1910 B, 125.  
 1921 A, 22.  
 Triassic (Hosselkus); California.

## OPHTHALMOSAURIDÆ Andrews.

- Andrews, C. W. 1910 A, 2.  
 Hay, O. P. 1902 A, 463 (Baptanodontidæ).  
 Boulenger, G. A. 1904 B, 425 (Baptanodontidæ).  
 Brauns, D. 1890 A, 202 (Baptanodontia).

- Gilmore, C. W. 1906 B, 333 (Baptanodontidæ).  
 Merriam, J. C. 1903 C, 10 (Baptanodontidæ):  
 90 (Baptanodontinæ).  
 Williston, S. W. 1925 B, 258.

OPHTHALMOSAURUS Seeley. Type *O. icenicus* Seeley.

Unless otherwise indicated the authors quoted use for the American species of this genus the name *Baptanodon*.

- Seeley, H. G. 1874 C, 699, pls. xlv, xlv  
 (Ophthalmosaurus).

- Hay, O. P. 1902 A, 463.

- Abel, O. 1905 B, 204.

- 1909 A, 252.

- 1912 F, 526.

- 1919 A, 467, 480, figs. 369, 371, 375, 381.

- 1925 A, 165, fig. 106.

- Andrews, C. W. 1907 B, 203 (Ophthalmosaurus).

- 1910 A, 2, with pls. and text-figs. (Ophthalmosaurus).

- 1915 A, 145.

- Baur, G. 1885 L.

- Boule, M. 1891 A, 9 (Sauranodon).

- Boulenger, G. A. 1904 B, 424.

- Branca, W. 1908 B, 44.

- Braus, H. 1906 A, 292.

- Broili, F. 1916 A, 490.

- Case, E. C. 1898 C, 713.

- Dames, W. 1898 B, 141.

- Emery, C. 1887 A, 187 (Sauranodon).

- Fraas, E. 1913 C, 8 (Baptanodon, Ophthalmosaurus).

- Gilmore, C. W. 1902 A, 913 (Baptanodon); 914  
 (Microdontosaurus, type *M. petersonii*).

- 1903 A, 750 (Baptanodon or Ophthalmosaurus).

- 1905 A, 77, 116.

- 1906 B, 325.

- Heilprin, A. 1887 A, 162 (Sauranodon).

- Holland, W. J. 1908 D, 191.

- Huene, F. 1903 A, 442.

- 1911 A, 737.

- 1922 B, 102.

- 1922 D, 279.

- 1922 H, 151.

- 1923 C, 465, 466.

- 1923 D, 268.

- 1925 A, 95.

- 1925 F, 237.

- 1927 A, 25.

- Knight, W. C. 1903 B, 76.

- Koken, E. 1906 A, 311 (Ophthalmosaurus).

- Loomis, F. B. 1901 A, 193.

- Lull, R. S. 1917 B, 334.

- Lydekker, R. 1888 C, 309 (Ophthalmosaurus).  
 1889 F, 8 (Ophthalmosaurus).

- 1905 A, 304.

- 1907 C, 459.

- 1909 C, 465.

- 1911 A, 684.

- 1912 C, 32, 102, 134, 136.

- Merriam, J. C. 1903 A, 252.

- 1905 A, 36.

- 1905 C, 26.

- 1905 G, 403.

- 1912 B, 221.

- Merriam and Gilmore 1928 A, 3.

- Nicholson and Lydekker 1889 A, 1127 (Ophthalmosaurus, Baptanodon).

- Nopce, F. 1923 H, 12, 23-26, 160, pl. iv, fig. 4.  
 1928 A, 168.

- Osborn, H. F. 1905 M, 414.

- 1917 B, 205, fig.

- Osburn, R. C. 1906 A, 452.

- Peck, F. B. 1904 A, 36, fig. 4.

- Pycraft, W. P. 1909 A, 204.

- Schuchert, C. 1918 B, 251, 253 (Baptanodon, Ophthalmosaurus).

- Seeley, H. G. 1887 D, 339.

- Seitz, A. L. L. 1907 A, 291.

- Sollas, W. J. 1916 A, 68, 78, 105.

- Stromer, E. 1921 A, 56.

- Williston, S. W. 1903 A, 36, 69.

- 1914 A, 113, figs. 53-55.

- 1918 A, 79, fig. 3.

- 1925 A, 61, 62, 102, 131, 193, figs. 50, 51,  
 80, 103, 158.

- 1925 B, 258.

- Wiman, C. 1910 B, 141.

- 1921 A, 23, 28, fig. 2.

- 1923 B, 274.

- Woodward, A. S. 1898 B, 133 (Ophthalmosaurus).

- Zittel, K. A. 1890 A, 473 (Ophthalmosaurus).

- Zittel and Broili 1911 A, 228 (Baptanodon);  
 229 (Ophthalmosaurus).

- 1923 A, 277.

- Zittel, Eastman, etc. 1902 A, 171.

## Ophthalmosaurus discus (Marsh).

- Hay, O. P. 1902 A, 463 (Baptanodon).

- Andrews, C. W. 1910 A, 46 (Baptanodon).

- Emery, C. 1887 A, 189, fig. C (Baptanodon).

- Gilmore, C. W. 1902 A, 913 (Baptanodon. This  
 species?); 914 (Microdontosaurus petersonii).

- 1903 A, 750 (Baptanodon).

- 1905 A, 80, 121, pls. vii-xii; text-figs. 1-  
 22, 25 (Baptanodon).

- 1907 B, 194, 198 (Baptanodon).

- Lambe, L. M. 1907 C, 224 (Baptanodon).

- Merriam, J. C. 1908 C, 61, figs. 85, 107 (Baptanodon).

- Williston, S. W. 1905 B, 341 (Baptanodon).

- Wortman, J. L. 1900 A, 165 ("Baptanodon").

- Upper Jurassic (Sundance); Wyoming.

## Ophthalmosaurus marshi (Knight).

- Knight, W. C. 1903 B, 77, 81, figs. 1-3  
 (Baptanodon).

- Gilmore, C. W. 1905 A, 103, 121, figs. 23, 24,  
 26 (Baptanodon).

- Merriam, J. C. 1905 C, 26, fig. 7 (Baptanodon).

- Williston, S. W. 1905 B, 341 (Baptanodon).

- Upper Jurassic (Sundance); Wyoming.



**Ophthalmosaurus natans (Marsh).**

- Hay, O. P. 1902 A, 463 (Baptanodon).  
 Gilmore, C. W. 1903 A, 750 (Baptanodon).  
 1905 A, 120 (Baptanodon).  
 1906 B, 327, figs. 1-10 (Baptanodon).  
 1907 B, 198 (Baptanodon).  
 Osburn, R. C. 1906 A, 450, pl. vii, fig. 11 (Baptanodon).  
 Williston, S. W. 1905 B, 341 (Baptanodon).  
 Upper Jurassic (Sundance); Wyoming.

**Ophthalmosaurus reedi (Gilmore).**

- Gilmore, C. W. 1907 B, 193, fig. 1 (Baptanodon).  
 Upper Jurassic (Sundance); Wyoming.

**Ophthalmosaurus robustus (Gilmore).**

- Gilmore, C. W. 1906 B, 332, pl. xxxviii; text-figs. 12, 13 (Baptanodon).  
 1907 B, 198 (Baptanodon).

**APATODONOSAURUS Mehl. Type *A. grayi* Mehl.**

- Mehl, M. G. 1927 A, 233.  
 1928 A, 111.

- Merriam and Gilmore 1928 A, 3.  
 Upper Jurassic (Sundance); Wyoming.

**Ophthalmosaurus sp. indet.**

- Fraas, E. 1904 B, 283, figs. 3, 4 (Cape Stewart, northeastern Greenland).  
 1911 A, 483.  
 Gilmore, C. W. 1914 C, 210 (Baptanodon).  
 Upper Cretaceous (Benton); Wyoming.  
 Huene, F. 1922 B, 95 (Campylodon?); 98 (Myopterygius?). Upper Cretaceous (Benton); Wyoming.  
 Madsen, V. 1904 A, 170 (Ichthyosaurus or Ophthalmosaurus). Eastern Greenland.  
 Merriam, J. C. 1905 G, 404.  
 1905 D, 640 (Baptanodon?). Upper Cretaceous (Benton); Wyoming.  
 Merriam and Gilmore 1928 A, 1-4, fig. 1 (This genus?). Upper Cretaceous; Oregon.

**Apatodonosaurus grayi Mehl.**

- Mehl, M. G. 1928 A, 113, pls. xxx-xxxv; text-figs. 1, 2.  
 Jurassic (Sundance); Wyoming.

**PROTEOSAURIDÆ Hay.**

- Hay, O. P. 1902 A, 462.  
 Abel, O. 1919 A, 453-481 ("ichthyosaurier").  
 1922 C, 537 ("ichthyosaurier").  
 Arldt, T. 1907 D, 660 (Ichthyosauridæ).  
 Cope, E. D. 1891 N, 41 (Ichthyosauridæ).  
 Fraas, E. 1902 B, 4 ("ichthyosaurier").  
 Huene, F. 1923 C, 465 (Longipinnatidæ).  
 Merriam, J. C. 1903 A, 252 (Ichthyosauridæ).

- Merriam, J. C. 1903 C, 10, 89 (Ichthyosauridæ); 90 (Ichthyosaurinæ).  
 Owen, R. 1845 B, 275, pls. lxxiii, lxxiia (Ichthyosauri).  
 Williston, S. W. 1925 B, 256 (Ichthyosauridæ).  
 Zittel and Broili 1911 A, 227 ("ichthyosaurier").  
 1923 A, 277 (Ichthyosauridæ).  
 Zittel, Eastman, etc. 1902 A, 171 (Ichthyosauridæ).

**PROTEOSAURUS Home. Type *Ichthyosaurus platyodon* Conybeare.**

Unless otherwise indicated the authors cited employ for this genus the name *Ichthyosaurus*.

- Hay, O. P. 1902 A, 462 (Proteosaurus).  
 Abel, O. 1905 B, 204.  
 1907 G, 14, fig. 9.  
 1908 A, 482, fig. 9.  
 1908 F (232).  
 1915 A, 415.  
 1920 A, 372, figs. 585, 586 (Stenopterygius).  
 1925 A, 149, figs. 92-103; 107, 108.  
 Andreae, A. 1903 A, 154.  
 Andrews, C. W. 1924 B, 533, pl. i; text-figs. 1, 2.  
 Bauer, F. 1901 A, 1.  
 Bogolubow, N. N. 1909 A, 50, 62, pl. ii.  
 Boulenger, G. A. 1904 B, 425.  
 Brauer, A. 1908 A, 89, fig. 2.  
 Broili, F. 1907 A, 139, pls. xii, xiii.  
 1916 A, 476-494.  
 Bronn, H. G. 1837 A, 499, 506.  
 1848 A, 605.  
 1849 B, 383.  
 Broom, R. 1890 A, 411.  
 1921 A, 154.  
 1922 A, 19, 23, 24.  
 1922 B, 460.  
 Brown, B. 1912 B, 136.  
 1924 C, 69.

- Carus and Engelmann 1861 A, 594, 1570 (Proteosaurus).  
 Case, E. C. 1898 C, 612.  
 Cope, E. D. 1891 N, 41.  
 Cuvier, G. 1925 A, v, 2, 445-474, pls. xxviii-xxxii (Ichthyosaurus).  
 Dabelow, A. 1926 A, 97, figs. 2, 3.  
 De la Beche and Conybeare 1821 A, 559, 563 (Ichthyosaurus); 594 (Proteosaurus).  
 Dollo, L. 1885 C, 322.  
 Durand, J. P. 1898 A, 293 ("ichthyosaure").  
 Etheridge, R. 1898 A, 143.  
 Fraas, E. 1902 B, 4.  
 1911 A, 480.  
 1913 C, 2.  
 Frassetto, F. 1915 A, 49, figs. 28, 30, 31.  
 Freund, L. 1904 A, 387.  
 Fuchs, H. 1909 B, 151.  
 Gadow, H. 1901 B, 481, 483.  
 Gervais, P. 1859 A, 481.  
 Giebel, C. G. 1855 A, 90, pl. x.  
 Gill, T. 1881 A, 376.  
 Greene, J. R. 1861 A, 222.  
 Hoernes, R. 1886 A, 596.  
 Hoffmann, C. K. 1890 B, 1303, pl. lxi.  
 Huene, F. 1903 A, 442.  
 1916 A, 35.  
 1922 D, 277, fig.

- Huene, F. 1923 C, 465.  
 1923 D, 266 (Eurypterygius, Stenopterygius, Eurhinosaurus, Leptopterygius, etc.)  
 Humphrey, G. M. 1876 A, 665.  
 Hutchinson, H. N. 1910 A, 61, pls. iii, iv.  
 Huxley, T. H. 1859 D, 453.  
 Jaekel, O. 1903 C, 40.  
 1903 F, 33, fig. 4.  
 1904 A, 26.  
 1907 B, 43, figs. 27, 28.  
 1911 A, 140, fig. 153.  
 1912 A, 619.  
 Kehler, F. A. 1896 A, 356.  
 Kingsley, J. S. 1925 A, 46, 150, 283, fig. 160.  
 Koken, E. 1893 B, 356.  
 1901 B, 221.  
 1908 C, 9.  
 Lankester, E. R. 1905 A, 225, figs. 165-168.  
 Le Damany, P. 1903 G, 127 ("ichthyosaure").  
 1906 A, 49, fig. 6 ("ichthyosaure").  
 Lönnberg, E. 1910 A, 15.  
 Lucas, F. A. 1901 F, 483, fig. 2 ("ichthyosaur").  
 Lydekker, R. 1912 C, 134.  
 Mantell, G. A. 1844 A, 708.  
 Merriam, J. C. 1903 A, 252.  
 1903 C, 297.  
 1903 D, 311.  
 1905 C, 23.  
 1905 D, 640.  
 Mivart, St. G. 1871 B, 388, fig. 1.  
 1878 B, 309, fig. 12.  
 Müller, J. 1841 B, cliv.  
 Nopcsa, F. 1922 A, 112.  
 1923 G, 116.  
 1923 H, 80.  
 1926 A, 637, text fig. 2.  
 Owen, R. 1840 I, 157.  
 1842 F, 69, 77.  
 Owen, R. 1845 B, 200, 275.  
 Pütter, A. 1923 A, 221.  
 Regnault, F. 1903 A, 109 ("ichthyosaure").  
 Reis, O. 1893 A, 499, 523.  
 1894 B, 90.  
 Reynolds, S. H. 1897 A, 544.  
 Rogenhofer, A. 1908 A, 39.  
 Ryder, J. 1887 B, 439.  
 Seeley, H. G. 1887 E, 195.  
 1903 E, 441.  
 Serres, M. 1852 A, 114.  
 Sollas, W. J. 1916 A, 63-126, pl. i, figs. 1-22.  
 Steinmann, G. 1908 A, 238, 246, figs. 140, 153, 154.  
 1912 A, 50, figs. 1-5.  
 Thyng, F. W. 1906 A, 49, figs. G-I.  
 Tornier, G. 1913 B, 351, figs. 28, 33.  
 Watson, D. M. S. 1914 B, 95.  
 Williston, S. W. 1902 L, 918.  
 1904 B, 182, text-fig. 17.  
 1914 A, 108, 110, 119, figs. 51, 58 (Ichthyosaurus, Proteosaurus).  
 1925 A, 112.  
 1925 B, 257, fig. 177.  
 Wiman, C. 1912 A, 236.  
 Woodward, A. S. 1908 B, 443.  
 1917 C, 541, fig. 1.  
 1922 C, 37, pl. vi, text-figs. 34-37.  
 Wyman, J. 1867 B, 249, 259, 276.  
 Zittel and Broili 1911 A, 228.  
 1923 A, 270, figs. 373-384, 387.  
 Zittel, Eastman, etc. 1902 A, 171.  
**Proteosaurus** sp. indet.  
 Hay, O. P. 1902 A, 462.  
 Owen, R. 1855 D, 389, pl. xxxi (Ichthyosaurus).  
 Jurassic; Exmouth Island (Lat. 77° 16' N.; long. 96° W.).

## Order OMPHALOSAURIA Huene.

- Huene, F. 1923 C, 464.  
 Nopcsa, F. 1928 A, 168 (Omphalosauroides).  
 Williston, S. W. 1925 B, 258.

## OMPHALOSAURIDÆ Merriam.

- Merriam, J. C. 1906 B, 78.  
 Huene, F. 1923 C, 466.  
 Nopcsa, F. 1923 H, 28.  
 1928 A, 168.

OMPHALOSAURUS Merriam, J. C. Type *O. nevadanus* Merriam.

- Merriam, J. C. 1906 B, 76.  
 Abel, O. 1928 A, 368.  
 Huene, F. 1922 B, 70.  
 1923 C, 464.  
 Merriam, J. C. 1911 C, 325.  
 Merriam and Bryant 1911 A, 329.  
 Nopcsa, F. 1923 H, 28.  
 1928 A, 168.  
 Williston, S. W. 1925 B, 259.  
 Wiman, C. 1916 A, 70.  
**Omphalosaurus nevadanus** Merriam, J. C.  
 Merriam, J. C. 1906 B, 76, pls. viii, ix; and text-fig. 1.  
 Huene, F. 1922 B, 69, pl. xx, fig. 12.  
 Merriam, J. C. 1908 C, 18.  
 Triassic (Middle); Nevada.  
**Omphalosaurus** sp. indet.  
 Merriam and Bryant 1911 A, figs. 1, 2 (This genus?). Triassic (Middle); Nevada.

## Subclass DIPLOTREMATA, new name.

- The term Diapsida, as employed by the authors quoted, coincides only in part with Diplotremata.  
 Abel, O. 1912 F, 221.  
 Bittner, F. 1912 A, 2 ("diapsiden").  
 Boulenger, G. A. 1904 C, 479.  
 Broom, R. 1904 B, 93.  
 1904 C, 111 (Diapsida); 112 (Herpetomorphia).  
 1906 C, 437.

- Broom, R. 1906 F, 374 ("diapsiden").  
 1907 A, 37 ("diapsidans").  
 1908 A, 1049.  
 1911 A, 919.  
 1922 A, 17, 25 (Diapsida).  
 1924 B, 40, 64.
- Cope, E. D. 1891 N, 35 (Archosauria).  
 Doderlein, L. 1900 A, 335 (Archosauria).  
 Fraas, E. 1905 B, 363 ("diapsiden").  
 Fuchs, H. 1909 B, 129, 149, 150.  
 1911 B.
- Fürbringer, M. 1900 A.  
 1904 A, 579 ("archosaurier"); 581 (Diapsida).  
 Goodrich, E. S. 1916 A, 263.  
 Gregory, W. K. 1920 A, 214, 234.  
 Huene, F. 1908 B, 378.  
 1908 F, 405.  
 1911 D, 58.  
 1913 E, 480 ("archosaurier").
- Jaekel, O. 1905 B, 61.  
 1908 A, 140.  
 1908 B, 464.  
 1909 A, 211.  
 1911 A, 131 (Diapsida); 132, 136 (Archosauria).
- Kingsley, J. S. 1925 A, 76 (Diapsida).  
 McGregor, J. H. 1905 A, 295.  
 Nopcsa, F. 1923 A, 180.  
 Osborn, H. F. 1903 F, 276.  
 1903 H, 452, 455, 457, 458, 459, 466, 506 (Diapsida); 452, 453 (Archosauria).  
 1904 H, 105.  
 1904 L, 256.  
 1904 N, 308.  
 1905 C, 295.
- Sewertzoff, A. N. 1908 A.  
 Thevenin, A. 1909 A, 1224 ("diapsidés").  
 Versluys, J. 1912 B, 643 (Archosauria).  
 1919 A, 5-22 (Diapsida); 6 (Archosauria).  
 Watson, D. M. S. 1917 C, 179 (Archosauria).  
 Williston, S. W. 1904 B, 175.  
 1907 A, 487.  
 1908 I, 629.  
 1911 B, 66.  
 1912 B, 650.  
 1914 A, 15.  
 1917 C, 414 (Diapsida).  
 1925 A, 193 (Diapsida).  
 1925 B, 278 (Diapsida).
- Zittel and Broili 1911 A, 187 (Diapsida).  
 1923 A, 221 (Diapsida).

### *Superorder EODITREMATA*, new name.

- The name Eoditremata is only in part synonymous with that of Diaptosauria, the term used by the authors, as cited.
- Broom, R. 1904 C, 111.  
 1906 B, 600 ("diaptosaurians").  
 1907 A, 37 ("diaptosaurians").
- Case, E. C. 1907 E, 17.  
 Diener, C. 1909 A, 36.  
 Fraas, E. 1905 B, 370.  
 Fuchs, H. 1909 B, 149.  
 Fürbringer, M. 1904 A, 581.  
 Huene, F. 1908 B, 378.  
 Jaekel, O. 1910 B, 526.  
 1910 C, 331.  
 1910 D, 113.  
 1911 A, 131.
- Merriam, J. C. 1904 A, 421.  
 1905 E, 248.
- Nopcsa, F. 1923 H, 4, 7, 92, 125, tab.  
 1928 A, 181.
- Osborn, H. F. 1903 H, 456, 466, 467, 499, 504.  
 1904 H, 107.  
 1904 L, 256.  
 1904 N, 308.  
 1905 C, 295.  
 1905 N, 237.
- Sewertzoff, A. N. 1908 A.  
 Versluys, J. 1910 B, 245 ("diaptosaurier").  
 1912 A, 494 ("diaptosaurier").  
 1912 B, 548, 621, 687.  
 1919 A, 19.
- Williston, S. W. 1912 B, 650.  
 1917 C, 412, 414.  
 1925 A, 113, 117.  
 1925 B, 279.

### Order RHYNCHOCEPHALIA Günther.

- Hay, O. P. 1902 A, 459.
- Abel, O. 1907 A, 225 ("rhynchocephalen").  
 1919 A, 443.  
 1920 A, 371.
- Anderson, R. J. 1912 D, 251.
- Anthony, R. 1913 A, 253 ("rhynchocephales").
- Ardt, T. 1907 C, 677.  
 1907 D, 679.  
 1907 E, 205.  
 1908 A, 570 ("rhynchocephalen").  
 1912 A, 663, 669.
- Baur, G. 1885 L.  
 1887 G, 694.  
 1894 B, 349.
- Beer, G. R. 1926 A, 312.
- Bluntschli, H. 1912 B, 383 ("rhynchocephalen").
- Boas, J. E. V. 1914 B, 557 ("rhynchocephalen").  
 1914 C, 262 ("rhynchocephalen").
- Boulenger, G. A. 1893 B, 204, 209.
- Boulenger, G. A. 1904 C, 480.  
 1918 E, 515 ("rhynchocephaliens").
- Brauns, D. 1890 A, 149, 152, 163, 187, 202 ("rhynchocephalen").
- Braus, H. 1906 A, 259 ("rhynchocephier").
- Broili, F. 1908 E, 295 ("rhynchocephalen").
- Broom, R. 1901 A, 188.  
 1902 D, 554.  
 1903 D, 288.  
 1903 I, 554.  
 1910 C, 473.  
 1912 A, 627 ("rhynchocephalians").  
 1913 O, 632 ("rhynchocephaloids").  
 1913 P, 227 ("rhynchocephalians").  
 1922 A, 17 ("rhynchocephalians").  
 1924 B, 64, fig. 13.
- Carus, V. 1875 A, 435.
- Case, E. C. 1898 C, 729.  
 1910 C, 192.

- Case, E. C. 1911 A, 96.  
 Cope, E. D. 1891 N, 35, 45.  
 Daiber, M. 1920 A, 371.  
 Dendey, A. 1899 A, 1 (Sphenodon).  
 1899 B, 111 (Sphenodon).  
 1907 A, 298.  
 Depéret, C. 1907 B ("rhynchocéphaliens").  
 Diener, C. 1909 A, 36.  
 Döderlein, L. 1900 A, 334.  
 Dollo, L. 1883 G, 590.  
 1889 B, 666 ("rhynchocéphaliens").  
 1903 B, 138 ("rhynchocéphaliens").  
 1904 B, 219 ("rhynchocéphaliens").  
 DuToit, P. J. 1911 A, 417.  
 Frassetto, F. 1915 A, 30.  
 Fuchs, H. 1907 B, 413 ("rhynchocephalen").  
 1908 C, 167 ("rhynchocephalen").  
 1909 B, 114, 128 ("rhynchocephalen").  
 1909 D, 26 ("rhynchocephalen").  
 1910 A, 39 ("rhynchocephalen").  
 1911 A, 52 ("rhynchocephalen").  
 1911 B.  
 1912 B, 82 ("rhynchocephalen").  
 1927 A, 346.  
 Fürbringer, M. 1902 B, 727, 732 ("rhynchocephalier").  
 Gadow, H. 1901 B, 292 (Rhynchocephali).  
 Gaupp, E. 1895 A, 58 ("rhynchocephalen").  
 1905 D, 1014 ("rhynchocephalen").  
 1906 A, 59 ("rhynchocephalen").  
 1906 B, 775.  
 1908 A, 182 ("rhynchocephalen").  
 1908 B, 239 ("rhynchocephalen").  
 1910 B, 358 ("rhynchocephalen").  
 1910 C.  
 1911 C, 449.  
 1911 D, 635 ("rhynchocephalen").  
 1912 B, 239 ("rhynchocephalen").  
 1913 A, 93 (Rhynchocephala).  
 Goodrich, E. S. 1916 A, 263.  
 Gray, J. E. 1872 B, 29.  
 Gregory, W. K. 1913 E, 39.  
 1920 A, 233.  
 Günther, A. 1886 A, 444.  
 Hayek, H. 1924 A, 147.  
 Heilmann, G. 1926 A, 85.  
 Heilprin, A. 1887 A, 320 (Rhynchocephala).  
 Hilsheimer, M. 1913 A, 513 ("rhynchocephalen").  
 Hoernes, R. 1886 A, 603.  
 Howes, G. B. 1902 A, 525.  
 Howes and Swinnerton 1901 A.  
 Huene, F. 1902 A, 6 ("rhynchocephalen").  
 1910 B, 38 ("rhynchocephalen").  
 1911 D, 47 ("rhynchocephalier").  
 1922 E, 24.  
 1925 D, 238.  
 1926 I, 81.  
 1927 E, 325.  
 Kesteven, H. L. 1919 A, 235 (Rhynchocephalia).  
 Kingsley, J. S. 1925 A, 45, 160, 283.  
 Koken, E. 1893 B, 245.  
 Lakjer, T. 1927 A ("rhynchocephalen").  
 Lebedinsky, N. G. 1913 A, 787 ("rhynchocephalen").  
 Lydekker, R. 1912 C, 3, 4, 18.  
 McGregor, J. H. 1901 A, 272.  
 1902 A, 27.  
 1906 A, 79.  
 Merriam, J. C. 1905 E, 248.  
 1908 C, 57.  
 Nopcsa, F. 1922 A, 111, 116 ("rhynchocephalier").  
 1923 E, 1048.  
 1923 H, 1-6, 8-10, 71, 82, 85, 92, 104, 110, 125, 128, 148, 171, 174.  
 1928 A, 181.  
 Osborn, H. F. 1899 J, 415.  
 1903 D, 313.  
 1903 H, 452, 454, 456, 467, 468, 494.  
 1905 C, 295.  
 1917 B, 193, 201 (Rhynchocephala).  
 Palacký, J. 1894 A, 130 ("rhynchocephaliden").  
 Parker and Haswell 1897 A, 312.  
 Rabi, C. 1903 A, 175 ("rhynchocephalen").  
 Reynolds, S. H. 1897 A, 553.  
 Schaulinsland, H. 1903 A, 1, pls. i-xi (Sphenodon).  
 Seeley, H. G. 1882 A, 366.  
 1887 D, 338.  
 Sewertsoff, A. N. 1908 A.  
 Simpson, G. G. 1926 E, 8, 9 ("rhynchocephalians").  
 1926 F, 12.  
 Smith, G. E. 1911 A, 293.  
 1912 A, 426.  
 Steiner, H. 1922 A, 341 ("rhynchocephalen").  
 Stremme, H. 1909 A, 505 ("rhynchocephalen").  
 Stromer, E. 1912 A, 77.  
 Sushkin, P. P. 1927 A, 269, 287.  
 Swinnerton and Howes 1901 A, 1, 70.  
 Taschenberg, O. 1894 A, 3631.  
 Thyng, F. W. 1906 A, 51.  
 Tornier, G. 1913 A, 333.  
 1913 B, 347.  
 Versluys, J. 1903 A, 151.  
 1915 A, 491 ("rhynchocephalier").  
 1912 B, 621, 687.  
 Watson, D. M. S. 1917 C, 180.  
 Williston, S. W. 1904 A, 43.  
 1904 B, 176.  
 1914 A, 17, 45, 176.  
 1917 C, 411.  
 1918 A, 79.  
 1925 A, *passim* (Rhynchocephalia, Diapsosauria).  
 1925 B, 213, 279.  
 Woodward, A. S. 1904 D, 144.  
 1907 C, 298.  
 Woodward, H. 1904 B, 144.  
 Zittel and Broili 1911 A, 201.  
 1923 A, 246, 251, 383.  
 Zittel, Eastman, etc. 1902 A, 145.

### Suborder CHAMPSOSAURIFORMES, new name.

Unless otherwise indicated the authors, as cited, employ for this group the name Chorisotodera.

- Hay, O. P. 1902 A, 460.  
 Broom, R. 1924 B, 64, fig. 13.

- Brown, B. 1905 B, 4, 25.  
 Cope, E. D. 1876 I, 350.  
 Dollo, L. 1885 C, 320 (Simocodosauria).  
 Fuchs, H. 1911 B.  
 Goodrich, E. S. 1916 A, 263.

- Jaekel, O. 1911 A, 147 (Champsosauri).  
 Matthew, W. D. 1914 B, 383, 388.  
     1921 D, 211.  
 Merriam, J. C. 1904 A, 421.  
     1908 C, 57.  
 Nopcsa, F. 1923 H, 4, 8, 125, 171, tab.  
     1923 A, 181.  
 Osborn, H. F. 1903 H, 456, 468, 492.  
     1904 H, 111.  
     1905 C, 295.  
     1905 N, 239.

- Parks, W. A. 1927 A, 4.  
 Simpson, G. G. 1926 F, 12 (Choristodera).  
 Versluys, J. 1912 B, 624, 684, 687.  
 Williston, S. W. 1909 A, 399.  
     1914 A, 17, 45, 178.  
     1918 A, 81.  
     1925 A, 10, 95, 104, 110, 121, 128, 143, 161.  
     1925 B, 213, 233.  
 Zittel and Broili 1911 A, 204.  
     1923 A, 250.

## CHAMPSOSAURIDÆ Cope.

- Hay, O. P. 1902 A, 460.  
 Abel, O. 1919 A, 449.  
 Arlitt, T. 1907 D, 645.  
 Boulenger, G. A. 1893 B, 209.  
 Cope, E. D. 1891 N, 45 (Choristodera, Champsosauridæ).  
 Gervais, P. 1852 A, 265 ("simosauriens").  
     1859 A, 473 ("simosaunens").  
 Howes and Swinnerton 1901 A, 37.  
 Huene, F. 1914 G, pl. vii (Champsosauria).  
     1922 D, 278 ("champsosauriden").  
     1922 E, 24.  
 Jaekel, O. 1910 C, 333 (Champsosauri).  
 Matthew, W. D. 1914 B, 387.  
     1921 D, 211.

- Nopcsa, F. 1922 A, 111.  
     1923 H, 83, 125, 181.  
     1923 A, 181.  
 Osborn, H. F. 1903 D, 468.  
 Palacky, J. 1902 B, 141 ("champsosauriden").  
 Parks, W. A. 1927 A, 9.  
 Pictet, F. J. 1853 A, 538 ("simosauriens").  
 Pomel, A. 1894 A, 1309 ("champsosauriens").  
 Stromer, E. 1910 B, 481 (Champsosauria).  
     1912 A, 73.  
 Tornier, G. 1913 B, 349 (Champsosauridæ).  
 Zittel and Broili 1911 A, 204.  
     1923 A, 250.  
 Zittel, Eastman, etc. 1902 A, 150.

CHAMPSOSAURUS Cope. Type *C. profundus* Cope.

- Hay, O. P. 1902 A, 460 (Champsosaurus); 457 (Nothosaurops).  
 Abel, O. 1919 A, 450.  
 Baur, G. 1887 G, 694.  
     1894 B, 350.  
 Broili, F. 1926 C, 10, 37.  
 Brown, B. 1905 B, 3.  
 Case, E. C. 1898 C, 730.  
 Cope, E. D. 1880 U, 148.  
 Dollo, L. 1885 C, 315.  
     1885 D, 617.  
     1892 E, 158 ("champsosaure").  
     1893 E, 196 (Syn. of *Simosaurus*).  
     1909 A, 106.  
     1919 A, 14.  
 Douglass, E. 1909 C, 245, 279.  
 Gaudry, A. 1901 A, 504.  
 Gilmore, C. W. 1917 A.  
     1924 A, 68.  
     1924 D, 27.  
 Granger, W. 1914 A, 204.  
 Gregory, W. K. 1920 A, 129, 233.  
 Harrison, H. S. 1901 B, 205.  
 Hatcher, J. B. 1905 B, 80.  
 Hay, O. P. 1910 B, 294, 297.  
 Howes and Swinnerton 1901 A, 3.  
 Jaekel, O. 1912 A, 614.  
 Lakjer, T. 1927 A, 231, 247, fig. 91.  
 Lambe, L. M. 1917 B, 43.  
 Lemoine, V. 1886 A, 167 ("champsosaure").  
 Lydekker, R. 1885 G, 13, 14.  
     1907 C, 459.  
     1912 C, 19, 27.  
 McGregor, J. H. 1906 A, 79.  
 Malaquon, A. G. 1900 A, 260.  
 Matthew, W. D. 1915 K, 437.  
 Nopcsa, F. 1922 A, 112.  
     1923 E, 1050, figs. 8, 9.

- Nopcsa, F. 1923 H, 80-82, 84, 88, 164.  
     1925 B, 11, pl. u.  
     1923 A, 181.  
 Osborn, H. F. 1902 H, 674.  
     1902 I, 17.  
     1903 D, 492.  
     1910 A, 205.  
     1914 A, 322.  
     1917 B, 199, fig.  
 Parks, W. A. 1927 A, 3.  
 Peale, A. C. 1912 A, 747, 754.  
 Reagan, A. B. 1903 A, 82.  
 Rogers, A. F. 1924 A, 546.  
 Scott, W. B. 1913 A, 102.  
 Seeley, H. G. 1886 A, 413, 521.  
 Sertz, A. L. L. 1907 A, 352.  
 Sewertzoff, A. N. 1908 A, 253.  
 Sternberg, C. H. 1915 A, 132.  
     1917 A, 84, 116.  
 Stromer, E. 1910 A, 89.  
     1910 B, 482.  
 Swinnerton and Howes 1901 A, 3.  
 Thevenin, A. 1911 A, 9, 14.  
 Tornier, G. 1913 B, 350 (Champsosaurus).  
 Versluys, J. 1912 B, 624, fig. d<sup>2</sup>.  
 Williston, S. W. 1902 K, 953.  
     1903 A, 10 (Nothosaurops).  
     1914 A, 179, figs. 87-91.  
     1918 A, 79, fig. 3.  
     1925 A, 76, 103, 131, figs. 63, 80, 94, 104.  
     1925 B, 283.  
 Williston and Case 1913 B, 44.  
 Woodward, A. S. 1909 A, 327.  
     1910 B, 467.  
 Zittel and Broili 1911 A, 204.  
     1923 A, 250.  
 Zittel, Eastman, etc. 1902 A, 150.

**Champsosaurus albertensis Parks.**

Parks, W. A. 1927 A, 3-48, pls. i, ii; text-figs. 1-25.

Upper Cretaceous (Edmonton); Alberta.

**Champsosaurus ambulator Brown.**

Brown, B. 1905 B, 22, pl. iv, fig. 2; pl. v, figs. 3, 3a, 5, 5a, 6, 6a, 14, 15.

Bowen, C. F. 1915 A, 128.

Brown, B. 1914 E, 358.

Parks, W. A. 1927 A, 9, 44.

Upper Cretaceous (Judith River); Montana; (Edmonton); Alberta.

**Champsosaurus annectens Cope.**

Hay, O. P. 1902 A, 460.

Bowen, C. F. 1915 A, 128, 148.

Brown, B. 1905 B, 6.

1914 E, 379.

Dollo, L. 1884 C, 155.

Hatcher, J. B. 1905 B, 80.

Lambe, L. M. 1902 A, 45.

1904 C, 22, 37, 49.

Matthew, W. D. 1916 A, 484.

Osborn, H. F. 1902 H, 674.

1902 I, 12, 17.

Parks, W. A. 1927 A, 8, 44.

Upper Cretaceous (Hell Creek); Montana; (Belly River); Alberta.

**Champsosaurus australis Cope.**

Hay, O. P. 1902 A, 461.

Brown, B. 1905 B, 6.

Gardner, J. H. 1910 A, 731.

Gilmore, C. W. 1920 A, 10.

Matthew, W. D. 1914 B, 383.

Parks, W. A. 1927 A, 5.

Reeside, J. B. 1924 A, 38.

Paleocene (Puerco); New Mexico.

**Champsosaurus laramiensis Brown.**

Hay, O. P. 1902 A, 461.

Bowen, C. F. 1915 A, 128, 149, 150.

Brown, B. 1905 B, 6.

1914 E, 379.

Dollo, L. 1884 C, 155.

Hatcher, J. B. 1905 B, 80.

Matthew, W. D. 1916 A, 484.

Osborn, H. F. 1902 I, 12.

Upper Cretaceous (Judith); Montana.

**Champsosaurus brevicollis Cope.**

Brown, B. 1905 B, 8, pls. i-iii; pl. iv, figs. 2-3a; pl. v, figs. 1, 2, 4, 7-13.

Abel, O. 1912 F, 42, fig. 10.

1919 A, 450, fig. 350.

Bowen, C. F. 1915 A, 128.

Brown, B. 1907 A, 842.

1914 E, 358.

Leonard, A. G. 1912 A, 3.

Merriam, J. C. 1908 C, 68, fig. 89.

Parks, W. A. 1927 A, 4, 46.

Stromer, E. 1912 A, 79, fig. 81.

Tornier, G. 1913 B, 348, fig. 22 (C. lamariensis).

Zittel and Broili 1923 A, 251, fig. 354.

Upper Cretaceous (Hell Creek); Montana.

**Champsosaurus occiduus (Leidy).**

Hay, O. P. 1902 A, 457 (Nothosaurops).

Cope, E. D. 1874 B, 433 (Plesiosaurus).

Osborn, H. F. 1902 H, 674 (Nothosaurops).

1902 I, 11, 16 (Nothosaurops).

Williston, S. W. 1902 D, 241 (Plesiosaurus).

1903 A, 10 (Nothosaurops).

1908 C, 735 (Nothosaurops a syn.).

Upper Cretaceous (Lance); South Dakota.

**Champsosaurus profundus Cope.**

Hay, O. P. 1902 A, 461.

Bowen, C. F. 1915 A, 128.

Brown, B. 1905 B, 6.

1914 E, 379.

Dollo, L. 1884 C, 155.

Hatcher, J. B. 1905 B, 80.

Matthew, W. D. 1916 A, 484.

Osborn, H. F. 1902 I, 12.

Upper Cretaceous (Judith River); Montana.

**Champsosaurus puercensis Cope.**

Hay, O. P. 1902 A, 461.

Brown, B. 1905 B, 6 (Syn.? C. saponensis).

Gardner, J. H. 1910 A, 731.

Gilmore, C. W. 1920 A, 10.

Parks, W. A. 1927 A, 5.

Reeside, J. B. 1924 A, 42.

Stanton, T. W. 1909 A, 264 (This species?).

Paleocene (Puerco, Torrejon); New Mexico.

**Champsosaurus saponensis Cope.**

Hay, O. P. 1902 A, 461.

Brown, B. 1905 B, 6.

Gardner, J. H. 1910 A, 731.

Gilmore, C. W. 1920 A, 10.

Matthew, W. D. 1914 B, 383.

Parks, W. A. 1927 A, 5, 44.

Reeside, J. B. 1924 A, 38.

Paleocene (Puerco, Torrejon); New Mexico.

**Champsosaurus sp. indet.**

Bowen, C. F. 1915 A, 128. Upper Cretaceous (Belly River); Alberta; (Lance); Wyoming.

Collier, A. J. 1918 A, 32. Upper Cretaceous (Lance); Montana.

Gidley, J. W. 1915 E, 539. Upper Cretaceous (Fort Union); Montana.

Gilmore, C. W. 1917 A, 4. Upper Cretaceous (Two Medicine); Montana.

1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

1926 J, 28. Upper Cretaceous (Lance); Wyoming.

Hay, O. P. 1903 D, 119.

Knowlton, F. H. 1909 A, 190. Upper Cretaceous (Hell Creek); Montana.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

**Suborder SPHENODONTIFORMES, new name.**

Nopcsa, F. 1928 A, 181 (Sphenodontoidea).

| Williston, S. W. 1925 B, 281 (Sphenodontia).

## SPHENODONTIDÆ Cope.

- Cope, E. D. 1871 B, 235.  
 Abel, O. 1919 A, 444.  
 Boulenger, G. A. 1889 A, 2 (Hatteriidae).  
 Brauns, D. 1890 A, 149, 163, 187, 202 ("sphenodonten").  
 Cope, E. D. 1864 A, 227 (Hatteriidae).  
 Günther, A. C. 1867 A, 624 (Hatteridae).
- Hay, O. P. 1902 A, 460.  
 Allis, E. P. 1919 B, 80 (Hatteria).  
 Anderson, R. J. 1905 A, 323, fig. 11 (Hatteria).  
 Anthony, R. 1913 A, 253 (Hatteria).  
 Bardeleben, K. 1901 A (Hatteria).  
 Bauer, F. 1901 A, 47.  
 Baur, G. 1887 H, 52.  
 Beer, G. R. 1926 A, 312, figs. 81, 83.  
 Bender, O. 1907 A, 40 (Hatteria).  
 Bluntschli, H. 1912 B, 383, figs. 20, 21.  
 Boas, J. E. V. 1914 C, 263, figs. 40, 42, 43, 58.  
 Bogoljubsky, S. 1914 A, 660.  
 Brauns, D. 1890 A, 151, 152, 202, fig. 2 (Hatteria).  
 Broili, F. 1926 B, 172, fig. 4.  
 1926 C, figs. 2, 6.  
 Broom, R. 1922 A, 21.  
 1922 B, 455.  
 1924 B, 40, fig. 3.  
 1924 C, 69.  
 1925 A, 2.  
 Case, E. C. 1905 C, 9.  
 1910 C, 196.  
 Daiber, M. 1920 A, 371, pls. i, ii.  
 Dendy, A. 1907 A, 287.  
 Dollo, L. 1894 E, 67 (Hatteria).  
 1893 D.  
 1903 A, 759.  
 Edgeworth, F. H. 1907 A, 529, figs. 25-29.  
 Fuchs, H. 1907 A, 164, fig. 1 (Hatteria).  
 1907 B, 419 (Hatteria).  
 1909 B, 154 (Hatteria).  
 1909 C, 97 (Hatteria).  
 1909 D, 9, figs. 1, 2 (Hatteria).  
 1910 A, 35, fig. 4 (Hatteria).  
 1910 B, 253 (Hatteria).  
 1910 C, 481 (Hatteria).  
 1912 B, 94 (Hatteria).  
 1927 A, 309, 316, fig. 2 (Hatteria).  
 Gadow, H. 1901 B, 294, figs. 58-60.  
 Gaupp, E. 1895 A, 62 (Hatteria).  
 1899 A, 1073, figs. 13, 15.  
 1905 D, 1014, fig. 37.  
 1906 A.  
 1906 B.  
 1910 A, 540.  
 1910 C.  
 1911 B, 108.  
 1911 D, 616.  
 1912 B, 220.  
 Gelderen, C. 1925 A, 497 (Hatteria).  
 Gregory, W. K. 1913 B, 243.  
 1913 E, 14, figs. 12-14.  
 1926 A, 204.  
 Gregory and Camp 1918 A, pls. xliii, xlv; text-figs. 1-3.  
 Harrison, H. S. 1901 A, 145 (Hatteria).  
 1901 B, 393 (Hatteria).
- Huene, F. 1922 E, 24.  
 Huxley, T. H. 1887 A, 692.  
 Lakjer, T. 1927 A, 172.  
 Nopcea, F. 1928 A, 181.  
 Zittel, K. A. 1890 A, 589.  
 Zittel and Broili 1911 A, 206.  
 1923 A, 249.
- Hayek, H. 1924 A, 147, pl. i, fig. 5 (Hatteria).  
 Heilmann, G. 1926 A, 207, figs. 31, 66, 67, 79 (Hatteria, Sphenodon).  
 Higgins, G. M. 1923 A.  
 Hoffmann, C. K. 1890 B, 1065, pl. liv (Hatteria, Sphenodon).  
 Howes and Swinnerton 1901 A.  
 Huene, F. 1902 A, 7 (Hatteria).  
 1925 D, 230.  
 Huxley, T. H. 1869 G, 441, figs. 3, 4, 8.  
 1869 H, 384.  
 1887 B, 638, figs. 3, 6.  
 Iwanzoff, N. 1894 A, 584 (Hatteria).  
 Jaekel, O. 1902 B, 133.  
 1903 F, 40.  
 1906 A, 22, fig. 13.  
 Kesteven, H. L. 1919 A, 236.  
 Kingsley, J. S. 1925 A, 43, 161, 173, 174, 247, 264, 281, 283, figs. 50, 172-174, 264, 283, 304, 307.  
 Lakjer, T. 1927 A, figs. 61-65, 92, 109, 110, 120, 124, 131, 134 (Hatteria).  
 Lehms, P. 1911 A, 261, pl.  
 Leydig, F. 1890 A, 508 (Hatteria).  
 Lwoff, W. 1884 A, 328 (Hatteria).  
 Marcus, H. 1921 A, 571 (Hatteria).  
 Miner, R. W. 1925 A, *passim*, 35 figs.  
 Noble, G. K. 1922 A, table 1.  
 Noordenbos, W. 1905 B, 390 (Hatteria).  
 Nopcea, F. 1923 H, 79-81, 84, 85, 152, 186, pl. iii, fig. 1.  
 1928 A, 181.  
 Nowikoff, M. 1910 A, 122 (Hatteria).  
 1912 A, 337.  
 Osborn, H. F. 1903 H, 497.  
 Parsons, F. G. 1903 A, 315, fig. 1.  
 Pinkus, F. 1904 A, 150 (Hatteria).  
 Rabl, C. 1903 A, 157, 168.  
 Reynolds, S. H. 1897 A, 555, fig. 52.  
 Romer, A. S. 1922 A, 39.  
 1922 B, *passim*.  
 Schauinsland, H. 1899 A, 309, pls. ii, iii (Hatteria).  
 1906 A.  
 Schwarz, H. 1908 B, 100.  
 Seeley, H. G. 1872 B, 36 (Hatteria).  
 1876 C, 171 (Hatteria).  
 Siegelbauer, F. 1911 A, 274 (Hatteria).  
 Simpson, G. G. 1926 F, 12.  
 Sixta, V. 1901 A, 325.  
 Sollas, W. J. 1916 A, 89.  
 Steiner, H. 1922 A, 330, 334, fig. 11.  
 Sushkin, P. P. 1927 A, 288, figs. 16-18.  
 Thyng, F. W. 1906 A, 55, figs. M-P.  
 Versluys, J. 1898 A, 259, fig. 1.  
 1903 A, 158.  
 1910 B, 200.

- Versluys, J. 1912 A, 496, fig. 5.  
 1912 B, 549, figs. c, d, h.  
 Voeltzkow and Döderlein 1901 A, 316 (Hatteria).  
 Watson, D. M. S. 1916 A.  
 Wiedersheim, R. 1880 E, 493, fig. 1 (Hatteria).  
 Williston, S. W. 1903 A, 32, pl. v, fig. 1.  
 1904 B, 177, text-fig. 6.  
 1910 A, 270.  
 1910 F, 600, pl. i, fig. 3.

- Williston, S. W. 1914 A, 24, 176, fig. 8.  
 1925 A, *passim*, figs. 60, 80, 94.  
 1925 B, 281.  
 Williston and Case 1913 B, 42.  
 Woodward, A. S. 1907 C, 295-296.  
 Wyeth, F. J. 1924 A, 259, pls. xi-xvii, 16 text-figs.  
 Zittel and Broili 1923 A, 213, fig. 220.  
 No North American species are yet known.

#### OPISTHIAS Gilmore. Type *O. rarus* Gilmore.

- Gilmore, C. W. 1909 B, 35.  
 Huene, F. 1910 B, 37.  
 Nopcsa, F. 1923 H, 79 (Opisthias).  
 1928 A, 181 (Opisthias).  
 Simpson, G. G. 1926 F, 13, 15.  
 1926 H, 204.  
 Zittel and Broili 1911 A, 206.  
 1923 A, 250.

#### Opisthias rarus Gilmore.

- Gilmore, C. W. 1909 B, 35, 39, pl. xi, fig. 1; text-fig. 1.  
 1927 G, 163.  
 Huene, F. 1910 B, 36, fig. 3.  
 Lydekker, R. 1910 F, 668.  
 Mook, C. C. 1916 A, 143.  
 Simpson, G. G. 1926 E, 3.  
 1926 F, 15, fig. 2.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

#### THERETAIRUS Simpson. Type *T. antiquus* Simpson.

- Simpson, G. G. 1926 F, 13.  
**Theretairus antiquus** Simpson.  
 Simpson, G. G. 1926 F, 13, fig. 1.

- Simpson, G. G. 1926 E, 3 (Name; no description).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### Order LORICATA Merrem.

Unless otherwise indicated the authors, as cited, use for this group the name *Crocodylia*. Besides being preceded by Merrem's Loricata, it is an ambiguous term, sometimes including only Huxley's Eusuchia; sometimes connoting also the Phytosauridae and the Aëtosauridae.

- Hay, O. P. 1902 A, 508 (Loricata).  
 Abel, O. 1907 A, 225 ("crocodilier").  
 1912 F, 591, 681 ("krokodile").  
 1919 A, 533.  
 1920 A, 380.  
 1922 D, 40.  
 Ahlborn, F. 1896 B, 8 ("krokodile").  
 Alix, E. 1874 A, 17 ("crocodiles").  
 Anderson, R. J. 1912 A, 917 ("crocodiles").  
 Andraee, A. 1903 A, 150 ("crocodiliden").  
 Andrews, C. W. 1913 A, 80.  
 Anonymous 1921 B, 433.  
 Anthony, R. 1913 A, 254 ("crocodiliens").  
 Arlét, T. 1907 D, 648.  
 Arthaber, G. 1906 A, 299, 319 ("crocodilier").  
 Auer, E. 1909 A, 219 ("krokodile").  
 Baraldi, G. 1877 A, 8 ("crocodiles").  
 Bardeleben, K. 1896 A, 114 ("krokodile").  
 1903 A, 27 ("krokodilier").  
 1904 A, 109 ("krokodile").  
 Baur, G. 1899 L, 312.  
 1894 B, 349.  
 1897 D, 47.  
 Beyer, H. 1907 B, 289 ("krokodile").  
 Bluntschli, H. 1912 B, 384 ("krokodile").  
 Boas, J. E. V. 1914 B, 562 ("krokodile").  
 1914 C, 273 ("krokodile").  
 Bolck, L. 1922 A, 109.  
 1922 B, 58.  
 Bonaparte, C. L. 1832 A, 313 (Crocodylie).  
 Brandt, J. F. 1865 A, 19 ("crocodile").  
 Brauns, D. 1890 A, 147, 148, 152, 161, 202 (Crocodylina, "krokodile").  
 Braus, H. 1906 A, 292 ("krokodile").  
 Bronn, H. G. 1849 A, 383 seq. (Crocodylin).  
 Broom, R. 1901 A, 188.  
 1903 C, 179 ("crocodiles").  
 1906 C, 437 ("crocodiles").  
 1909 D, 212.  
 1911 A, 920 ("crocodilians").  
 1917 A, 977.  
 Carter, J. T. 1905 A, 143.  
 Carus, V. 1875 A, 404 (Crocodylina).  
 Carus and Engelmann 1861 A, 1108-1109, 1675.  
 Case, E. C. 1898 C, 732.  
 1923 A, 517.  
 Cope, E. D. 1835 BB, 68.  
 1891 N, 35.  
 Cuvier, G. 1807 A, 8 ("crocodiles").  
 1808 C, 1 ("crocodiles").  
 1808 E, 73 ("crocodiles").  
 1812 A, 125 ("crocodiles").  
 1825 A, v, 2, 14-173, pls. i-x ("crocodiles").  
 Dendy, A. 1907 A, 292.  
 Depéret, C. 1912 A, 703 ("crocodiliens").  
 Döderlein, L. 1900 A, 329.  
 Dollo, L. 1883 G, 590.  
 1884 D, 89 ("crocodiliens").  
 1889 B, 677 ("crocodiliens").  
 1914 A, 291 ("crocodiliens").  
 DuToit, P. J. 1911 A, 417 ("krokodile").  
 1913 A, 245 ("krokodile").  
 Edgeworth, F. H. 1907 A, 516.



- Fejérváry, G. J. 1921 C, 11.  
 Fitzinger, L. 1843 A, 35 (Loricata).  
 Fleischmann, A. 1910 A, 702.  
 Fraas, E. 1901 B, cxvii ("krokodile").  
     1901 C, 409, 411.  
     1902 B, 69 ("crocodilher").  
 Frassetto, F. 1915 A ("coccodrilli").  
 Fuchs, H. 1907 B, 410 ("krokodile").  
     1908 C, 196.  
     1909 B, 149.  
     1909 D, 26 ("krokodile").  
     1910 A, 40 ("krokodile").  
     1911 B.  
 Fürbringer, M. 1888 A, 1620.  
     1902 B, 727, 731 ("crocodilher").  
     1904 A.  
 Gadow, H. 1901 A, 402 ("crocodiles").  
     1901 B, 431.  
 Gaupp, E. 1899 A, 1034, 1082 ("krokodile").  
     1905 D, 1022 ("krokodilier").  
     1906 B, 782 ("krokodile").  
     1910 A, 531, 541 ("krokodile").  
     1911 B, 111.  
     1911 C, 452.  
     1912 B, 227 ("krokodile").  
     1913 A, 44 ("krokodile").  
 Gegenbaur, C. 1893 A, 464 ("krokodile").  
     1864 C, 190 ("crocodile").  
     1871 A, 199 ("crocodile").  
 Gelderon, C. 1925 A, 495, 506.  
 Geoffroy St. Hilaire, E. F. 1807 D, 249 ("croco-  
     diles").  
 Gervais, P. 1852 A, 248 ("crocodiliens").  
     1859 A, 442 ("crocodiliens").  
 Gill, T. 1907 A, 493 ("crocodiliens").  
 Goldhy, F. 1925 A, 301.  
 Goodrich, E. S. 1916 A, 262, 264.  
 Goodsir, J. 1857 A ("crocodiles").  
 Gray, J. E. 1872 B, 1 (Emydosauri).  
 Greene, J. R. 1861 A, 219, 226.  
 Gregory, W. K. 1913 B, 243 ("crocodiles").  
     1913 E, 3.  
     1917 C, 975.  
     1920 A, 212.  
 Gregory and Camp 1918 A.  
 Haeckel, E. 1868 A, 453, 455.  
     1873 A, 512, 531.  
 Hanson, F. B. 1919 B, 72.  
     1920 B, 332.  
 Hase, A. 1913 A ("krokodilier").  
 Hatschek, B. 1889 B, 117 ("krokodilier").  
 Heilmann, G. 1914 A, 60.  
     1926 A, 85.  
 Heilprin, A. 1887 A, 327, 328 ("crocodiles").  
 Henshaw, H. W. 1912 A, 318 ("crocodiles").  
 Hülzheimer, M. 1913 A, 515.  
 Hoernes, R. 1886 A, 599.  
 Holland, W. J. 1912 A, 207.  
 Holland, H. 1864 C, 368 ("crocodiles").  
 Howes, G. B. 1891 A, 148.  
     1894 A, 80.  
 Howes and Swinnerton 1901 A, 2, 35.  
 Huene, F. 1908 B, 401.  
     1908 F, 402.  
     1911 E, 118 ("krokodile").  
     1913 F, 468 ("krokodile").  
     1914 G, 46, pl. vii.  
     1922 E, 24.  
 Huene, F. 1925 G, 307 ("krokodile").  
     1927 E, 326.  
 Huxley, T. H. 1859 D, 401.  
     1859 E, 445.  
     1859 F, 137.  
     1859 G, 678.  
     1859 I, 286.  
     1862 A, xlviii.  
     1863 F, 477, 529.  
     1870 F, 538.  
     1870 H, 492.  
     1875 E, 66.  
     1876 F, 173.  
     1877 A, 1-58.  
     1879 A, 398.  
     1887 C, 236 ("crocodiles").  
 Jaekel, O. 1905 B, 65 ("crocodilier").  
     1910 C, 338, 340 (Loricati).  
     1910 E, 229 (Loricata).  
     1911 A, 162 (Loricati).  
     1912 A, 610 ("krokodilier").  
     1915 A, 99 ("crocodile").  
 Kehler, F. A. 1896 A, 348 ("crocodilier").  
 Kesteven, H. 1916 A, 304, 305.  
     1922 A, 316.  
 Kingsley, J. S. 1912 B, 94.  
 Klein, E. E. 1868 A ("crocodilier").  
 Köstlin, O. 1844 A ("crocodile").  
 Koken, E. 1893 B, 270, 389, 415 ("crocodiliden").  
 Laaser, P. 1903 A, 574 ("krokodile").  
 Lambe, L. M. 1901 B, 182.  
 Latreille, P. A. 1825 A, 93 (Crocodilei).  
 Lavocat, A. 1884 A, 1126 ("crocodiles").  
     1885 A, 29, 37 ("crocodiles").  
     1889 A, 46 ("crocodiles").  
 Le Damany, P. 1902 A, 334 ("crocodiliens").  
 Leunis and Ludwig 1883 A, 539 (Crocodilina).  
 Lull, R. S. 1917 B, 322.  
     1924 A, chart.  
 Lydekker, R. 1887 C, 307.  
     1912 C, 3, 4, 40, 118.  
 McGregor, J. H. 1906 A, 83.  
 Mantell, G. A. 1844 A, 718 ("crocodiliens").  
 Matthew, W. D. 1906 A, 83.  
     1914 B, 383.  
     1915 A, 284.  
     1921 D, 211.  
 Meckel, J. F. 1825 A ("crocodile").  
 Menmuir, W. H. 1902 A, 274.  
 Merriam, J. C. 1912 B, 222.  
 Mivart, St. G. 1871 B, 380 ("crocodiles").  
 Mook, C. C. 1918 A, 466.  
     1921 B, 51.  
     1921 C, 67.  
     1921 D, 101.  
 Müller, J. 1832 A, 507 (Crocodili).  
     1841 B, cliv ("crocodile").  
 Nitzsch, C. L. 1822 A, 82 ("krokodile").  
 Nopsca, F. 1917 A, 204 ("krokodilier").  
     1922 A, 113 ("crocodilier").  
     1923 H, 3 (Loricata. See also his Para-  
         suchia, Proterosauri and Crocodilia).  
 Oken, L. 1819 A, 1529 ("crocodile").  
 Osborn, H. F. 1903 D, 313.  
     1903 H, 454, 456, 504.  
     1904 H, 113.  
     1904 N, 308.  
     1905 C, 295.

- Osborn, H. F. 1905 N, 239.  
 1912 A, 80, 125.  
 1917 B, 311.  
 1925 F, 962.
- Owen, R. 1842 F, 70 ("crocodiles").  
 1845 B, 235 ("crocodilians").  
 1868 A, 874, 875.  
 1879 D, 148.
- Palacký, J. 1894 A, 129 ("krokodile").  
 Paramore, R. H. 1910 A, 1398 ("crocodiles").
- Parker, W. K. 1878 C, 214 ("crocodiles").  
 1879 C, 336.  
 1888 C, 397 ("crocodiles").
- Parker and Haswell 1897 A, 313.
- Parsons, F. G. 1903 A, 316 ("crocodiles").
- Peters, W. 1867 A, 728 ("crocodile").  
 1868 A, 592 ("crocodilen").  
 1868 B, 388 ("crocodiles").
- Petronievics, B. 1919 A, 414 ("crocodiliens").
- Philippi, Frech and Volz 1903 A, 18 ("krokodile").
- Plieninger, F. 1901 A, 88 ("crocodilier").  
 1906 A, 406 ("krokodilier").
- Pompeckj, J. F. 1925 A, 10 ("krokodilier").
- Röse, C. 1892 G, 129 ("crocodile").
- Romer, A. S. 1923 A, 143.  
 1923 B, 533.  
 1923 C, 605, 607.
- Sabatier, A. 1897 A, 805 ("crocodiliens").  
 1897 B, 933.  
 1902 A, 99 ("crocodiliens").
- Schlosser, M. 1898 D, 120 ("krokodile").  
 1903 G, 145.
- Schmidt, W. J. 1914 B, 643 ("crocodile").
- Schöne, G. 1902 A, 17 ("krokodile").
- Seeley, H. G. 1872 A, 275 ("crocodiles").  
 1872 B, 36 ("crocodiles").  
 1878 B, 428 ("crocodiles").  
 1882 A, 366.  
 1887 D, 341.  
 1887 E, 191.  
 1888 I, 235.
- Seemann, G. 1926 A, 107 ("krokodile").
- Sewertzoff, A. N. 1908 A.
- Shore, T. W. 1887 A, 366.
- Simpson, G. G. 1926 E, 6 ("crocodiles").
- Sixta, V. 1900 B, 340 ("krokodile").
- Sonies, F. 1907 A, 406 ("crocodile").
- Stannius, H. 1856 A, 8, seq. (Crocodila).
- Stehli, G. 1910 A, 775 ("krokodile").
- Steiner, H. 1922 A, 330, 339.
- Steinmann, G. 1907 A, 429.  
 1908 A, 213 ("krokodile").  
 1910 A, 99.  
 1912 B, 713, 731.
- Strecker, C. 1887 A, 304 ("krokodile").
- Stromer, E. 1912 A, 80, 125.
- Taschenberg, O. 1894 A, 3632.
- Terra, P. 1911 A, 237.
- Tims, H. W. M. 1903 A, 133.
- Tornier, G. 1909 A, 195 ("krokodile").  
 1909 C, 547.  
 1913 A, 336.  
 1913 B, 359, 374.
- Troxell, E. L. 1925 D, 605 ("crocodiles").
- Vallois, H. V. 1921 A, 973 ("crocodiliens").
- Van den Broeck, E. 1900 A, 88, 107 ("crocodiliens").
- Versluys, J. 1903 A, 168 ("crocodilier").  
 1912 A, 491 ("crocodilier").  
 1912 B, 649, 687.  
 1918 A, 7.
- Virchow, H. 1914 B, 106 ("krokodile").
- Voeltzkow, A. 1899 A.
- Voeltzkow and Döderlein 1901 A, 316 ("krokodile").
- Wagner, L. 1834 A ("krokodile").
- Wallace, A. R. 1876 A, I, 100; II, 405-407.
- Watson, D. M. S. 1916 C, 611 ("crocodiles").  
 1917 A, 984 ("crocodiles").
- Werner, F. 1904 A, 339 ("krokodile").
- Williston, S. W. 1906 A.  
 1911 F, 661.  
 1912 E, 260.  
 1914 A, 18, 45, 194.  
 1916 B, 193.  
 1917 C, 412.  
 1918 A, 79, 80.  
 1925 A, *passim*.  
 1925 B, 213, 287 (Crocodilia, Loricata, Parasuchia).
- Woodward, A. S. 1922 C, 10.
- Woodward, H. 1904 B, 149.
- Wright, W. 1909 A, 674.
- Ziegler, H. E. 1901 A, 232 ("krokodile").
- Zittel and Bröhl 1911 A, 261.  
 1923 A, 318.
- Zittel, Eastman, etc. 1902 A, 208.

### Order PHYTOSAURIFORMI, new name.

Unless otherwise indicated, the authors, as cited, employ for this order the name Parasuchia.

- Boulenger, G. A. 1903 A, 357 (Thecodontia).  
 1904 C, 430 (Thecodontia).
- Broom, R. 1914 H, 1077 (Thecodontia).
- Fuchs, H. 1909 B, 130, 149.
- Gadow, H. 1901 B, 432 (Crocodilia, in part).
- Huene, F. 1902 A, 54, 71.  
 1908 B, 388.  
 1908 E, 380 ("parasuchier").  
 1911 E, 67, 117 ("parasuchier").  
 1914 G, 47, 49, pl. vii ("parasuchier").  
 1922 E, 22 (Thecodontia).  
 1922 F, 408 (Thecodontia).  
 1922 I, xiv (Thecodontia).  
 1926 I, 52, 85, 102 (Thecodontia).
- Huene, F. 1927 E, 320 (Thecodontia).
- Lull, R. S. 1910 A, 4.
- Lydekker, R. 1907 C, 453.
- McGregor, J. H. 1904 A, 255.  
 1906 A, 31, 91.
- Nopcsa, F. 1923 H, 89-180 ("theodontier");  
 125 (Thecodontia).  
 1928 A, 181 (Thecodontia; not of Owen).
- Osborn, H. F. 1903 H, 454, 456, 504 (Phytosauria).  
 1904 H, 112.  
 1904 N, 308.  
 1905 C, 295.
- Steiner, H. 1922 A, 339 (Thecodontia).
- Stromer, E. 1912 A, 83.
- Watson, D. M. S. 1916 C, 611 ("theodonts").  
 1917 C, 179 (Thecodontia).

Williston, S. W. 1914 A, 18, 186.  
1925 A, 114.  
1925 B, 213, 284.

Zittel and Broili 1911 A, 251.  
1923 A, 314.

### Suborder AËTOSAURIFORMES, new name.

Unless otherwise indicated the authors, as cited, use for this group the name *Pseudosuchia*.

Hay, O. P. 1902 A, 511 (*Aëtosauria*).  
Abel, O. 1919 A, 524.  
1920 A, 379.  
1926 B, 38 ("aëtosaurier").  
Brauns, D. 1890 A, 160, fig. 4 (*Aëtosaurus*).  
Broom, R. 1901 A, 188 (*Aëtosauria*).  
1913 O, 629.  
1924 B, 65.  
Cope, E. D. 1891 N, 45.  
Fraas, E. 1911 B, 30 ("aëtosaurier").  
Fuchs, H. 1909 B, 149 (*Aëtosauria*).  
Gadow, H. 1901 B, 432.  
Gilmore, C. W. 1926 B, 328, 338 (*Aëtosauria*).  
Gregory, W. K. 1915 E, 448 ("aëtosaurs").  
Helmman, G. 1926 A, 207, figs. 5, 81, 133.  
Huene, F. 1908 B, 388, 395.  
1911 D, 28 ("pseudosuchier").  
1911 E, 116.  
1914 A, 146.  
1914 G, 4, 20, pl. vii.  
1920 A, 160.  
1921 D, 391, 394, 395.  
1922 E, 22.  
1922 F, 408.  
1922 I, xlv ("pseudosuchier").  
1925 G, 316 ("pseudosuchier").  
1926 B, 104.  
1926 I, 52, 64, 85, 102 ("pseudosuchier").  
1927 E, 320 (*Pseudosuchia*).  
Jaekel, O. 1910 C, 340 (*Aëtosauri*).  
1911 A, 164 (*Aëtosauri*).  
Lull, R. S. 1915 A, 174 (*Aëtosauria*).

Lull, R. S. 1924 A, chart.  
Lydekker, R. 1907 C, 458 (*Aëtosauria*).  
McGregor, J. H. 1904 A, 255 (*Aëtosauria*).  
1906 A, 81, 91 (*Aëtosauria*).  
Marsh, O. C. 1884 A, 167 (*Aëtosauria*).  
Moodie, R. L. 1909 G, 363 (*Aëtosauria*).  
Nopcsa, F. 1923 H, 8, 10, tab. (*Aëtosauria*);  
125 (*Aëtosauridae*, *Aëtosaurinae*; *Parasuchia*, in part).  
1928 A, 181 (*Parasuchioidea*, in part).  
Osborn, H. F. 1903 H, 456 ("aëtosaurs").  
1904 H, 112 (*Aëtosauria*).  
Stehli, G. 1910 A, 790 (*Pseudosuchia*).  
Steiner, H. 1922 A, 339 (*Pseudosuchia*, *Thecodontia*).  
Steinmann, G. 1907 A, 433.  
Stromer, E. 1912 A, 82 (*Aëtosauria*).  
Watson, D. M. S. 1916 C, 611 (*Thecodontia*, in part).  
1917 C, 179 (*Thecodontia*, in part).  
Wegner, R. N. 1922 A, 480.  
Williston, S. W. 1909 A, 396 ("aëtosaurs").  
1914 A, 18, 45, 187.  
1917 C, 412.  
1925 A, 11, 18, 19, 21, 32, 77, 95, 100, 114, 119, 178.  
1925 B, 284.  
Zittel and Broili 1923 A, 316.  
Zittel, Eastman, etc. 1902 A, 211.  
*Pseudosuchia* is long antedated by *Aëtosauria* of Marsh. Owen's *Thecodontia* did not include the *Aëtosauria*; the type genera were stated to be *Thecodontosaurus*, *Palaeosaurus*, and *Cladiodon*. All these are theropodous dinosaurs.

### AËTOSAURIDÆ Lydekker.

Lydekker, R. in Nicholson and Lydekker 1889 A, 1112.  
Hay, O. P. 1902 A, 511.  
Abel, O. 1912 F, 563 ("aëtosauriden").  
1919 A, 529.  
Cope, E. D. 1889 R, 866.  
Fraas, E. 1907 B, 101 (*Aëtosaurus*).  
Hay, O. P. 1928 A, 5 (*Aëtosaurus*).  
Huene, F. 1915 A, 490 (*Typothoracidae*).  
1920 A, 161.  
1920 G, 465 ("pseudosuchier").  
1921 D, 330, pl. i, figs. 1-8; text-figs. 2-7 (*Aëtosaurus*).

Huene, F. 1922 E, 22.  
1922 H, 84 (*Aëtosaurus*).  
Jaekel, O. 1910 C, 340.  
Lull, R. S. 1917 D, 110.  
Newton, E. T. 1894 A, 599 (*Aëtosaurus*).  
Nopcsa, F. 1923 H, 125 (With subfamilies *Aëtosaurinae*, *Stegominae*).  
1928 A, 182.  
Stehli, G. 1910 A, 790, figs. 18, 19 (*Aëtosaurus*).  
Tornier, G. 1913 B, 358 (*Aëtosaurus*).  
Watson, D. M. S. 1917 C, 180.  
Zittel and Broili 1911 A, 260.

### Typothorax Cope. Type *T. coccinarum* Cope.

Hay, O. P. 1902 A, 511.  
Branson, E. B. 1905 B, 568.  
Lydekker, R. 1912 C, 121.  
Nopcsa, F. 1928 A, 182.  
Zittel and Broili 1911 A, 260.  
1923 A, 317.

### Typothorax coccinarum Cope.

Hay, O. P. 1902 A, 511.  
Cross, W. 1907 A, 640 ("Typothorax").  
Cross and Howe 1905 A, 494.  
Gregory and Camp 1918 A, 531, text-fig. 11.  
Huene, F. 1915 A, 485, figs. 1-10.  
Merrill, G. P. 1907 A, 81.  
Triassic (Dolores); New Mexico.

STEGOMUS Marsh. Type *S. arcuatus* Marsh.

- Hay, O. P. 1902 A, 511.  
 Abel, O. 1919 A, 532.  
 Emerson and Loomis 1904 A, 377.  
 Huene, F. 1902 A, 60.  
     1908 B, 392.  
     1914 G, 17, 35.  
     1920 A, 161.  
 Lull, R. S. 1904 B, 381.  
     1904 D, 147, figs.  
     1910 A, 4.  
     1912 D, 416.  
 Nopcsa, F. 1922 B, 174.  
     1923 H, 86, 87 (Stegomus); 125 (Stegominae).  
 Osborn, H. F. 1917 B, 211, fig.  
 Steiner, H. 1922 A, 351.  
 Watson, D. M. S. 1917 C, 180.  
 Williston, S. W. 1925 B, 285.

**Stegomus arcuatus** Marsh.

- Hay, O. P. 1902 A, 511.  
 Abel, O. 1926 B, 19.  
 Emerson and Loomis 1904 A, 379.  
 Heilmann, G. 1916 A, 111.  
 Huene, F. 1914 G, 17, 35, fig. 49.  
     1915 A, 490, 492.  
     1920 G, 485, 487.  
     1922 E, 23.  
     1922 F, 409, 410, tab.  
     1922 H, 84, 152.  
     1926 E, 5, 6.  
 Lull, R. S. 1904 B, 382.  
     1912 D, 410, 412.  
     1915 A, 43, 79, 99, pl. vii.  
     1917 D, 110, 111.  
 Rice and Gregory 1906 A, 174.  
 Schuchert, C. 1910 A, 438, 579.  
     Triassic (Newark); Connecticut.

## STEGOMOSUCHIDÆ Huene.

- Huene, F. 1922 E, 22.  
 Gilmore, C. W. 1926 B, 326, 340.

- Huene, F. 1922 F, 409.

STEGOMOSUCHUS Huene. Type *Stegomus longipes* Emerson and Loomis.

- Huene, F. 1922 E, 23.  
     1922 F, 409.  
     1925 G, 317.  
 Nopcsa, F. 1928 A, 182.  
**Stegomosuchus longipes** (Emerson and Loomis).  
*Emerson and Loomis* 1904 A, 377, pl. xxi (Stegomus).  
 Gilmore, C. W. 1926 B, 325, fig. 4.  
     1928 F, 7.  
 Heilmann, G. 1916 A, 110, figs. 200, 201 (Stegomus).  
 Huene, F. 1914 G, 17, 44, text-figs. 42, 45-48 (Stegomus).

- Huene, F. 1915 A, 490 (Stegomus).  
     1920 G, 485, 487 (Stegomus).  
     1922 E, 22, 23.  
     1922 F, 409.  
     1922 H, 153 (Stegomus).  
     1926 E, 6.  
 Lull, R. S. 1904 B, 381 (Stegomus).  
     1905 C, 299 (Stegomus).  
     1912 D, 411, 412, 413, fig. 1 (Stegomus).  
     1915 A, 102, 175, pls. u, viii; text-figs. 10, 11 (Stegomus).  
     1917 D, 110, 111, pl. iii, fig. 2 (Stegomus).  
 Lydekker, R. 1905 B, 278 (Stegomus).  
 Rice and Gregory 1906 A, 174 (Stegomus).  
 Schuchert, C. 1910 A, 438 (Stegomus).  
     Triassic (Newark); Massachusetts.

HOPLOSUCHEUS Gilmore. Type *H. kayi* Gilmore.

- Gilmore, C. W. 1926 B, 326.

**Hoplosuchus kayi** Gilmore.

- Gilmore, C. W. 1926 B, 326, pls. xxvii-xxix; text-figs. 1-3.  
     Upper Jurassic or Lower Cretaceous (Morrison); Utah.

## Suborder DESMATOSUCHIFORMES, new name.

- Case, E. C. 1920 B, 529 (Desmatosuchia).  
     1922 A, 445 (Desmatosuchia).  
     1922 B, 26 (Desmatosuchia).  
 Huene, F. 1921 E, xlv ("desmatosuchier").

- Nopcsa, F. 1928 A, 182 (Pelycosimia).  
 Williston, S. W. 1925 B, 286 (Desmatosuchia).  
 Zittel and Broili 1923 A, 318 (Desmatosuchia)

## DESMATOSUCHIDÆ Case.

- Case, E. C. 1920 B, 529.  
 Huene, F. 1922 E, 23.  
     1922 F, 410.  
     1922 H, 158.

- Huene, F. 1922 I, xlv ("desmatosuchiden").  
 Nopcsa, F. 1923 H, 91, 125.  
     1928 A, 182.

DESMATOSUCHUS Case. Type *D. spurensis* Case.

Case, E. C. 1920 B, 529.

1921 A, 133.

1921 C, 445.

1922 B, 26.

Huene, F. 1922 E, 23.

1922 F, 410.

1922 H, 147.

1926 E, 3, 4, 8.

1926 I, 59, 61, 76.

Mehl, M. G. 1923 B, 16.

Nopcsa, F. 1923 H, 86, 89, 90, 91.

1928 A, 182.

Williston, S. W. 1925 B, 286.

Zittel and Brouh 1923 A, 318.

## Desmatosuchus spurensis Case.

Case, E. C. 1920 B, 529, figs. 1-4.

1921 A, 133, pls. i-iii.

1922 B, 26, pls. v-x; text-figs. 7-10.

1928 A, 163 ("Desmatosuchus").

Huene, F. 1922 F, tab.

1922 H, 147, 149, figs. 152, 153.

1926 E, 5.

Zittel and Brouh 1923 A, 318, fig. 429.

Triassic (Dockum); Texas.

ACOMPSOSAURUS Mehl. Type *A. wingatensis* Mehl.

Mehl, M. G. 1915 C, 735.

Branson and Mehl 1923 A, 326.

Huene, F. 1922 F, 411.

1922 H, 150.

1926 E, 3.

Mehl, M. G. 1916 A, 39.

Nopcsa, F. 1923 H, 89, 90.

A genus of uncertain ordinal position.

## Acompsosaurus wingatensis Mehl.

Mehl, M. G. 1915 C, 735.

Case, E. C. 1922 B, 74.

Huene, F. 1922 H, 148.

1926 E, 4.

Mehl and Schwartz 1916 A, 33, pl. iii; text-figs. 12-14.

Triassic (Wingate); New Mexico.

## Suborder PHYTOSAURIFORMES, new name.

Unless otherwise indicated, the authors, as cited, use for this group the name Parasuchia.

Hay, O. P. 1902 A, 509.

Abel, O. 1919 A, 513.

1920 A, 378.

1922 D, 26 ("parasuchier").

Arlt, T. 1907 D, 671.

Auer, E. 1909 A, 286.

Brauns, D. 1890 A, 202 (Belodontia).

Broom, R. 1903 D, 287.

1904 C, 111 ("phytosaurians").

1906 B, 599 (Phytosauria).

1913 O, 629.

1924 B, 64, fig. 13 (Phytosauria).

Case, E. C. 1922 B, 32, 33, 48, 55 (Parasuchia); 35, 51 (Phytosauria).

Cope, E. D. 1891 N, 45.

Dollo, L. 1907 D, 85 ("parasuchiens").

Eastman, C. R. 1917 B, 656 ("phytosaur").

Fraas, E. 1902 B, 69.

1905 B, 370 (Phytosauria).

Fuchs, H. 1909 B, 130 (Phytosauria); 145, 149 (Parasuchia).

1911 B.

Fürbringer, M. 1904 A, 581 (Phytosauria).

Gadow, H. 1901 B, 433.

1902 B, 360.

Goodrich, E. S. 1916 A, 263 (Phytosauria).

Gregory and Adams 1915 A, 764 ("phytosaur").

Heilmann, G. 1913 B, 50.

1916 A, 75.

Hoffmann, C. K. 1890 B, 1326.

Huene, F. 1903 B, 388, 395 (Phytosauria).

1908 E, 380 ("parasuchier").

1911 A, 736 ("phytosaurier").

1911 D, 45 ("phytosaurier").

1911 E, 67, 117 ("parasuchier"); 100 ("phytosaurier").

Huene, F. 1914 G, 47, 49, pl. vii ("parasuchier").

1922 E, 22.

1922 F, 408 ("parasuchier").

1922 H, 59 ("parasuchier").

1922 I, xlv ("phytosaurier").

1926 I, 52, 59, 63, 102.

1927 E, 320.

Huxley, T. H. 1875 E, 71.

1877 A, 56.

Jaekel, O. 1910 C, 340 (Belodontia).

1910 E, 205 (Belodontia); 220 (Parasuchi).

1911 A, 163 (Belodontia).

Kingsley, J. S. 1925 A, 166.

Lull, R. S. 1904 D, 148.

1910 A, 4.

1912 D, 411.

1915 A, 98.

1917 B, 322.

1917 C, 110.

Lydekker, R. 1887 C, 311.

1907 C, 458 (Phytosauria).

1912 C, 4, 20, 27.

McGregor, J. H. 1901 A, 272 ("belodonts").

1904 A, 254 (Phytosauria).

1906 A, 31 (Phytosauria).

Mehl, M. G. 1904 A, 254 (Phytosauria).

1906 A, 31 (Phytosauria).

1915 A, 129 (Phytosauria).

1928 B, 19.

1928 C, 141 (Phytosauria).

Merriam, J. C. 1904 A, 421.

1912 B, 222 (Pasachus, err. typ.).

Moodie, R. L. 1909 G, 363 (Phytosauria).

1922 A, 417 (Phytosauria).

Newton, E. T. 1894 A, 586, 601.

Nicholson and Lydekker 1889 A, 1183.

Nopcsa, F. 1922 A, 112, 116 (Parasuchia); 112 ("phytosaurier").

1923 E, 1045 ("parasuchians").

- Nopcsa, F. 1923 H, 3-188, tab.  
 Osborn, H. F. 1903 F, 276 (Phytosauria).  
     1903 H, 454, 456, 504 (Phytosauria).  
     1904 H, 112 (Phytosauria).  
     1904 N, 308 (Phytosauria).  
     1905 C, 295 (Phytosauria).  
     1905 N, 239.  
     1917 B, 319 ("phytosaur").  
 Pompeckj, J. F. 1925 A, 23 ("parasuchier").  
 Reynolds, S. H. 1897 A, 211.  
 Seeley, H. G. 1887 E, 189.  
 Sewertzoff, A. N. 1908 A (Phytosauria).  
 Stehli, G. 1910 A, 790.  
 Steiner, H. 1922 A, 339.  
 Steinmann, G. 1909 A, 80 (Phytosauria).  
 Stromer, E. 1912 A, 83 (Phytosauria).  
 Tornier, G. 1913 B, 357, 374.  
 Troxell, E. L. 1925 C, 490.

- Van den Broeck, E. 1900 A, 107.  
 Versluys, J. 1912 B, 573, 647.  
 Wegner, R. N. 1922 A, 480.  
 Williston, S. W. 1905 D, 297 (Phytosauria, Belodontia).  
     1906 A, 3.  
     1909 A, 395 ("phytosaur").  
     1911 F, 661, 663.  
     1912 E, 260.  
     1912 F, 92.  
     1914 A, 18, 45, 184.  
     1917 C, 412.  
     1925 A, 114.  
     1925 B, 213, 284, 286.  
 Zittel and Broili 1911 A, 257.  
     1923 A, 313.  
 Zittel, Eastman, etc. 1902 A, 208.

## PHYTOSAURIDÆ Lydekker.

- Hay, O. P. 1902 A, 509.  
 Abel, O. 1919 A, 515.  
     1920 A, 378 ("phytosauriden").  
 Arldt, T. 1912 A, 662, 663.  
 Arthaber, G. 1906 A, 312.  
 Broom, R. 1914 H, 1076 ("phytosaur").  
 Case, E. C. 1921 D, 338 ("phytosaurians").  
 Hoernes, R. 1886 A, 599 (Belodontidæ).  
 Huene, F. 1902 A, 61, 71 (Belodontidæ).  
     1908 B, 394.  
     1911 E, 116, 120.  
     1922 E, 23.  
     1922 F, 411.  
     1922 H, 158 (Phytosauridæ, Mystriosuchidæ).  
     1926 I, 74 ("phytosauriden").  
     1927 E, 320 ("phytosauriden").

- Jaekel, O. 1908 B, 467 ("belodontiden").  
     1910 E, 197 ("belodontiden").  
 Lydekker, R. 1887 C, 312 (Belodontidæ).  
 McGregor, J. H. 1902 A, 27 (Belodontia).  
     1906 A, 92.  
 Mehl, M. G. 1925 A, 225 ("phytosaur").  
 Nopcsa, F. 1923 H, 125 (Belodontidæ, Phytosaurinæ).  
     1923 A, 182 (Belodontidæ, Mystriosuchinæ, Phytosaurinæ).  
 Philippi, Frech and Volz 1903 A, 18 ("belodonten").  
 Tornier, G. 1913 B, 358.  
 Watson, D. M. S. 1917 C, 179.  
 Wegner, R. N. 1922 A, 481.  
 Williston, S. W. 1925 B, 286.  
 Zittel and Broili 1911 A, 258.

PALÆORHINUS Williston. Type *P. bransoni* Williston.

- Williston, S. W. 1904 D, 696.  
 Branson and Mehl 1928 A, 326.  
 Case, E. C. 1920 B, 534 (Palæorhinus).  
     1922 B, 57, 68, text-fig. 23.  
 Huene, F. 1909 F, 587.  
     1915 A, 491.  
     1921 B, 570.  
     1922 E, 23.  
     1922 F, 410, 411.  
     1922 H, 88, 100, 143.  
     1926 E, 2, 3.  
 Jaekel, O. 1910 E, 201.  
 Lees, J. H. 1907 A, 121.  
 Mehl, M. G. 1915 A, 157.  
     1928 C, 143, 156.  
 Nopcsa, F. 1923 H, 83.  
 Versluys, J. 1912 B, 581, 648, fig. c.  
 Watson, D. M. S. 1917 C, 179.  
 Williston, S. W. 1925 B, 286.  
 Zittel and Broili 1911 A, 260.  
     1923 A, 316.

**Palæorhinus bransoni** Williston.

- Williston, S. W. 1904 D, 696, text-fig. 6.  
 Huene, F. 1909 F, 592.  
     1911 A, 736 (Metarhinus).

- Huene, F. 1911 E, 106, 113, 120.  
     1922 F, tab.  
     1922 H, 148.  
     1926 E, 4.  
 Jaekel, O. 1910 E, 215, figs. 10, 12, 13.  
 Lees, J. H. 1907 A, 123, figs. 1-8.  
 McGregor, J. H. 1906 A, 96.  
 Mehl, M. G. 1915 A, 157, figs. 19-20.  
     1928 C, 141, 154, 171.  
 Toepelmann, W. C. 1916 A, 43.  
     Upper Triassic (Popo Agie); Wyoming, Arizona.

**Palæorhinus parvus** Mehl.

- Mehl, M. G. 1928 C, 142, 171, pls. i-iii; text-figs. 1, 2.  
     Triassic (Popo Agie); Wyoming.

**Palæorhinus** sp. indet.

- Abel, O. 1922 D, 33, fig. 3.  
 Branson, E. B. 1927 A, 617. Triassic (Wingate); New Mexico.  
 Mehl, M. G. 1928 C, 142.  
 Toepelmann, W. C. 1916 A, 40, figs. 15, 16.  
     (This genus?). Triassic (Wingate); New Mexico.

PHYTOSAURUS Jaeger. Type *P. cylindricodon* Jaeger.

- Hay, O. P. 1902 A, 509.  
 Abel, O. 1919 A, 519.  
     1920 A, 379, figs. 592, 593.  
     1922 D, 26, 47, 51.  
 Anderson, R. J. 1905 A, 322 (Belodon).  
 Arltdt, T. 1907 D, 329 (Belodon).  
 Arthaber, G. 1906 A, 312.  
 Baur, G. 1889 L, 312 (Belodon).  
 Boas, J. E. V. 1914 C, 274, fig. 60 (Belodon).  
 Brauns, D. 1890 A, 160 (Belodon).  
 Broili, F. 1921 A, 342.  
 Bronn, H. G. 1849 A, 691 (Belodon).  
 Broom, R. 1913 O, 629 (Belodon).  
 Case, E. C. 1898 C, 732 (Belodon).  
     1920 B, 523.  
     1921 A, 135 (Belodon).  
     1922 B, 59, fig. 24.  
     1927 D, 227.  
 Cope, E. D. 1880 U, 145 (Belodon).  
 Depéret, C. 1912 A, 705 (Belodon).  
 Fraas, E. 1907 B, 106 (Belodon).  
 Fuchs, H. 1908 C, 217 (Belodon).  
 Gaudry, A. 1896 A, 122, fig. 99 (Belodon).  
 Gilmore, C. W. 1910 A, 500 (Belodon).  
 Hoernes, R. 1886 A, 599 (Belodon).  
 Hoffmann, C. K. 1890 B, 1326 (Belodon).  
 Huene, F. 1902 A, 55 (Belodon).  
     1906 C, 337 (Belodon).  
     1909 F, 583, figs. 1-2, 5-7.  
     1910 B, 43.  
     1911 E, 91, figs. 12-16, 25, 28.  
     1920 E, 144.  
     1921 E, xiv.  
     1922 E, 23.  
     1922 F, 410.  
     1922 H, 65, many figs.  
     1922 I, xlv.  
     1926 E, 3.  
 Huxley, T. H. 1870 H, 496.  
     1870 I, 23 (Belodon).  
     1875 E, 68, 70 (Belodon).  
     1876 F, 176 (Belodon).  
     1877 A, 49.  
 Jaekel, O. 1908 B, 467 (Belodon).  
 Koken, E. 1893 B, 270 (Belodon).  
     1910 E, 201 (Belodon); 214 (Phytosaurus).  
 Lydekker, R. 1885 G, 15, 21 (Belodon).  
     1912 C, 19, 120, fig. 2.  
 McGregor, J. H. 1906 A, 31, 93.  
 Matthew, W. D. 1915 A, 286 (Belodon).  
 Mehl, M. G. 1916 A, 21 (Belodon).  
     1922 A, 151 (Phytosaurus, Lophoprosopus).  
 Newton, E. T. 1894 A, 535.  
 Nopsca, F. 1922 A, 116 (Belodon).  
     1923 H, 83-85.  
 Owen, R. 1845 B, 196, pl. lxiii.  
 Philippi, Frech and Volz 1903 A, 18, pl. xviii (Belodon).  
 Pictet, F. A. 1853 A, 514.  
 Plieninger, T. 1847 A, 151 (Belodon).  
 Reynolds, S. H. 1897 A, 277, 281 (Belodon).  
 Schuchert, C. 1910 A, 438 (Belodon).  
 Seeley, H. G. 1892 C, 139 (Belodon).  
     1899 B, 69 (Belodon).  
 Seitz, A. L. L. 1907 A, 259 (Belodon).  
 Steinmann, G. 1907 A, 432 (Belodon).  
 Tornier, G. 1913 B, 356, 358, figs. 37, 39.  
 Versluys, J. 1912 B, 648, fig. m<sup>2</sup>.  
 Watson, D. M. S. 1916 C, 611 (Belodon).  
     1917 C, 179.  
 Wegner, R. N. 1922 A, 480.  
 Williston, S. W. 1902 F, 26 (Belodon).  
     1925 B, 286.  
 Wiman, C. 1914 A, 184, figs. 94, 96 (Belodon).  
     1918 A, 83 (Belodon).  
 Woodward, A. S. 1922 C, 15, fig. 10 (Belodon).  
 Zittel and Broili 1911 A, 258.  
     1923 A, 315, fig. 424.  
 Zittel, Eastman, etc. 1902 A, 210 (Belodon).  
**Phytosaurus doughtyi** Case.  
 Case, E. C. 1920 B, 533, figs. 5, 6 [P. (Machæroprosopus)].  
 Huene, F. 1922 F, tab. (P. doughtei).  
     1922 H, 149.  
     1926 E, 5. (P. doughti. This genus?).  
     Triassic (Dockum); Texas.  
**Phytosaurus leai** (Emmons).  
 Hay, O. P. 1902 A, 510.  
 Lyman, B. S. 1894 A, 207 (Belodon).  
 Mehl, M. G. 1915 A, 162 (Rutiodon carolinensis).  
 Rogers, H. D. 1858 B, 695 (Clepsysaurus).  
 Schuchert, C. 1910 A, 579 (Belodon).  
     Triassic (Newark); North Carolina.  
**Phytosaurus lepturus** (Cope).  
 Hay, O. P. 1902 A, 510.  
 Huene, F. 1921 B, 571 ("Belodon" lepturus. Syn? of Rutiodon carolinensis).  
 Lyman, B. S. 1894 A, 212 (Belodon).  
 Mehl, M. G. 1915 A, 162 (Syn. of Rutiodon carolinensis).  
     Triassic (Newark); Pennsylvania.  
**Phytosaurus scolopax** (Cope).  
 Hay, O. P. 1902 A, 510.  
 Huene, F. 1922 F, tab. ("gen. indet.").  
     1922 H, 148, 150 ("gen. indet.").  
     1926 E, 2 (Belodon).  
 Lees, J. H. 1907 A, 146 (Belodon).  
 McGregor, J. H. 1906 A, 94.  
 Mehl, M. G. 1915 A, 163 (Palæorhinus?).  
     Triassic; New Mexico.  
**Phytosaurus superciliosus** (Cope).  
 Hay, O. P. 1902 A, 510.  
 Huene, F. 1922 F, tab.  
     1922 H, 149.  
     1926 E, 5 (This genus?).  
 McGregor, J. H. 1906 A, 94.  
 Mehl, M. G. 1915 A, 163.  
     Triassic (Dockum); Texas.  
**Phytosaurus validus** (Marsh).  
 Hay, O. P. 1902 A, 510.  
 Huene, F. 1911 A, 106, 121.  
 Lull, R. S. 1915 A, 79, 109, text-fig. 12 (Rutiodon).

McGregor, J. H. 1906 A, 95 (Belodon).

Mehl, M. G. 1915 A, 182.

Triassic (Newark); Connecticut.

**Phytosaurus** sp. indet.

Case, E. C. 1927 D, 227, pl. i (This genus?).

Triassic (Dockum); Texas.

**ZATOMUS** Cope. Type *Z. sarcophagus* Cope.

Hay, O. P. 1902 A, 490.

The position of this genus is doubtful.

**Zatomus sarcophagus** Cope.

Hay, O. P. 1902 A, 490.

Case, E. C. 1928 A, 161, figs. 1-9 (This genus?).  
Upper Triassic; Texas.

Stanton, T. W. 1905 A, 663 ("Belodon." This genus?). Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

Huene, F. 1914 K, 10.

Triassic (Newark); North Carolina.

**Zatomus** sp. indet.

Stephenson, L. W. 1912 A, 120 (Zatomis. This genus?).

**ANGISTORHINUS** Mehl. Type *A. grandis* Mehl.

Mehl, M. G. 1913 B, 186.

Branson, E. B. 1927 A, 617.

Branson and Mehl 1928 A, 326.

Case, E. C. 1920 B, 534.

1922 B, 55, 56, 68, text-fig. 22.

Eastman, C. R. 1917 B, 656.

Eastman, Gregory, Matthew 1917 A, 119.

Huene, F. 1915 A, 491.

1921 B, 570.

1922 E, 23.

1922 F, 410, 411.

1922 H, 83, 142.

1926 E, 2, 3.

Mehl, M. G. 1915 A, 129.

1922 A, 150.

1928 C, 143, 165.

Nopcsa, F. 1923 H, 83, 89.

Williston, S. W. 1925 B, 286.

**Angistorhinus gracilis** Mehl.

Mehl, M. G. 1915 A, 146, figs. 4, 17, 18.

Huene, F. 1922 F, tab.

1922 H, 148.

1926 E, 4.

Mehl, M. G. 1928 C, 141, 171.

Triassic (Popo Agie); Wyoming.

**Angistorhinus grandis** Mehl.

Mehl, M. G. 1913 B, 186, fig.

Huene, F. 1922 F, tab.

1922 H, 144.

1926 E, 4.

Mehl, M. G. 1915 A, 129, figs. 1-3, 5, 7?

1925 B, 227.

1928 B, 12, fig. 3.

1928 C, 141, 157, 165, 171.

Wiman, C. 1916 B, 214.

Triassic (Popo Agie); Wyoming.

**Angistorhinus maximus** Mehl.

Mehl, M. G. 1928 C, 158, text-figs. 3-6.

Triassic (Popo Agie); Wyoming.

**Angistorhinus** sp. indet.

Huene, F. 1926 E, 4.

Mehl, M. G. 1916 A, 26, pl. ii; text-fig. 11.  
(This genus?). Triassic; Arizona.

1928 C, 167, figs. 7, 8. Triassic (Popo Agie); Wyoming.

**PSEUDOPALATUS** Mehl. Type *P. pristinus* Mehl.

Mehl, M. G. 1928 B, 7.

**Pseudopalatus pristinus** Mehl.

Mehl, M. G. 1928 B, 7, pls. i-iii; text-figs. 1-6.  
Triassic (Chinle); Arizona.

**LEPTOSUCHUS** Case. Type *L. crosbiensis* Case.

Case, E. C. 1922 B, 61, 69.

Huene, F. 1926 E, 8.

**Leptosuchus crosbiensis** Case.

Case, E. C. 1922 A, 61, pl. xiv; text-fig. 25.

1924 A, 419, pl. xxii, fig. 1; text-figs. 9-12.

Huene, F. 1926 E, 5 (*L. crosbyensis*).

Mehl, M. G. 1928 B, 11.

Upper Triassic; Texas.

**Leptosuchus imperfectus** Case.

Case, E. C. 1922 B, 68.

1924 A, 421, pl. xxii, fig. 2; pl. xxiii, fig. 1.

Upper Triassic; Texas.

**MACHÆROPSOPUS** Mehl. Type *M. validus* Mehl.

Mehl, M. G. 1916 A, 5, 23, figs. 6-10.

Hay, O. P. 1902 A, 509 (Phytosaurus, in part).

Abel, O. 1922 D, 28, 35, 36 (Syn. of Phytosaurus).

Case, E. C. 1920 B, 534.

Case, E. C. 1922 B, 60, 68, fig. 24 (Phytosaurus).

Eastman, C. R. 1917 B, 656.

Eastman, Gregory and Matthew 1917 A, 119.

Huene, F. 1921 B, 570.

1922 E, 23.



Huene, F. 1922 F, 410, 411.

1922 H, 88, 143.

1926 E, 2, 3.

Mehl, M. G. 1922 A, 157.

Nopcsa, F. 1923 H, 83.

Williston, S. W. 1925 A, 81, fig. 66.

1925 B, 286 (Lophoprosopus).

### **Machæroprosopus andersoni** Mehl.

Mehl, M. G. 1922 A, 144, figs. 1-3.

1925 B, 227.

1928 B, 9, fig. 3.

Upper Triassic; New Mexico.

### **Machæroprosopus buceros** (Cope).

Hay, O. P. 1902 A, 510 (Phytosaurus).

Abel, O. 1922 D, 28, 34, fig. 4 (Phytosaurus).

Broili, F. 1921 A, 342.

Case, E. C. 1920 B, 533, 535 (Phytosaurus).

1928 A, 161 (Belodon).

Cope, E. D. 1891 N, 46, fig. 23 (Phytosaurus).

Huene, F. 1915 A, 490, fig. 11 (Phytosaurus).

1922 F, tab. (This genus?).

1922 H, 148 (Metapasaurus); 156 ("Phytosaurus").

1926 E, 4.

Jaekel, O. 1910 E, 215 (Metarhinus, preoccupied).

McGregor, J. H. 1906 A, 93 (Phytosaurus).

Mansuy, — 1923 A, 91 (Phytosaurus biacros).

Mehl, M. G. 1915 A, 163 (Lophoprosopus?).

1916 A, 21 (Belodon); 23 (Machæroprosopus).

1928 B, 16 (Belodon).

Nopcsa, F. 1926 A, 647, text-fig. 5 (Phytosaurus).

Triassic; New Mexico.

### **Machæroprosopus validus** Mehl.

Mehl, M. G. 1916 A, 5, figs. 1-5.

Abel, O. 1922 D, 35, fig. 5 (Syn. of *M. buceros*).

Huene, F. 1922 F, tab.

1922 H, 143.

1926 E, 4.

Mehl, M. G. 1916 A, 24, fig. 10 (1st sp.); 23 (2d sp.).

1922 A, 147, 155.

Triassic (Papo Agie); Arizona.

### **Machæroprosopus** sp. indet.

Huene, F. 1926 E

Triassic (Papo Agie); Arizona.

### PROMYSTERIOSUCHUS Case. Type *P. ehlersi* Case.

Case, E. C. 1922 B, 49, 69.

Huene, F. 1926 E, 8.

Mehl, M. G. 1928 C, 165.

### **Promystriosuchus ehlersi** Case.

Case, E. C. 1922 B, 49, pl. ii; text-fig. 21.

Huene, F. 1926 E, 5 (*P. ehlersi*).

Upper Triassic; Texas.

### HETERODONTOSUCHUS Lucas. Type *H. ganei* Lucas.

Hay, O. P. 1902 A, 515.

Huene, F. 1926 E, 2.

Lees, J. H. 1907 A, 148.

Mook, C. C. 1925 A, 380.

Williston, S. W. 1904 D, 696.

### **Heterodontosuchus ganei** Lucas.

Hay, O. P. 1902 A, 515.

Broili, F. 1921 A, 342.

Cross, W. 1899 A, 3.

1899 B, 3 (This species?).

1907 A, 659.

1908 A, 113, 116.

Cross and Howe 1905 A, 468, 480, 489.

Darton, N. H. 1910 A, 42.

Gregory, H. E. 1917 A, 46, 47.

Huene, F. 1922 F, tab.

1922 H, 149.

1926 E, 4.

Lucas, F. A. 1901 B, 376.

1902 B, 134.

1904 A, 193.

McGregor, J. H. 1906 A, 63, 94 (Phytosaurus).

Mehl, M. G. 1913 B, 189 (Phytosaurus).

1915 A, 163 (Lophosaurus buceros?).

1916 A, 21.

Merrill, G. P. 1907 A, 73.

Mook, C. C. 1925 A, 380.

Upper Triassic (Chinle); Utah, Arizona; (Dolores); Colorado.

### EPISCOPOSOSAURUS Cope. Type *E. horridus* Cope.

Hay, O. P. 1902 A, 511.

Cross and Howe 1905 A, 480.

Huene, F. 1902 A, 57.

1915 A, 493.

1922 E, 23.

1922 F, 411.

1922 H, 143.

1926 E, 2.

Lucas, F. A. 1901 B, 376.

1902 B, 134.

Zittel and Broili 1923 A, 316.

Zittel, Eastman, etc. 1902 A, 210.

### **Episcoposaurus haplocerus** Cope.

Hay, O. P. 1902 A, 511.

Huene, F. 1922 F, tab. (Phytosaurus).

1922 H, 149.

Huene, F. 1926 E, 5 (This genus?).

McGregor, J. H. 1906 A, 96.

Triassic (Dockum); Texas.

### **Episcoposaurus horridus** Cope.

Hay, O. P. 1902 A, 511.

Darton, N. H. 1910 A, 42 ("H. episcoposaurus").

Huene, F. 1902 A, 57.

1915 A, 492, figs. 12-15, 18-27.

1922 F, tab.

1922 H, 148, 149.

1926 E, 5.

1926 I, 62.

McGregor, J. H. 1906 A, 35, 96.

Triassic (Upper); New Mexico.

**Episcoposaurus** sp. indet.

Cross, W. 1908 A. Triassic (Shinarump); Arizona.

**RUTIDON** Emmons. Type *R. carolinensis* Emmons.

- Hay, O. P. 1902 A, 509 (Phytosaurus, part).  
 Abel, O. 1919 A, 522 (Syn. of *Mystriosuchus*).  
 Arthaber, G. 1906 A, 312 (Rhytidodon).  
 Case, E. C. 1922 B, 59 (Rhytidodon).  
 Huene, F. 1902 A, 61 (Rytidodon).  
     1908 B, 395 (Rhytidodon).  
     1913 A, 277.  
     1915 A, 491.  
     1920 E, 145.  
     1922 E, 23.  
     1922 F, 411.  
     1922 H, 88, 101, 114.  
 Lee, J. H. 1907 A, 144 (Rhytidodon).  
 Lull, R. S. 1915 A, 43, 112.  
 Lydekker, R. 1911 A, 683 (Rhytidodon).  
     1914 A, 641.  
 McGregor, J. H. 1901 A, 272 (Rhytidodon).  
     1906 A (Rhytidodon).  
 Matthew, W. D. 1915 A, 286.  
 Mehl, M. G. 1913 B, 188 (Rhytidodon).  
     1915 A, 156.  
 Nopsa, F. 1923 H, 85-87, pl. iv, fig. 10; pl. v, fig. 10.  
 Osborn, H. F. 1917 B, 199, 211, figs. (Rhytidodon).  
 Watson, D. M. S. 1917 C, 179 (Rhytidodon).  
 Williston, S. W. 1925 B, 286.  
 Zittel and Broili 1911 A, 259 (Rhytidodon).  
     1923 A, 316.

**Rutidon carolinensis** Emmons.

- Hay, O. P. 1902 A, 510 (Phytosaurus carolinensis, P. leaii, P. priscus, P. rostratus, P. serridens).  
 Abel, O. 1922 D, 52, 53, 57 (Syn. of Phytosaurus buceros).  
 Case, E. C. 1922 B, 74, 75 (Rhytidodon, Rhytidodon).  
 Cross, W. 1899 A, 3 (Belodon priscus. This species?).  
 Fraas, E. 1907 B, 108 (Rhytidodon).  
 Hawkins, A. C. 1914 A, 153 (Centemodon sulcatus, Eurydorus serridens).  
 Huene, F. 1909 F, 592 (Rhytidodon. To Phytosaurus).  
     1911 E, 106, 119, 121, figs. 29, 30 (Mystriosuchus).  
     1913 A, 275, pl. xlix.  
     1915 A, 494.  
     1921 B, 568, fig. 11 ("Belodon" priscus); 570, figs. 12, 13 (R. carolinensis).  
     1922 F, tab. (R. carolinensis, R. rostratus).  
     1922 H, 64, 88, 95, 109, 110, 143 (R. carolinensis, R. rostratus).  
 Lees, J. H. 1907 A, 149 (Rhytidodon).  
 Lull, R. S. 1915 A, 110, fig. 13.  
 Lyman, B. S. 1894 A, 207, 209, 212 (Belodon car.); 212 (Centemodon sulcatus); 207 (Belodon

Gregory, H. E. 1917 A, 46. Triassic (Chinle); Arizona.  
 Huene, F. 1926 E, 9, fig. 6 (This genus?). Middle Triassic; Arizona.

- don leaii); 207, 209 (B. priscus); 212 (Eurydorus serridens).  
 McGregor, J. H. 1906 A, 95, figs. 12, 14-26 (Rhytidodon).  
 Mehl, M. G. 1915 A, 162 (Phytosaurus leaii, P. priscus, P. rostratus, P. serridens as syns.).  
 Merrill, G. P. 1907 A, 76 (Rhytidodon rostratus).  
 Moodie, R. L. 1909 G, 364 (Rhytidodon).  
 Rice and Gregory 1906 A, 172.  
 Rogers, H. D. 1858 B, 695 (R. car., Paleosaurus sulcatus); 695 (Phytosaurus leaii).  
 Schuchert, C. 1910 A, 579 (Belodon car., B. leaii).  
 Sinclair, W. J. 1918 A, 457.  
 Williston, S. W. 1914 A, 190, fig. 95.  
     1925 A, 141, 145, figs. 111, 118.  
 Wiman, C. 1918 A, 83 (Rhytidodon).  
 Zittel and Broili 1911 A, 259, fig. 405 (Rhytidodon).  
     Triassic (Newark); North Carolina: (Dolores); Colorado.

**Rutidon manhattanensis** Huene.

- Huene, F. 1913 A, 277, pl. 1, text-fig. 14.  
 Abel, O. 1926 B, 19 (Phytosaurus).  
 Huene, F. 1915 A, 494.  
     1921 B, 571.  
     1922 F, tab.  
     1922 H, 143, 152.  
     1926 E, 5 (This genus?).  
 Lull, R. S. 1915 A, 113, pls. iii, ix.  
 Lydekker, R. 1914 A, 641.  
 Matthew, W. D. 1911 A, 28 ("dinosaur").  
 Sinclair, W. J. 1918 A, 457, figs. 1-10.  
     Triassic (Newark); New York.

**Rutidon validus** Lull.

- Lull, R. S. 1915 A, 79, 109, text-fig. 12.  
 Hay, O. P. 1902 A, 510 (Phytosaurus).  
 Abel, O. 1926 B, 19 (Phytosaurus).  
 Huene, F. 1911 A, 106, 121 (Phytosaurus).  
     1921 B, 571 (Syn? of Rutidon carolinensis).  
     1922 F, tab. (Rutidon).  
     1922 H, 143 (Belodon).  
     1926 E, 5 (Rutidon?).  
 Lull, R. S. 1912 D, 411, 413, 414 (Rhytidodon).  
     1917 D, 110, 111 (Rutidon).  
 McGregor, J. H. 1906 A, 95 (Belodon).  
 Mehl, M. G. 1915 A, 162 (Phytosaurus).  
     Triassic (Newark); Connecticut.

**Rutidon** sp. indet.

- Cross, W. 1899 B, 3 (Belodon). Triassic (Dolores); Colorado.  
     1905 B, 5 (Belodon). Triassic (Dolores); Colorado.

**Order CROCIDILOMORPHI, new name.**

Nopsa, F. 1923 A, 186 (Crocodilia).

## Suborder GONIOPHOLIDIFORMES, new name.

Andrews, C. W. 1913 A, 80 (Mesosuchia).  
 Gilmore, C. W. 1926 B, 340 (Mesosuchia).

Huxley, T. H. 1875 B, 427 (Mesosuchia).

Lydekker, R. 1887 C, 311 (Mesosuchia).

1888 B, 76 ("amphicelalian series").

Newton, E. T. 1894 A, 586 (Mesosuchia).

Nicholson and Lydekker 1889 A, 1185 ("amphicelalian series").

Simpson, G. G. 1926 E, 6 ("brevirostrines").

1926 H, 204 ("brevirostral crocodiles").

Williston, S. W. 1914 A, 204 (Mesosuchia).

Woodward, A. S. 1898 B, 218 (Mesosuchia).

Zittel, K. A. 1890 A, 636, 647 (Mesosuchia).

Zittel and Broili 1923 A, 321 (Mesosuchia).

## GONIOPHOLIDIDÆ Lydekker.

Lydekker, R. 1887 C, 312.

Hay, O. P. 1902 A, 516 (Goniopholidæ).

Ardt, T. 1907 D, 656 (Goniopholidæ).

Lydekker, R. 1912 C, 119.

Nopcsa, F. 1928 A, 187 (Goniopholidæ, Goniopholinae, Hyposaurinae).

Van den Broeck, E. 1900 A, 110.

Williston, S. W. 1906 A, 9.

1925 B, 289 (Goniopholidæ).

Zittel and Broili 1911 A, 270 (Goniopholidæ).

1923 A, 329 (Goniopholidæ).

GONIOPHOLIS Owen. Type *G. crassidens* Owen.

Hay, O. P. 1902 A, 516.

Abel, O. 1922 C, 384, fig. 328.

Andrews, C. W. 1913 B, 494.

Cannon, G. L. 1894 A, 246 (Diplosaurus).

Hooley, R. W. 1907 A, 50.

Hulke, J. W. 1878 A, 377, pl. xv.

Huxley, T. H. 1859 E, 445.

1859 I, 310.

1877 A.

Jaekel, O. 1927 A, 267, fig. 8.

Kesteven, H. L. 1919 A, 230, fig. 9.

Loomis, F. B. 1901 A, 195.

Lull, R. S. 1911 B, 177.

Lydekker, R. 1912 C, 119.

Mantell, G. A. 1844 A, 721.

Mook, C. C. 1916 A, 153, 155.

1925 A, 321 (Goniopholis); 379 (Diplosaurus, Amphicotylus).

Nopcsa, F. 1923 H, 109.

1925 B, 10.

1928 A, 187.

Owen, R. 1842 F, 71, 73.

1879 D, 149.

Reynolds, S. H. 1897 A, 275.

Sauvage, H. E. 1901 B, 10.

Schuchert, C. 1918 B, 259 (Diplosaurus).

Simpson, G. G. 1926 E, 7.

1926 H, 204.

Troedsson, G. T. 1924 A, 49.

Van den Broeck, E. 1900 A, 111.

Williston, S. W. 1905 B, 346 (Diplosaurus, Goniopholis).

1906 A, 3, 7 (Goniopholis); 7, 8 (Diplosaurus).

1925 B, 289.

Zittel and Broili 1911 A, 270.

1923 A, 329, fig. 442.

**Goniopholis affinis** Lull.

Lull, R. S. 1911 C, 210, pl. xx, fig. 7.

Gilmore, C. W. 1921 E, 589, pl. cx, fig. 1.

Lull, R. S. 1911 B, 177.

Mook, C. C. 1925 A, 329, fig. 5.

Lower Cretaceous (Arundel); Maryland.

**Goniopholis felix** (Marsh).

Hay, O. P. 1902 A, 516.

Lull, R. S. 1911 C, 211.

Mook, C. C. 1916 A, 148.

1925 A, 324, fig. 2.

Williston, S. W. 1906 A, 7 (Diplosaurus).

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**Goniopholis? gilmorei.**

Holland, W. J. 1905 A, 431, pl. xvi.

Abel, O. 1922 C, 440, fig. 379.

Mook, C. C. 1916 A, 148.

1925 A, 326, figs. 3, 4.

Williston, S. W. 1906 A, 8.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Goniopholis lucasii** Cope.

Hay, O. P. 1902 A, 516.

Abel, O. 1922 C, 436 (Amphicotylus lucasii).

Mook, C. C. 1916 A, 148.

1925 A, 325 (Goniopholis); 380 (Amphicotylus).

Williston, S. W. 1906 A, 7 (Amphicotylus).

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**Goniopholis nanus** (Marsh).

Marsh, O. C. 1895 A, 405 (Diplosaurus).

Williston, S. W. 1905 B, 341 (Diplosaurus).

1906 A, 8 (Diplosaurus)

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Goniopholis vebbiansus** (Cope).

Hay, O. P. 1902 A, 516.

Cope, E. D. 1874 B, 431 (Hyposaurus vebbii).

Mook, C. C. 1916 A, 155 (Hyposaurus vebbii).

1925 A, 322, fig. 1.

Sauvage, H. E. 1901 B, 10 (Hyposaurus vebbii).

Troxell, E. L. 1925 C, 491 (Hyposaurus).

Williston, S. W. 1905 B, 346 (Hyposaurus vebbii).

1906 A, 7 (Hyposaurus vebbii or H. vebbiansus).

Upper Cretaceous (Benton); Kansas.

**Goniopholis** sp. indet.

Gilmore, C. W. 1909 B, 39. Upper Jurassic or Lower Cretaceous (Morrison); Colorado.  
1914 A, 4, 25. Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**CŒLOSUCHUS** Williston. Type *C. reedi* Williston.

Williston, S. W. 1906 A, 9.  
Mook, C. C. 1925 A, 382.  
Nopcsa, F. 1923 H, 113.  
1928 A, 187.  
Williston, S. W. 1925 B, 289.  
Zittel and Broili 1911 A, 270.  
1923 A, 329.

Simpson, G. G. 1926 E, 3. Upper Jurassic; Wyoming.  
Williston, S. W. 1906 A, 7. Lower Cretaceous (Comanche); Kansas.

**Cœlosuchus reedi** Williston.

Williston, S. W. 1906 A, 9, text-figs. 1-12.  
Mook, C. C. 1925 A, 382, figs. 37-42.  
Upper Cretaceous (Benton); Wyoming.

**PHOLIDOSAURIDÆ** Williston.

Williston, S. W., in Zittel, Eastman, etc. 1902 A, 215.  
Abel, O. 1919 A, 546.  
Andrews, C. W. 1913 B, 492.  
Koken, E. 1887 A.

Williston, S. W. 1906 A, 6.  
1925 B, 288.  
Zittel, K. A. 1890 A, 670 (Macrorhynchidæ).  
Zittel and Broili 1911 A, 269 (Macrorhynchidæ).  
1923 A, 327.  
Zittel, Eastman, etc. 1902 A, 215.

**HYPOSAURUS** Owen. Type *H. rogersii* Owen.

Hay, O. P. 1902 A, 516.  
Anonymous 1906 D, 711.  
Arlt, T. 1907 D, 90.  
Cope, E. D. 1885 Z, 15.  
Huxley, T. H. 1875 E, 75.  
Mook, C. C. 1925 A, 343 (Syn. of Goniopholis).  
Nopcsa, F. 1928 A, 187.  
Sauvage, H. E. 1901 B, 10.  
Thevenin, A. 1911 A, 3.  
Toula and Kail 1885 A, 354.  
Troedsson, G. T. 1924 A, 8.  
Troxell, E. L. 1925 A, 221.  
1925 C, 489, 492, fig.  
1925 D, 613.  
Williston, S. W. 1906 A, 1.  
Zittel and Broili 1911 A, 270.

**Hyposaurus ferox** Marsh.

Hay, O. P. 1902 A, 516.  
Mook, C. C. 1925 A, 347.  
Williston, S. W. 1906 A, 4.  
Upper Cretaceous (Middle marl); New Jersey.

**Hyposaurus natator** Troxell.

Troxell, E. L. 1925 C, 496-505, figs. 2-8, 14, 15.  
Upper Cretaceous (Hornerstown); New Jersey.

**Hyposaurus natator oweni** Troxell.

Troxell, E. L. 1925 C, 505, figs. 9-13.  
Upper Cretaceous (Marl); New Jersey.

**Hyposaurus rogersii** Owen.

Hay, O. P. 1902 A, 516.  
Berry, E. W. 1916 A, 349, pl. viii, figs. 3, 4.  
Cope, E. D. 1885 Z, 15 (H. rogersi).  
Mook, C. C. 1925 A, 344, figs. 14, 15.  
Sauvage, H. E. 1901 B, 10 (H. rogerin).  
Troxell, E. L. 1925 C, 490.  
Williston, S. W. 1906 A, 1.  
Upper Cretaceous (Greensand); New Jersey: (Monmouth); Maryland.

**TELEORHINUS** Osborn. Type *T. browni* Osborn.

Osborn, H. F. 1904 P, 239 (with *Terminonaris* as substitute name).  
Mook, C. C. 1925 A, 381.  
Nopcsa, F. 1923 A, 187.  
Williston, S. W. 1905 G, 183 (Teleorhinus).  
1906 A, 5.  
1925 B, 288, 289.  
Zittel and Broili 1911 A, 269.

**Teleorhinus browni** Osborn.

Osborn, H. F. 1904 P, 239.  
Mook, C. C. 1925 A, 381, fig. 36.  
Thevenin, A. 1911 A, 4, 6.  
Williston, S. W. 1906 A, 6.  
Upper Cretaceous (Benton); Montana.

**Suborder GAVIALIFORMES**, new name.

Huxley, T. H. 1875 B, 430 ("long-smouted crocodiles").  
Lydekker, R. 1888 B, 62 ("longirostrine section").

Nicholson and Lydekker 1889 A, 1192 ("longirostrine section").  
Zittel, K. A. 1890 A, 658 (Longirostres).

## GAVIALIDÆ Adams.

- Adams, A. 1854 A, 70.  
 Hay, O. P. 1902 A, 515.  
 Abel, O. 1919 A, 553.  
 Arldt, T. 1907 D, 655.  
 Brauns, D. 1890 A, 152 ("gavialen").  
 Carus, V. 1875 A, 409.  
 Gadow, H. 1901 B, 451.  
 Gaupp, E. 1895 A, 58 ("gavialen").  
 Geoffroy St. Hilaire, E. F. 1825 B, 97  
 ("gavials").  
 Gray, J. E. 1867 C, 132.  
 1872 B, 4, 5.  
 Hoernes, R. 1886 A, 602.  
 Huxley, T. H. 1859 B, 16.  
 1859 I, 287, 300.
- Lobley, J. L. 1908 A, 199, 208.  
 Nopcsa, F. 1923 H, 83 ("gavialen"); 126  
 (Gavialinae).  
 1926 A, 646 ("gavials").  
 1928 A, 187 (Gavialinae).  
 Sellards, E. H. 1915 A, 135.  
 Terra, P. 1911 A, 237.  
 Tornier, G. 1913 B, 361.  
 Troedsson, G. T. 1924 A, 49, 67.  
 Williston, S. W. 1914 A, 203.  
 1925 B, 289.  
 Zittel and Broili 1911 A, 271.  
 1923 A, 330.  
 Zittel, Eastman, etc. 1902 A, 221.

GAVIALIS Oppel. Type *G. gangeticus* Linnæus.

- Hay, O. P. 1902 A, 515.  
 Abel, O. 1909 A, 251.  
 1912 F, 515.  
 Arldt, T. 1907 D, 215.  
 1911 A, 228.  
 Auer, E. 1909 A, 287.  
 Baur, G. 1891 F, 335.  
 Bronn, H. G. 1849 A, 687.  
 Cuvier, G. 1808 E, 74 ("gavial").  
 1825 A, v, 2, 59, 106, pl. iii, figs. 5-7;  
 pl. viii, figs. 1, 2.  
 Dollo, L. 1889 B, 677.  
 Fuchs, H. 1909 A, 350.  
 Gadow, H. 1901 B, 451.  
 Geoffroy St. Hilaire, E. F. 1825 A, 13.  
 1825 B, 97.  
 Gervais, P. 1859 A, 447.  
 Giebel, C. G. 1855 A, 34, pl. xxxviii.  
 Gray, J. E. 1867 C, 132.  
 1872 B, 5.  
 Hoffmann, C. K. 1890 B, 1059, 1062, pl. lix.  
 Howes, G. B. 1894 A, 80.  
 Huene, F. 1908 E, 879.  
 Huxley, T. H. 1859 I, 304.  
 1875 E, 75.  
 Jäger, G. 1863 A, 101, pl. ("reptile").  
 Klein, E. F. 1863 A, 71.  
 Lemoine, V. 1884 C, 158, pl. iv.  
 Leunis and Ludwig 1883 A, 545.  
 Mook, C. C. 1921 H, 128, fig. 1.
- Nopcsa, F. 1923 H, 12, 13, 87, 109, 110-112,  
 pl. iii, fig. 7.  
 1928 A, 187.  
 Owen, R. 1845 B, 286, pl. lxxv, fig. 2.  
 1866 A, 406.  
 Rovereto, C. 1912 A, 367 (Gavialis).  
 Troedsson, G. T. 1924 A.  
 Troxell, E. L. 1925 A, 220, 221.  
 Versluys, J. 1919 A, 23.  
 Williston, S. W. 1904 B, 177, text-fig. 10.  
 1914 A, 198, figs. 101, 102, 105 ("gavial").  
 1918 A, 79, fig. 3.  
 1925 A, 103, 115, 141, figs. 80, 90, 112.  
 1925 B, 289.  
 Zittel and Broili 1911 A, 272.  
 1923 A, 322, fig. 432.  
 Zittel, Eastman, etc. 1902 A, 221.

**Gavialis fraterculus** Cope.

- Hay, O. P. 1902 A, 515.  
 Mook, C. C. 1925 A, 346, fig. 16 (Hyposaurus).  
 Toulou and Kail 1885 A, 354 (Hyposaurus,  
 Gavialis).  
 Williston, S. W. 1906 A, 1 (Hyposaurus).  
 Upper Cretaceous (Hornerstown); New  
 Jersey.

**Gavialis minor** Marsh.

- Hay, O. P. 1902 A, 515.  
 Eocene (Shark River); New Jersey.

## TOMISTOMIDÆ Eastman.

- Eastman, C. R. 1902, in Zittel, Eastman, etc.  
 1902 A, 220.  
 Abel, O. 1919 A, 553, figs. 436, 437 (Tomistoma).  
 Sellards, E. H. 1915 A, 135.  
 Toulou and Kail 1885 A (Tomistoma).
- Troedsson, G. T. 1924 A, 67.  
 Williston, S. W. 1906 A, 3.  
 1925 B, 289.  
 Zittel, K. A. 1890 A, 672 (Rhynchosuchidæ).

GAVIALOSUCHUS Toulou and Kail. Type *G. eggenburgense* Toulou and Kail.

- Toulou and Kail 1885, Anz. Akad. Wiss. Wien,  
 109.  
 Citations of the literature of *Tomistoma*  
 also are presented.  
 Abel, O. 1922 C, 200, fig. 169.  
 Andrews, C. W. 1906 A, 267 (Tomistoma).  
 Arldt, T. 1911 A, 228 (Tomistoma).  
 Boulenger, G. A. 1889 A, 276 (Tomistoma).  
 Capellini, G. 1890 A, 507, pls. i-iv (Tomistoma).
- Carus, V. 1875 A, 409 (Tomistoma).  
 Cope, E. D. 1900 A, 162 (Tomistoma).  
 Drevermann, F. 1918 A, 120, fig. 1 (Tomistoma).  
 Gray, J. E. 1867 C, 133 (Tomistoma).  
 1872 B, 6 (Tomistoma).  
 Gregory, W. K. 1920 A, 125 (Tomistoma).  
 Howes, G. B. 1891 A, 148 (Tomistoma).  
 Hulke, J. W. 1871, Quart. Jour. Geol. Soc.  
 Lond., xxvii. 3 (Melitosaurus).

- Huxley, T. H. 1859 B, 16 (Rhynchosuchus).  
 Lydekker, R. 1836 F, 21, pl. ii (Tomistoma).  
     1838 B, 62, fig. 10 (Tomistoma).  
 Mook, C. C. 1921 B, 61.  
     1921 C, 77, text-fig. 6 (Tomistoma).  
     1921 H, 140, fig. 2 (Tomistoma).  
     1924 A, 1.  
 Müller, S. 1846, Arch. Naturgesch., i, 122 (Tomistoma).  
 Nicholson and Lydekker 1889 A, 1193, fig. 1091 (Tomistoma).  
 Sellards, E. H. 1915 A, 137 (Tomistoma).  
 Thevenin, A. 1911 A, 15 (Tomistoma).  
 Toulou and Kail 1885 A, 302, 342, pls. i-iii; text-figs. 1-3.  
 Williston, S. W. 1925 B, 289 (Syn.? of Tomistoma).  
 Zittel, K. A. 1890 A, 674 (Tomistoma).  
 Zittel and Broili 1911 A, 271, fig. 420 (Tomistoma).

- Zittel and Broili 1923 A, 330 (Tomistoma).  
 Zittel, Eastman, etc. 1902 A, 220, fig. 324 (Tomistoma).

### **Gavialosuchus americanus (Sellards).**

- Sellards, E. H. 1915 A, 136, figs. 1, 2 (Tomistoma).  
 Anonymous 1916 B, 480 (Tomistoma).  
 Hay, O. P. 1923 A, 330 (Tomistoma).  
 Merriam, J. C. 1917 A, 439 (Tomistoma).  
 Mook, C. C. 1921 A, 33, pls. viii, ix (G. americana).  
     1924 A, 1, fig. 1 (G. americana).  
 Rogers, A. F. 1924 A, 545 (Tomistoma).  
 Sellards, E. H. 1915 D, 73, 100, figs. 8, 29, 30 (Tomistoma).  
     1916 A, 237, figs. 2, 3 (Tomistoma).  
     Upper Miocene or Lower Pliocene (Bone Valley); Florida.

## **THORACOSAURIDÆ Troedsson.**

- Troedsson, G. F. 1924 A, 67.

- Troxell, E. L. 1925 A, 231 (Thoracosauri).

### **THORACOSAURUS Leidy. Type *T. grandis* Leidy = *Gavialis neocasiensis* DeKay.**

- Hay, O. P. 1902 A, 515 (Thoracosaurus, Holops).  
 Abel, O. 1919 A, 553.  
 Andrews, C. W. 1906 A, 269.  
 Berry, E. W. 1916 A, 347.  
 Gadow, H. 1901 B, 451.  
 Heilmann, A. 1887 B, 329 (Thoracosaurus, Holops).  
 Huxley, T. H. 1875 E, 75 (Thoracosaurus, Holops).  
 Lydekker, R. 1886 E, 211, 220, 225, 235 (Holops).  
 Mook, C. C. 1925 A, 342 (Sphenosaurus); 348 (Thoracosaurus); 357 (Holops).  
 Nopcsa, F. 1923 H, 109.  
 Sellards, E. H. 1915 A, 137 (Thoracosaurus, Holops).  
 Tornier, G. 1913 B, 362.  
 Troedsson, G. T. 1924 A, 9, 56, pls. i-viii; 9 text-figs.  
 Troxell, E. L. 1925 A, 219, 220 (Thoracosaurus, Holops).  
 Williston, S. W. 1906 A, 211 (Holops).  
     1909 A, 399.  
     1914 A, 207 (Thoracosaurus, Holops).  
     1925 B, 289 (Thoracosaurus, Holops).  
 Woodward, A. S. 1898 B, 223.  
     1922 C, 12.  
 Zittel and Broili 1911 A, 271 (Thoracosaurus, Holops).  
     1923 A, 330 (Thoracosaurus, Holops).  
 Zittel, Eastman, etc. 1902 A, 220 (Thoracosaurus, Holops).

### **Thoracosaurus basifissus (Owen).**

- Owen, R. 1849 A, 381, pl. x, figs. 1, 2 (Crocodilus).  
 Hay, O. P. 1902 A, 515 (T. neocasiensis, in part).  
 Mook, C. C. 1925 A, 352, fig. 18.  
 Toulou and Kail 1885 A, 354 (Alligator, Crocodilus).

- Troxell, E. L. 1925 A, 220.  
 Williston, S. W. 1906 A, 2 (Crocodilus).  
     Upper Cretaceous (Hornerstown); New Jersey.

### **Thoracosaurus basitruncatus (Owen).**

- Hay, O. P. 1902 A, 515 (Holops).  
 Cope, E. D. 1869 N, 736 (T. tenebrosus).  
     1869 P, 123 (Crocodilus tenebrosus).  
 Mook, C. C. 1925 A, 359, fig. 20 (Holops basitruncatus); 362, fig. 22 (H. tenebrosus).  
 Owen, R. 1860 E, 277 (Crocodilus).  
 Toulou and Kail 1885 A, 354 (Holops basitruncatus, H. tenebrosus, Crocodilus tenebrosus).  
 Troedsson, G. T. 1924 A, 11.  
 Troxell, E. L. 1925 A, 220.  
     Upper Cretaceous (Hornerstown); New Jersey.

### **Thoracosaurus brevispinus Cope.**

- Cope, E. D. 1869 H, 123 (Holops (Thoracosaurus)).  
 Hay, O. P. 1902 A, 516 (Holops brevispinus).  
 Cope, E. D. 1867 A, 39 (No description).  
     1869 B, 736 (No description).  
     1869 M, 69 (Holops brevispinus).  
     1869 P, 121 (T. brispinus).  
 Mook, C. C. 1925 A, 365, figs. 24-26 (Holops).  
 Toulou and Kail 1885 A, 354 (Holops).  
 Troedsson, G. T. 1924 A, 11, 50 (T. brevispinus).  
 Troxell, E. L. 1925 A, 220.  
     Upper Cretaceous (Hornerstown); New Jersey.

### **Thoracosaurus cordatus (Cope).**

- Hay, O. P. 1902 A, 516 (Holops).  
 Mook, C. C. 1925 A, 372, figs. 27, 28 (Holops).  
 Toulou and Kail 1885 A, 354 (Holops, Crocodilus).  
 Troedsson, G. T. 1924 A, 11.

Troxell, E. L. 1925 A, 220.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus glyptodon (Cope).**

Hay, O. P. 1902 A, 516 (Holops).  
Mook, C. C. 1925 A, 375 (Holops).  
Toula and Kail 1885 A, 354 (Holops).  
Troedsson, G. T. 1924 A, 11.  
Troxell, E. L. 1925 A, 220.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus meirsanus Troxell.**

Troxell, E. L. 1925 A, 223, figs. 1, 2.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus mullicensis Troxell.**

Troxell, E. L. 1925 A, 227, figs. 3, 4.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus neocesariensis (DeKay).**

Hay, O. P. 1902 A, 515.  
Andrews, C. W. 1906 A, 269.  
Berry, E. W. 1916 A, 347, pl. viii, figs. 1, 2.  
Mook, C. C. 1925 A, 342, fig. 13 (Sphenosaurus clavirostris); 348, fig. 17 (T. neocesariensis); 355 (T. deKayi, T. grandis).  
Owen, R. 1860 E, 277 (Crocodilus).  
Toula and Kail 1885 A, 354 (Thoracosaurus

gavialis, Crocodilus deKayi, C. clavirostris).  
Troedsson, G. T. 1924 A, 9, 50, 54.  
Troxell, E. L. 1925 A, 220.  
Williston, S. W. 1906 A, 2.  
Upper Cretaceous; New Jersey; (Matawan); Maryland.

**Thoracosaurus obscurus (Leidy).**

Hay, O. P. 1902 A, 516 (Holops).  
Cope, E. D. 1869 P, 123 (Crocodilus).  
Mook, C. C. 1925 A, 360, fig. 21 (Holops).  
Toula and Kail 1885 A, 354 (Thoracosaurus, Holops, Crocodilus).  
Troedsson, G. T. 1924 A, 11.  
Troxell, E. L. 1925 A, 220.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus pneumaticus (Cope).**

Hay, O. P. 1902 A, 516 (Holops).  
Mook, C. C. 1925 A, 375, figs. 29-34 (Holops).  
Toula and Kail 1885 A, 354 (Holops).  
Troedsson, G. T. 1924 A, 11.  
Troxell, E. L. 1925 A, 220.  
Upper Cretaceous (Hornerstown); New Jersey.

**Thoracosaurus sp. indet.**

Berry, E. W. 1916 A, 348, pl. viii, fig. 11  
Upper Cretaceous (Monmouth); Maryland.  
Troxell, E. L. 1925 A, 229, figs. 5, 6. Upper Cretaceous (Hornerstown); New Jersey.

**Suborder CROCODYLIFORMES, new name.**

Unless otherwise indicated, the writers, as cited, use for this group the name Eusuchia.  
Hay, O. P. 1902 A, 511.  
Ardt, T. 1907 D, 145, 329.  
Auer, E. 1909 A, 286.  
Brauns, D. 1890 A, 147, 160, 202 (Crocodilia, "krokodile").  
Broom, R. 1924 B, 64, fig. 13 (Crocodilia).  
Case, E. C. 1898 C, 723.  
Cope, E. D. 1891 N, 45.  
Dollo, L. 1907 D, 85 ("eusuchiens").  
Gadow, H. 1901 B, 434.  
1902 B, 360.  
Gaupp, E. 1895 A, 58, seq. ("crocodilen").  
Gelderen, C. 1925 A, 495 (Crocodilia).  
Gilmore, C. W. 1926 B, 340 (Eusuchia, Crocodilia).  
Gray, J. E. 1867 C, 129 (Eumysosauri).  
Hayek, H. 1924 A, 151 (Crocodilia).  
Huene, F. 1902 A, 54, 72.  
Huxley, T. H. 1875 B.  
1875 E, 72, 74.  
1877 A.  
Jaekel, O. 1910 C, 340 (Crocodili).  
1911 A, 164 (Crocodili).  
Kingsley, J. S. 1925 A, 14, 16, 44, 55, 163, 164, 251, 285.  
Klaauw, C. J. 1924 B, 591 (Crocodilia).  
Lydekker, R. 1887 C, 311.

Mehl, M. G. 1928 B, 19 (Crocodilia).  
Newton, E. T. 1894 A, 536.  
Nopcsa, F. 1923 D, 113.  
1923 H, 3 (Eusuchia); 1, 2, 4, 6, 8, 10, 68, 91, 94, 112, 116, 119, 126, 180, 176, 180, 181, 183, tab. (Crocodilia).  
Philippi, Frech and Volz 1903 A, 18.  
Pictet, F. J. 1853 A, 475 ("crocodiliens").  
Rafinesque, C. S. 1815 A, 75 (Megalepia).  
Reynolds, S. H. 1897 A, 537 (Crocodilia, Eusuchia).  
Schmidt, W. J. 1912 B, 163 ("krokodilen").  
Siebenrock, F. 1906 A, 818 (Eumysosauria).  
Stannius, H. 1856 A (Crocodilia).  
Steinmann, G. 1907 A, 430.  
Stromer, E. 1925 A, 4, seq. (Crocodilia).  
Sushkin, P. P. 1927 A, 307 ("crocodilians").  
Van den Broeck, E. 1900 A, 108.  
Wegner, R. N. 1922 A, 480 (Crocodilia).  
Williston, S. W. 1902 G, 314 (Crocodilia).  
1904 B, 176 (Crocodilia).  
1914 A, 18, 45, 195.  
1925 A, 95.  
1925 B, 213, 288.  
Zittel and Broili 1923 A, 319, 383 (Crocodilia).  
Zittel, Eastman, etc. 1902 A, 217.  
See also the literature cited under the Loricata.

**CROCODYLIDÆ.**

Hay, O. P. 1902 A, 511.  
Abel, O. 1909 D, (226) ("krokodile").  
1919 A, 550 (Crocodilidæ).

Altmann, F. 1925 A, 95 ("crocodilen").  
Ardt, T. 1907 D, 637 (Alligatoridæ); 648 (Crocodilidæ).

- Ardt, T. 1912 A, 712, 756 (Crocodilidae, Alligatoridae).
- Bender, O. 1907 A, 41 ("krokodilier").
- Bonaparte, C. L. 1831 A, 72 (Crocodilidae).  
1833 B, 1184 (Crocodilidae).
- Broom, R. 1927 A, 74 ("crocodiles").
- Carius, V. 1875 A, 409 (Crocodilidae).
- Cuvier, G. 1807 A, 64 (Crocodili, Alligatores).  
1808 C, 1 ("crocodiles").  
1808 E, 73 ("crocodiles").
- Dollo, L. 1889 B, 677.
- Dombrowski, B. A. 1925 A, 75 ("krokodile").
- Fraas, E. 1913 D, 121 ("krokodile").
- Frech, F. 1906 A, 493 ("krokodile").
- Fuchs, H. 1909 A, 349 ("krokodile").  
1909 B, 114 ("krokodile").
- Gadow, H. 1901 B, 454 (Crocodilidae).
- Gaupp, E. 1910 A, 541 ("krokodile").  
1911 B, 111 ("krokodile").  
1911 C, 444 ("krokodile").
- Gegenbaur, C. 1867 B, 400 ("crocodilier").
- Geoffroy St. Hilaire, E. F. 1807 D, 249 ("crocodiles").  
1825 B, 121 ("crocodiles").
- Gray, J. E. 1825 A, 195 (Crocodilidae).  
1867 C, 134 (Crocodilidae); 160 (Alligatoridae).  
1872 B, 4, 6 (Crocodilidae, Alligatoridae).
- Hasse, C. 1873 D, 679 ("crocodile").
- Hasse and Schwarck 1870 A, 51 ("crocodilen").
- Hoernes, R. 1886 A, 603 (Crocodilidae).
- Huene, F. 1908 E, 379 ("krokodile").  
1908 F, 402 ("krokodile").  
1922 D, 278 ("crocodiliden").
- Huxley, T. H. 1859 G, 680 ("crocodiles," Alligatoridae).
- 1859 I, 287 (Crocodilidae, Alligatoridae).
- Kerbert, C. 1876 A, 224 ("krokodilen").
- Leunis and Ludwig 1833 A, 542 (Crocodilina).
- Lobley, J. L. 1908 A, 208.
- Lorenz, L. E. F. 1807 A, 21 (Crocodilus).
- Matthew, W. D. 1914 B, 387 (Crocodilidae).  
1921 D, 214 (Crocodilidae).
- Moodie, R. L. 1908 D, 455 ("crocodiles").  
1909 G, 363 ("crocodiles").
- Nopces, F. 1922 A, 113 (Crocodilidae).  
1923 H, 110, 111, 112, 114, 126 (Crocodilinae).  
1923 A, 187 (Crocodilidae, Crocodilinae, Thoracosaurinae, Gavialinae).
- Owen, R. 1845 B, 285 ("crocodilians"); 286 ("crocodiles").
- Pfeifer, H. 1854 A, 10 ("krokodile").
- Pictet, F. J. 1853 A, 476 (Proceli).
- Rabl, C. 1903 A, 157, 163 ("krokodile").
- Schaumsland, H. 1906 A, 542 ("krokodile").
- Seeley, H. G. 1882 A, 360, 365 ("crocodiles").
- Sellards, E. H. 1915 A, 135 (Alligatoridae).
- Seydel, O. 1899 A ("crocodilier").
- Shimo, K. 1914 A, 253 ("crocodilinae").
- Terra, P. 1911 A, 237 (Crocodilidae).
- Thäter, K. 1910 A, 514 ("krokodile").
- Tornier, G. 1888 A, 226 ("crocodilinen").  
1913 B, 361 (Crocodilidae).
- Troedsson, G. T. 1924 A, 49 ("alligatoriden," "krokodilen").
- Troxell, E. L. 1925 D, 606 ("crocodiles").
- Vogt, C. 1879 A, 243 ("crocodiles").
- Wallace, A. R. 1876 A, II, 406 (Crocodilidae).
- Wiedersheim, R. 1892 A, 55 ("krokodile").
- Williston, S. W. 1914 A, 201.  
1925 B, 290 (Crocodilidae).
- Zittel and Broili 1911 A, 272 (Crocodilidae).  
1923 A, 331 (Crocodilidae).
- Zittel, Eastman, etc. 1902 A, 121 (Alligatoridae); 222 (Crocodilidae).

CROCODYLUS Laurenti. Type *C. niloticus* Linnæus.

- Laurenti, J. N. 1768, Syn. Rept., 53.
- Hay, O. P. 1902 A, 512.
- Abel, O. 1919 A, 535, 550, figs. 424, 435.
- Adloff, P. 1913 C, 22 (Crocodilus).
- Ahlborn, F. 1896 B, 9 ("krokodil").
- Alessandrini, A. 1849 A, 379, pl. xxiv, figs. 1, 2; pl. xxvi, figs. 3, 4 (Crocodilus).
- Alix, E. 1874 A, 17 ("crocodiles").
- Allis, E. P. 1919 B, 79 (Crocodilus).  
1919 C, 260.  
1919 D, 209.
- Ardt, T. 1907 D, 648 (Crocodilus).  
1911 A, 228 (Crocodilus).
- Bardeleben, K. 1901 A, 36 (Crocodilus).
- Baur, G. 1897 D, 48 (Crocodilus).
- Beer, G. R. 1926 A, 320, figs. 91-93, 122.
- Bittner, F. 1912 A, 3 ("krokodil").
- Boas, J. E. V. 1914 C, 266 (Crocodilus).
- Bojanus, L. H. 1821 A, 1160 ("krokodil").
- Bolk, L. 1912 A, 61 (Crocodilus).  
1912 B, 953 (Crocodilus).  
1913 A, 104, figs. 69, 75 (Crocodilus).
- Braus, H. 1906 A, 261 ("krokodile").
- Bronn, H. G. 1848 A, 351 (Crocodilus).  
1849 A, 687 (Crocodilus).
- Broom, R. 1908 E, 115 ("crocodile").  
1909 B, 163 ("crocodile").
- Brown, A. E. 1904 A, 467 (Crocodilus).
- Brühl, C. B. 1882 A.
- Carus and Engelmann 1861 A, 1726.
- Case, E. C. 1904 D, 64 (Thecachampsia).
- Cleland, J. 1863 B, 309 ("crocodile").
- Cuvier, G. 1805 A (Crocodilus).  
1807 A, 63 (Crocodilus).  
1808 C, 4 ("crocodiles").  
1808 E, 73 ("crocodiles").  
1825 A, v, 2, 28-104 (Crocodilus).
- Dollo, L. 1883 G, 594 ("crocodile").
- Eichwald, E. 1832 A, 869 ("krokodil").
- Eimer, G. H. T. 1901 A, 259 ("krokodil").
- Eisler, P. 1895 A, 46 ("krokodil").
- Fernandez, M. 1921 A, 516, pl. i ("krokodil").
- Fleischmann, A. 1910 A, 682, 704, figs. 1, 27.
- Fraas, E. 1902 B, 69 ("crocodile").
- Fuchs, H. 1906 A, 19 ("krokodil").  
1909 A, 349 (Crocodilus).  
1909 D, 198, fig. 43 ("crocodilus").
- Fürbringer, M. 1900 A, figs.
- Gadow, H. 1896 A, 39, figs. 34, 37 (Crocodilus).  
1901 B, 454 (Crocodilus).
- Gaupp, E. 1895 A, 62 ("crocodil").  
1899 A, 1083, figs. 16-19 ("krokodile").  
1902 A, 176 (Crocodilus).



- Gaupp, E. 1905 D, 1022, fig. 41 (Crocodilus).  
 1908 B.  
 1908 C, 674 (Crocodilus).  
 1911 A, 425 (Crocodilus).  
 1911 C, 452, figs. 18, 19 (Crocodilus).  
 Gegenbaur, C. 1871 A, 199 (Crocodilus).  
 Gelderen, C. 1925 A, 497.  
 Geoffroy St. Hilaire, E. F. 1824 H, 245-299, pl. xvi ("crocodile").  
 Gervais, P. 1852 A, 249 (Crocodilus).  
 1853 B, 55 ("crocodiles").  
 1859 A, 443 (Crocodilus).  
 Giebel, C. G. 1855 A, 88 (Crocodilus).  
 Goepfert, E. 1896 B, 1, fig. 1 ("crocodil").  
 Goldby, F. 1925 A, 301, figs. 1-5.  
 Gray, J. E. 1867 C, 146 (Crocodilus).  
 1872 B, 14 (Crocodilus).  
 Gregory, W. K. 1910 D, 600 ("crocodile").  
 1911 C, 404 ("crocodile").  
 1913 E, 9, 32, figs. 7, 22 ("crocodile").  
 Gregory and Camp 1918 A.  
 Gregory and Noble 1924 A, 440, fig. 2.  
 Hanson, F. B. 1919 B, 73, fig. 81 ("crocodile").  
 Hasse, C. 1873 D, 679, pls. xxxi-xxxii.  
 Hayek, H. 1924 A, 151, pl. ii.  
 Heilmann, G. 1914 A, 69, fig. 150.  
 1926 A, 204, fig. 79.  
 Hertz, M. 1925 A, 557, 580, fig. 46.  
 Hoffmann, C. K. 1890 B, 1053, 1080, 1061, pls.  
 Howes, G. B. 1891 A, 156.  
 Huene, F. 1903 E, 379 (Crocodilus).  
 1913 F, 469, figs. 2, 6 (Crocodilus).  
 Hulke, J. W. 1875 A, 364, fig. 4 (Crocodilus).  
 Hutchinson, H. N. 1917 A, 363.  
 Huxley, T. H. 1859 E, 445 (Crocodilus).  
 1859 G, 678.  
 1859 I, 291 (Crocodilus).  
 1863 F, 475, 529, 579, figs. 41, 45, 48, 49 ("crocodile").  
 1869 G, 440, figs. 1, 2 (Crocodilus).  
 1869 H, 336 (Crocodilus).  
 1879 A, 405, pl. viii (Crocodilus).  
 Iwanzoff, N. 1894 A, 584 ("crocodil").  
 Johnson, A. 1883 A, 403 ("crocodile").  
 Kesteven, H. L. 1918 A, 449, 450, figs. 2-4 (Crocodilus).  
 1919 A, 227, figs. 5-8.  
 Kingsley, J. S. 1925 A, 55, 164, 202, figs. 14, 62, 176, 210.  
 Klaauw, C. J. 1924 B, 591.  
 Köstlin, O. 1844 A ("crocodile").  
 Lebedinsky, N. G. 1917 A, 318 (Crocodilus).  
 Leche, W. 1893 C, 796 ("krocodil").  
 Le Damany, P. 1902 A, 336 ("crocodile").  
 1903 G, 157, figs. 8, 12 ("crocodile").  
 Lemoine, V. 1884 C, 159, pl. iv ("crocodile").  
 Leunis and Ludwig 1883 A, 543 (Crocodilus).  
 Lubosch, W. 1926 A, 114, fig. 12 ("crocodil").  
 Lwoff, W. 1884 A, 313 ("crocodile").  
 Lydekker, R. 1887 C, 308 (Crocodilus).  
 1912 C, 40, 119 (Crocodilus).  
 Matthes, E. 1921 C (Crocodilus).  
 Matthew, W. D. 1915 A, 284 (Crocodilus).  
 Meckel, J. F. 1825 A (Crocodilus).  
 Meek, A. 1908 A, 1, fig. 2 ("crocodile").  
 1911 A, 357 ("crocodile").  
 Mivart, St. G. 1879 B, 533 ("crocodile").  
 Mook, C. C. 1921 B, 51, pl. x; text-figs. 2-4 (Crocodilus).  
 1921 C, 68, pls. xiii, xiv; text-figs. 1-5, 7-14, 16-19 (Crocodilus).  
 1921 H, 151, figs. 3-8 (Crocodilus).  
 1927 A, 1, figs. 1, 2.  
 Nopcsa, F. 1923 H, 86, 87, 111 (Crocodilus).  
 1926 A, 641, text-fig. 4 ("crocodile").  
 1928 A, 187 (Crocodilus).  
 Oken, L. 1819 A, 1542 ("crocodile").  
 1823 B, 446 ("crocodile").  
 Osborn, H. F. 1909 D, 46 (Crocodilus).  
 1912 J, figs. 14, 15 (Crocodilus).  
 Owen, R. 1845 B, 286, pl. lxxv, fig. 1; pl. lxxv, fig. 2 (Crocodilus).  
 1848 B, 22, 26, figs. 9, 13-23.  
 1866 A, 70, 135, figs. 57, 93-95 (Crocodilus).  
 1868 A, 875 (Crocodilus).  
 Paramore, R. H. 1910 A, 1399 (Crocodilus).  
 Parker and Haswell 1897 A, 322, figs. 927, 929, 937, 941 (Crocodilus).  
 Peters, W. 1868 A, 594 (Crocodilus).  
 1869 A, 7 ("crocodile").  
 1874 A, 42 ("crocodil").  
 Pictet, F. J. 1853 A, 476.  
 Pinkus, F. 1904 A, 152 ("krokodil").  
 Rabl, C. 1903 A, 156 (Crocodilus).  
 Retzius, A. 1837 A, 491 (Crocodilus).  
 Reynolds, S. H. 1897 A, 236-270, figs. 41, 42, 46, 50.  
 Rice, E. L. 1920 A.  
 Röse, C. 1892 G, 129.  
 Sabatier, A. 1897 A, 805 (Crocodilus).  
 Scharff, R. F. 1911 A, 180 (Crocodilus).  
 Schuinsland, H. 1906 A ("krokodile").  
 Schmidt, W. J. 1914 B, 643 (Crocodilus).  
 Schone, G. 1902 A, 17 (Crocodilus).  
 Seeley, H. G. 1872 A, 36 ("crocodile").  
 1876 C, 155 ("crocodiles").  
 1878 B, 428 ("crocodile").  
 1886 A, 413.  
 1887 E, 188 ("crocodile").  
 1888 I, 240 ("crocodilus").  
 1905 A, 221.  
 Seemann, G. 1926 A, 110, text-fig. 2.  
 Seitz, A. L. L. 1907 A, 358 (Crocodilus).  
 Sewertsoff, A. N. 1908 A (Crocodilus).  
 Shaner, R. F. 1926 A, 362 ("crocodile").  
 Shiino, K. 1914 A, 253-382, pls. xv-xxi; text-figs. 1-33 (Crocodilus).  
 Shumard, B. F. 1863 A, 141 (Crocodilus).  
 Siebenrock, F. 1906 A, 818 (Crocodilus).  
 Sixta, V. 1900 B, 336 (Crocodilus).  
 Stannius, H. 1856 A (Crocodilus).  
 Stanton and Hatcher 1905 A, 38 (Crocodilus).  
 Stehli, G. 1910 A, 775, figs. 14-16 (Crocodilus).  
 Steiner, H. 1922 A, 345 (Crocodilus).  
 Stromer, E. 1906 A, 208, 212 (Crocodilus).  
 Taschenberg, O. 1894 A, 3634.  
 Thäfer, K. 1910 A, 506 (Crocodilus).  
 Thyng, F. W. 1906 A, 60, fig. Q (Crocodilus).  
 Tornier, G. 1913 A, 320, fig. 6.  
 Troedson, G. T. 1924 A.  
 Troxell, E. L. 1925 A, 221.  
 1925 B, 31 (Crocodilus, Thecachampsia).  
 1925 C, 490.  
 1925 D, 607 (Crocodilus).

- Versluys, J. 1903 A, 169 (Crocodilus).  
 Vialleton, L. 1919 A, 307 (Crocodilus).  
 Virchow, H. 1914 B, 115, figs. 3, 4, 6, 7, 14 ("krokodil").  
 1914 C, 131 ("krokodile").  
 Voeltzkow, A. 1899 A (Crocodilus).  
 Voeltzkow and Döderlein 1901 A, 316, fig. 1 (Crocodilus).  
 Vogt, C. 1879 A, 243, fig. 19 ("crocodile").  
 Voit, M. 1923 A, 69 ("krokodile").  
 Wallace, A. R. 1876 A, II, 406 (Crocodilus).  
 Wallisch, W. 1922 A, 533, figs. 2, 5 ("krokodil").  
 Wamich, P. 1913 A ("krokodile").  
 Watson, D. M. S. 1916 A, 341 (Crocodilus).  
 1917 A, 981 (Crocodilus).  
 1919 C, 239 ("crocodile").  
 Wiedersheim, R. 1892 A, 55 (Crocodilus).  
 Williston, S. W. 1904 E, 565 ("crocodiles").  
 1904 F, 830 ("crocodile").  
 1909 A, 396 ("crocodile").  
 1914 A, 199, figs. 103, 104 ("crocodile").  
 1925 B, 290 (Crocodilus).  
 Woodward, A. S. 1922 C, 11.  
 Zittel and Broili 1911 A, 273 (Crocodilus).  
 1923 A, 210, 323, 332, figs. 317, 433-435.  
 Zittel, Eastman, etc. 1902 A, 222 (Crocodilus).

### ***Crocodylus acer* Cope.**

- Hay, O. P. 1902 A, 512.  
 Cope, E. D. 1891 N, 47, fig. 24 (Crocodilus acer).  
 Mook, C. C. 1921 G, 117, pl. xviii.  
 Eocene (Manti); Utah.

### ***Crocodylus affinis* Marsh.**

- Hay, O. P. 1902 A, 512.  
 Mook, C. C. 1921 F, 111, pls. xvi, xvii (Crocodilus. This species?).  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Troxell, E. L. 1925 B, 30, 34, figs. 1, 2 (Crocodilus).  
 Middle Eocene (Bridger); Wyoming.

### ***Crocodylus antiquus* Leidy.**

- Hay, O. P. 1902 A, 512.  
 Case, E. C. 1904 D, 67, pl. xxvii, figs. 7-9 (Thecachampsas?).  
 Clark and Miller 1912 A, 167, 168 (Thecachampsas?).  
 Dall and Harris 1892 A, 56 (Crocodilus).  
 Shattuck, G. B. 1904 A, xciv.  
 Toula and Kail 1885 A, 354 (Thecachampsas).  
 Miocene (Calvert); Virginia or Maryland, North Carolina.

### ***Crocodylus aptus* Leidy.**

- Hay, O. P. 1902 A, 512.  
 Cope, E. D. 1884 O, 162.  
 Merrill, G. P. 1907 A, 66.  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Lower Eocene (Wasatch); Wyoming.

### ***Crocodylus brevicollis* Marsh.**

- Hay, O. P. 1902 A, 512.  
 Troxell, E. L. 1925 B, 39, fig. 4.  
 Middle Eocene (Bridger); Wyoming.

### ***Crocodylus chamensis* Cope.**

- Hay, O. P. 1902 A, 512.  
 Merrill, G. P. 1907 A, 63 (Alligator); 67 (Crocodilus).  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Lower Eocene (Wasatch); New Mexico.

### ***Crocodylus clavis* Cope.**

- Hay, O. P. 1902 A, 512.  
 Merrill, G. P. 1907 A, 67.  
 Peterson, O. A. 1919 A, 41 (Crocodilus. This species?).  
 Seeley, H. G. 1886 A, 413.  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Middle Eocene (Bridger); Wyoming: Upper Eocene (Uinta); Utah.

### ***Crocodylus contusor* Cope.**

- Hay, O. P. 1902 A, 512 (Crocodilus antiquus, part).  
 Case, E. C. 1901 A, 96, pl. x, fig. 4 (Thecachampsas).  
 1904 D, 66, pl. xxvii, fig. 6 (Thecachampsas?).  
 Clark and Miller 1912 A, 117, 118 (Thecachampsas).  
 Shattuck, G. B. 1904 A, xciv.  
 Eocene (Aquia); Virginia: Miocene (Calvert); Maryland.

### ***Crocodylus elliotti* Leidy.**

- Hay, O. P. 1902 A, 512.  
 Hayden, F. V. 1871 A, 40 (Crocodilus).  
 Merrill, G. P. 1907 A, 67.  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Middle Eocene (Bridger); Wyoming: Lower Eocene (Wasatch); New Mexico.

### ***Crocodylus fastigiatus* Leidy.**

- Hay, O. P. 1902 A, 512.  
 Eocene, Virginia.

### ***Crocodylus grinellii* Marsh.**

- Hay, O. P. 1902 A, 512.  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Troxell, E. L. 1925 B, 30, 38 (Crocodilus).  
 Middle Eocene (Bridger); Wyoming.

### ***Crocodylus grinnelli herpichanus* (Troxell).**

- Troxell, E. L. 1925 B, 40, 44-66, figs. 5-19 (Crocodilus).  
 Middle Eocene (Bridger); Wyoming.

### ***Crocodylus grypus* Cope.**

- Hay, O. P. 1902 A, 512.  
 Merrill, G. P. 1907 A, 67.  
 Toula and Kail 1885 A, 354 (Crocodilus).  
 Middle Eocene (Bridger); New Mexico.

### ***Crocodylus humilis* Leidy.**

- Hay, O. P. 1902 A, 513.  
 Bowen, C. F. 1915 A, 130, 149, 150.  
 Brown, B. 1914 E, 373 (Crocodilus).  
 Cross, W. 1896 A, 227.  
 Gilmore, C. W. 1910 A, 483.

Hatcher, J. B. 1903 D, 372.  
1905 B, 82.

Hay, O. P. 1903 D, 119.  
1910 B, 297.

Lambe, L. M. 1902 A, 47 (Crocodilus).  
1904 C, 25, 37, 49 (Crocodilus).  
1907 C, 219.

Matthew, W. D. 1916 A, 484 (Crocodilus).

Osborn, H. F. 1902 H, 674 (Crocodilus).  
1902 I, 13, 17 (Crocodilus).

Peale, A. C. 1912 A, 754 (Crocodilus).  
Toula and Kail 1885 A, 354 (Crocodilus, *Bot-tosaurus?*).

Williston, S. W. 1902 K, 953 (Crocodilus).  
1906 A, 3 (Crocodilus).

Upper Cretaceous (Judith); Montana:  
(Lance); Wyoming: (Arapahoe or Denver);  
Colorado.

### ***Crocodylus hodon* Marsh.**

Hay, O. P. 1902 A, 513.

Loomis, F. B. 1907 B, 358.

Merrill, G. P. 1907 A, 68 (Crocodylus?).

Toula and Kail 1885 A, 354 (Crocodilus).

Troxell, E. L. 1925 B, 83, fig. 3 (Crocodilus).  
Lower Eocene (Wasatch); Wyoming, New  
Mexico.

### ***Crocodylus marylandicus* W. B. Clark.**

Hay, O. P. 1902 A, 513.

Case, E. C. 1901 A, 96, pl. x, fig. 5 (Theca-  
champsia).

Clark and Miller 1912 A, 117, 118 (Theca-  
champsia).

Eocene (Aquia); Maryland.

### ***Crocodylus parvus* Osborn, Scott, and Speir.**

Hay, O. P. 1902 A, 513.

Middle Eocene (Bridger); Wyoming.

### ***Crocodylus rugosus* (Emmons).**

Hay, O. P. 1902 A, 513.

Gilmore, C. W. 1911 A, 208 (Thecachampsia).

Stephenson, L. W. 1912 A, 120 (Thecachampsia).  
Upper Cretaceous (Black Creek); North  
Carolina: (Ripley); Georgia.

### ***Crocodylus sericodon* Cope.**

Hay, O. P. 1902 A, 513.

Case, E. C. 1901 A, 95, pl. x, fig. 3 (This  
species?).

1904 D, 65, pl. xxvii, figs. 1, 2 (Theca-  
champsia?).

Miller, B. L. 1911 A, 103 (Thecachampsia. This  
species?).

1912 A, 2 (This species?).

Shattuck, G. B. 1904 A, xciv.

Shattuck, Miller and Bibbins 1907 A, 5  
(Thecachampsia. This species?).

Toula and Kail 1885 A, 354 (Crocodilus).

Miocene (Calvert); Maryland, New Jersey.

### ***Crocodylus serratus* Cope.**

Hay, O. P. 1902 A, 513.

Eocene (Shark River?); New Jersey.

### ***Crocodylus sicarius* Cope.**

Hay, O. P. 1902 A, 513.

Case, E. C. 1904 D, 66, pl. xxvii, figs. 3-5  
(Thecachampsia?).

Shattuck, G. B. 1904 A, xciv.

Toula and Kail 1885 A, 354 (Thecachampsia).

Miocene (Chesapeake); Maryland.

### ***Crocodylus solaris* Marsh.**

Hay, O. P. 1902 A, 513.

O'Harra, C. C. 1910 A, 122 (Crocodilus salaris).  
Pliocene?; South Dakota.

### ***Crocodylus squankensis* Marsh.**

Hay, O. P. 1902 A, 513.

Cope, E. D. 1873 FF, 8 (Thecachampsia).

Toula and Kail 1885 A, 354 (Thecachampsia).

Eocene (Shark River?); New Jersey.

### ***Crocodylus stavelianus* Cope.**

Hay, O. P. 1902 A, 513.

Gilmore, C. W. 1920 A, 10.

Matthew, W. D. 1914 B, 383.

Reeside, J. B. 1924 A, 83.

Paleocene (Puerco); New Mexico.

### ***Crocodylus subulatus* Cope.**

Cope, E. D. 1872 UU, 1 [Crocodilus (Ichthyo-  
suchus) *errore* sublatus.

Hay, O. P. 1902 A, 513.

Gilmore, C. W. 1910 A, 501.

Merrill, G. P. 1907 A, 68.

Toula and Kail 1885 A, 354 (Crocodilus).

Middle Eocene (Bridger); Wyoming.

### ***Crocodylus sulciferus* Cope.**

Cope, E. D. 1872 UU, 1.

Hay, O. P. 1902 A, 513.

Merrill, G. P. 1907 A, 68.

Toula and Kail 1885 A, 354 (Crocodilus).

Middle Eocene (Bridger); Wyoming.

### ***Crocodylus vorax* Troxell.**

Troxell, E. L. 1925 B, 31, 42, fig. 22 (Croco-  
dilus).

Middle Eocene (Bridger); Wyoming.

### ***Crocodylus wheeleri* Cope.**

Hay, O. P. 1902 A, 513.

Loomis, F. B. 1907 B, 358.

Merrill, G. P. 1907 A, 68.

Lower Eocene (Wasatch); New Mexico.

### ***Crocodylus* sp. indet.**

Bowen, C. F. 1915 A, 130. Upper Cretaceous  
(Hell Creek); Montana.

Brown, B. 1907 A, 842. Upper Cretaceous (Hell  
Creek); Montana.

Case, E. C. 1901 A, 95, pl. x, figs. 1, 2  
(Thecachampsia).

Clark and Miller 1912 A, 117, 118 (Theca-  
champsia).

Gilmore, C. W. 1924 D, 27. Upper Cretaceous  
(Lance); Saskatchewan.

Hay, O. P. 1923 A, 482. Pleistocene; Mary-  
land, Virginia, Georgia.

Kennedy, W. 1893 A, 49 ("Crocodilus").

Merriam, J. C. 1917 A, 437 ("crocodile").

Merrill, G. P. 1907 A, 68.

Peterson, O. A. 1917 A, 471, fig. 3 ("Crocodilus sp. indet." This genus?). Pleistocene; Virginia.

Reeside, J. B. 1924 A, 23, 42. Upper Cretaceous

(Fruitland, Ojo Alamo, Nacimiento); New Mexico.

Sinclair, W. J. 1915 A, 77 ("crocodile").

Pliocene (Snake Creek); Nebraska.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

### LIMNOSAURUS Marsh. Type *Crocodilus ziphodon* Marsh.

Hay, O. P. 1902 A, 514.

Williston, S. W. 1925 B, 290.

### *Limnosaurus ziphodon* Marsh.

Hay, O. P. 1902 A, 514.

Toula and Kail 1885 A, 354 (Crocodilus).

Troxell, E. L. 1925 B, 31 (Crocodilus).

Middle Eocene (Bridger); Wyoming.

### LEIDYOSUCHUS Lambe. Type *L. canadensis* Lambe.

Lambe, L. M. 1907 C, 221, 222.

Abel, O. 1919 A, 552.

Gilmore, C. W. 1910 A, 485, 499.

Lambe, L. M. 1912 A, 10.

Lydekker, R. 1911 A, 682.

1912 C, 135.

Mook, C. C. 1925 A, 387.

Nopcsa, F. 1923 H, 112.

Williston, S. W. 1925 B, 290.

Zittel and Broili 1911 A, 272.

1923 A, 332.

### *Leidyosuchus canadensis* Lambe.

Lambe, L. M. 1907 C, 221, pls. i-v.

Bowen, C. F. 1915 A, 129, 130.

Brown, B. 1914 E, 378.

Gilmore, C. W. 1910 A, 486-496.

Hay, O. P. 1910 B, 297.

Lambe, L. M. 1908 B, 111.

Matthew, W. D. 1916 A, 484.

Mook, C. C. 1925 A, 389, figs. 43-47.

Upper Cretaceous (Belly River); Alberta.

### *Leidyosuchus sternbergii* Gilmore.

Gilmore, C. W. 1910 A, 486, pls. xxii, xxix; text-figs. 1, 2.

Bowen, C. F. 1915 A, 130.

Brown, B. 1914 E, 358.

Gilmore, C. W. 1917 A, 6.

Mook, C. C. 1925 A, 404, figs. 48-52.

Upper Cretaceous (Lance); Wyoming; (Hell Creek); Montana.

### *Leidyosuchus* sp. indet.

Gilmore, C. W. 1917 A, 4. Upper Cretaceous (Two Medicine); Montana.

### ALLOGNATHOSUCHUS Mook. Type *Crocodilus polyodon* Cope.

Mook, C. C. 1921 E, 105.

Abel, O. 1928 A, 367, fig. 1.

Case, E. C. 1925 B, 93.

### *Allognathosuchus heterodon* (Cope).

Hay, O. P. 1902 A, 513 (Crocodylus).

Abel, O. 1928 A, 369 (Crocodilus).

Case, E. C. 1925 B, 96.

Cope, E. D. 1874 B, 436, 441 (Alligator).

Loomis, F. B. 1907 B, 358 (Crocodylus).

Merrill, G. P. 1907 A, 63 (Alligator); 67, 68 (Crocodylus).

Mook, C. C. 1921 E, 109.

1923 B, 562.

Seeley, H. G. 1886 A, 413 (Crocodilus).

Toula and Kail 1885 A, 354 (Crocodilus).

Lower Eocene (Wasatch); Wyoming.

### *Allognathosuchus polyodon* (Cope).

Hay, O. P. 1902 A, 513 (Crocodylus).

Abel, O. 1928 A, 371.

Case, E. C. 1925 B, 93, text-fig. 1.

Gilmore, C. W. 1910 A, 501 (Crocodylus).

Merrill, G. P. 1907 A, 68 (Crocodylus); 69 (Diplocynodus).

Mook, C. C. 1921 E, 106, pl. xv.

1923 B, 562.

Toula and Kail 1885 A, 354 (Crocodilus).

Middle Eocene (Bridger); Wyoming.

### *Allognathosuchus wartheni* Case.

Case, E. C. 1925 B, 93, pl. i.

Abel, O. 1928 A, 370.

Lower Eocene (Wasatch); Wyoming.

### DIPLOCYNODON Pomel. Type *D. ratelii* Pomel.

Hay, O. P. 1902 A, 514.

Abel, O. 1919 A, 553.

Ärnäck-Christie-Linde A. 1912 B, 275.

Ardt, T. 1911 A, 228.

Broom, R. 1903 L, 345.

Gadow, H. 1901 B, 454.

Gilmore, C. W. 1911 B, 297.

Gregory, W. K. 1920 A, 125.

Lull, R. S. 1918 C, 133, fig. 25.

Lydekker, R. 1887 C, 308.

Nopcsa, F. 1923 H, 114.

1928 A, 187.

Osborn, H. F. 1907 G, 28, 219, figs. 20, 207.

Palmer, T. S. 1904 A, 237, 887.

Scharff, R. F. 1911 A, 180.

Schlosser, M. 1899 J, 353.

Schuchert, C. 1910 A, 582.

Stefano, G. 1905 A, 35, pl. xxxi.

Tornier, G. 1913 B, 362.

Troedsson, G. T. 1924 A, 46, 50, 67.

Williston, S. W. 1925 B, 290.

Zittel and Broili 1911 A, 272.

1923 A, 331, fig. 445.

Zittel, Eastman, etc. 1902 A, 221.

**Diplocynodon sphenops** (Cope).

Hay, O. P. 1902 A, 514.

Loomis, F. B. 1907 B, 353.

Merrill, G. P. 1907 A, 69 (*Diplocynodus*).

Troedsson, G. T. 1924 A, 68.

Lower Eocene (Wasatch); New Mexico.

**PHOBOSUCHUS** Nopcea. Type *Deinosuchus hatcheri* (Holland).

Nopcea, F. 1924 A, 378.

Gilmore, C. W. 1901 A, 501 (*Deinosuchus*).Holland, W. J. 1909 B, 231 (*Deinosuchus*; pre-occupied).1917, in Peterson, O. A. 1917 A, 472 (*Deinosuchus*).Mook, C. C. 1925 A, 418 (*Deinosuchus*).

Nopcea, F. 1928 A, 187.

Williston, S. W. 1925 B, 290 (*Deinosuchus*).Zittel and Broili 1911 A, 272 (*Deinosuchus*).1923 A, 332 (*Deinosuchus*).

The family position of this genus is uncertain.

**Phobosuchus hatcheri** (Holland).Holland, W. J. 1909 B, 231, figs. 1-7, 9-16 (*Deinosuchus*).Bowen, C. F. 1915 A, 130 (*Deinosuchus*).Lull, R. S. 1921 A, 121 (*Deinosuchus*).Lydekker, R. 1910 F, 668 (*Deinosuchus*).Mook, C. C. 1925 A, 419 (*Deinosuchus*).

Upper Cretaceous (Judith River); Montana.

**ORTHOGENYSUCHUS** Mook. Type *O. olseni* Mook.

Mook, C. C. 1924 B, 1.

**Orthogenysuchus olseni** Mook.

Mook, C. C. 1924 B, 1, figs. 1, 2.

Lower Eocene (Wasatch); Wyoming.

**ALLIGATOR** Cuvier. Type *A. lucius* Cuvier = *Crocodylus mississippiensis* Daudin.

Cuvier, G. 1807 A, 25.

Hay, O. P. 1902 A, 514.

Abel, O. 1919 A, 553.

Adams, L. A. 1919 A, 92, pl. vi.

Adloff, P. 1918 A, 134, fig. 3.

Agar, W. E. 1909 A, 380.

Altmann, F. 1925 A, 96.

Anderson, R. J. 1905 A, 322, fig. 10.

Ardt, T. 1911 A, 228.

Arthaber, G. 1919 B, 448, fig. 41.

Beebe, C. W. 1906 A, 485 ("alligator").

Bender, O. 1907 A, 40.

Beyer, H. 1907 B, 290, figs. 13, 14.

Boas, J. E. V. 1914 C, 273, figs. 57, 61.

Bronn, H. G. 1849 A, 687.

Brown, A. E. 1904 A, 467.

Carus, V. 1875 A, 408.

Carus and Engelmann 1861 A, 1109.

Case, E. C. 1896 A, 232.

Chapman, H. C. 1894 A, 42, fig. 11 ("alligator").

Dixey, F. A. 1881 A, 67 ("alligator").

Edgeworth, F. H. 1907 A, 521, figs. 21, 22.

Eimer, G. H. T. 1901 A, 37.

Emery, C. 1901 A, 675.

Forbes, W. A. 1879 A, 364 ("alligator").

Frech, F. 1906 A, 493.

Fuchs, H. 1909 A, 351, fig. 1.

1910 C, 495.

Fürbringer, M. 1900 A.

Gadow, H. 1901 B, 466.

Gaupp, E. 1895 A, 62.

1899 A, 1085 ("alligator").

1903 B, 528.

1908 C, 674.

Gegenbaur, C. 1863 A, 470.

Giebel, C. G. 1855 A, 88.

Gilmore, C. W. 1911 B, 297.

Gray, J. E. 1867 C, 162, 168.

1872 B, 28.

Gregory, W. K. 1920 A, 124, figs. 40, 41.

Gregory and Camp 1918 A, pls. xliii, xlv, 1; text-fig. 10.

Hanson, F. B. 1920 B, 334, 337.

Heilmann, G. 1926 A, 203.

Heilmann, A. 1887 A, 328, 329 ("alligators").

Higgins, G. M. 1923 A.

Hoffman, C. K. 1890 B, 1059-1063, pls.

Huxley, T. H. 1859 G, 680 ("alligators").

1859 I, 287.

1889 G, 446.

Kehrer, F. A. 1896 A, 354, figs. 23, 24.

Kingsley, J. S. 1900 A, 219.

1905 A, 64, fig. 7 ("alligator").

1925 A, 43, 141, 166, 267, 281, figs. 149, 178,

179, 289, 305.

Klein, E. F. 1863 A, 71.

Leunis and Ludwig 1883 A, 542.

Lobley, J. L. 1908 A, 199.

Lydekker, R. 1887 C, 308.

1910 E, 352 ("alligator").

1912 C, 42, 119.

Matthew, W. D. 1915 A, 284, 287.

Mivart and Clark 1879 A, 523, text-fig. 3.

Moodie, R. L. 1907 A, 89 ("alligator").

1909 G, 363 ("alligator").

Mook, C. C. 1921 H, 252, figs. 3-8.

Nopcea, F. 1903 C, pl. vi, fig. 8.

1923 H, 110, 111, pl. vi, fig. 8.

1925 B, 9.

1928 A, 187.

Owen, R. 1845 B, pls. lxxv, lxxva.

1848 B, 26.

Parsons, F. G. 1903 A, 316, fig. 2.

Peters, W. 1868 A, 593.

Pictet, F. J. 1853 A, 476.

Pinkus, F. 1904 A, 153, pl. xi, fig. 22.

Romer, A. S. 1923 A, 143, fig. 1.

1923 B, 534.

1923 C, 606, 608, fig. 2.

1927 C, 231, fig. 1.

Rovereto, C. 1912 A, 341.

Scharff, R. F. 1911 A, 180.

Schmidt, W. E. 1904 A, 105 ("alligatoriden").

Schöne, G. 1902 A, 18, figs. 4, 5.

- Seeley, H. G. 1876 C, 168.  
 Seemann, G. 1926 A, 110, text-fig. 1.  
 Seitz, A. L. L. 1907 A, 357.  
 Stannius, H. 1856 A, 55.  
 Stefano, G. 1905 A, 27, pl. iii.  
 Steiner, H. 1922 A, 345.  
 Stejneger, L. 1901 A, 308.  
 Stejneger and Barbour 1917 A, 41.  
 Thyng, F. W. 1906 A, 61, fig. R.  
 Troedsson, G. T. 1924 A.  
 Troxell, E. L. 1925 A, 221.  
 1925 D, 610, figs. 4, 5.  
 Versluys, J. 1919 A, 23.  
 Virchow, H. 1914 A, 79 ("alligators").  
 1914 B, 103.  
 1921 A, 139 ("alligatoren").  
 Voeltzkow and Döderlein 1901 A, 316.  
 Wallace, A. R. 1876 A, II, 406.  
 Wilder, B. G. 1868 A, 423, pl. xi, fig. 9.  
 Williston, S. W. 1903 A, 32, pl. v, fig. 3.  
 1925 A, 84, 174, 192, figs. 68, 69, 140, 157.  
 1925 B, 290.  
 Wyman, J. 1867 B, 265, figs. 9-12.  
 Zittel and Broili 1911 A, 272.  
 1923 A, 331.
- Alligator mississippiensis** Daudin.  
*Daudin, F. M.* 1803, Hist. Nat. Rept., II, 412.  
*Hay, O. P.* 1902 A, 514.  
*Abel, O.* 1907 A, 235.  
 1922 D, 40.  
*Arthaber, G.* 1906 A, 299, fig. 7.  
*Baur, G.* 1897 D, 48.  
*Case, E. C.* 1896 A, 233, figs. 1, 2.  
*Cuvier, G.* 1825 A, v, 2, 64 (*Crocodylus lucius*).  
*Ditmars, R. L.* 1907 A, 143.  
*Foot, J. S.* 1916 A, 56, pl. iv, fig. 65.  
 1921 A, 5, pl. i, figs. 6, 7.  
*Gadow, H.* 1901 B, 467.  
*Gaupp, E.* 1906 B, 782.  
*Goldby, F.* 1925 A, 301, figs. 6-10.  
*Gray, J. E.* 1867 C, 168.  
 1872 B, 29.  
*Hase, A.* 1913 A, figs. 46, 51, 57.  
*Haughton, S.* 1868 A, 282, pl. x.  
*Hay, O. P.* 1917 B, 13.  
 1917 E, 44.  
 1918 D, 461 ("alligator").  
 1923 A, 479.  
 1926 C, 2.  
 1927 D, 274, 286.  
*Higgins, G. M.* 1923 A, 373-406, pls. i-vi.  
*Howes, G. B.* 1891 A, 149, pl. xiv, figs. 4, 6.  
*Huene, F.* 1913 F, 470, fig. 3.

**BOTTOSAURUS** Agassiz. Type *Crocodylus macrorhynchus* Harlan = *Bottosaurus harlani* Meyer.

- Hay, O. P.* 1902 A, 514.  
*Ardt, T.* 1907 D, 90.  
 1911 A, 228.  
*Gilmore, C. W.* 1910 A, 492.  
 1911 B, 298.  
*Mook, C. C.* 1925 A, 330.  
*Nopcsa, F.* 1925 A, 187.  
*Toula and Kail* 1885 A, 354.  
*Troedsson, G. T.* 1924 A, 8, 67.  
*Williston, S. W.* 1906 A, 2-4.  
 1925 B, 290.

- Huxley, T. H.* 1859 E, 446 (*A. lucius*).  
*Loomis, F. B.* 1924 C, 506.  
*Lydekker, R.* 1912 C, 55.  
*Matson and Clapp* 1909 A, 137.  
*Moodie, R. L.* 1908 D, 455.  
*Mook, C. C.* 1921 B, 52, pl. xii; text-fig. 1.  
 1921 D, 101, figs. 1, 2.  
 1921 H, 253, fig. 14.  
 1923 A, 1-9, fig. 5.  
 1923 B, 553.  
*Nopcsa, F.* 1923 H, 111.  
*Owen, R.* 1845 B, 287.  
 1866 A, 408 (*Champsia*).  
*Reese, A. M.* 1908 A, 1, pls. i-xxiii.  
 1910 A, 365 ("alligator").  
*Romer, A. S.* 1923 B, 534, pls. xix-xxv.  
*Scharff, R. F.* 1911 A, 179, 319.  
*Schmidt, W. J.* 1914 B, 644.  
*Sellards, E. H.* 1916 C, 139, 145.  
*Spencer, J. W.* 1895 A, 137.  
*Stejneger and Barbour* 1917 A, 41.  
*Strecker, J. K.* 1915 A, 7.  
*Troedsson, G. T.* 1924 A.  
*Troxell, E. L.* 1925 B, 68, fig. 20.  
*Van Straelen, V.* 1928 A, 309.  
*Versluys, J.* 1903 A, 169.  
*Virchow, H.* 1914 B, 106, figs. 1, 2, 5, 8-12.  
 1919 A, 321.  
*Voeltzkow and Döderlein* 1901 A, 316.  
*Williston, S. W.* 1914 A, 27, figs. 11, 99, 100.  
 1914 D, 412, fig. 12.  
*Zittel and Broili* 1923 A, 212, 319 (*A. lucius*).  
 Recent; North Carolina to Rio Grande:  
 Pleistocene; Texas, Florida.
- Alligator thomsoni** Mook.  
*Mook, C. C.* 1923 A, 1-9, figs. 1-5.  
*Barbour, T.* 1926 A, 110.  
*Matthew, W. D.* 1924 C, 68.  
*Mook, C. C.* 1923 B, 553.  
 Middle Miocene to Upper Pliocene; Nebraska.
- Alligator** sp. indet.  
*Gidley, J. W.* 1927 E, 274. Pleistocene; Florida.  
*Hay, O. P.* 1923 A, 350. Pleistocene; Maryland.  
 1924 D, 3, 246. Pleistocene; Texas.  
 1927 D, 274. Pleistocene; Florida.  
*Matthew, W. D.* 1918 A, 187, 224. Pliocene  
 (Snake Creek); Nebraska.  
 1925 A, 97. Pleistocene (Earlier); Florida.  
*Merriam, J. C.* 1917 A, 439. Pliocene? (Bone  
 Valley); Florida.  
*Sellards, E. H.* 1916 B, 90. Miocene (Fuller's  
 Earth); Gadsden County, Florida.

- Zittel and Broili* 1911 A, 272.  
 1923 A, 331.  
*Zittel, Eastman, etc.* 1902 A, 222.

**Bottosaurus harlani** (Meyer).

- Hay, O. P.* 1902 A, 514.  
*Gilmore, C. W.* 1911 B, 297.  
*Lambe, L. M.* 1907 C, 220.  
*Mook, C. C.* 1925 A, 331, figs. 6-9 (*B. harlani*);  
 336 (*Bottosaurus macrorhynchus*).

Toula and Kail 1885 A, 354 (B. *macrorhynchus*, *Crocodylus harlani*).  
Williston, S. W. 1906 A, 2.  
Upper Cretaceous (Greensand); New Jersey.

#### BRACHYCHAMPSA Gilmore.

Gilmore, C. W. 1911 B, 298.  
Mook, C. C. 1925 A, 429, pls. iv, v; text-fig. 63.  
Nopcsa, F. 1928 A, 187.  
Troedsson, G. T. 1924 A, 67.  
Williston, S. W. 1925 B, 290.

#### *Brachychampsia montana* Gilmore.

Gilmore, C. W. 1911 B, 298, pls. xxvi, xxvii; text-fig. 1.  
Bowen, C. F. 1915 A, 130.  
Brown, B. 1914 E, 358.  
Gilmore, C. W. 1926 J, 28.  
Mehl, M. G. 1916 B, 50.  
Moodie, R. L. 1913 A, 186.  
Mook, C. C. 1925 A, 429, pls. iv, v; text-fig. 63.  
Upper Cretaceous (Hell Creek); Montana: (Lance); Wyoming.

#### *Brachychampsia perrugosa* (Cope).

Unless otherwise indicated the authors, as quoted, use for this species the generic name *Bottosaurus*.  
Hay, O. P. 1902 A, 514.  
Bowen, C. F. 1915 A, 128 (*Brachychampsia*).

#### CAIMANOIDEA Mehl.

Mehl, M. G. 1916 B, 47.  
Nopcsa, F. 1928 A, 187.  
Williston, S. W. 1925 B, 290.

#### *Caimanoidea prenasalis* (Loomis).

Loomis, F. B. 1904 A, 427, figs. 1-9 (*Crocodylus*).  
Barbour, T. 1926 A, 110 (*Alligator*).  
Lambe, L. M. 1905 D, 366 A (*Crocodylus*).  
1908 A, 9, 21 (*Crocodylus*. This species?).  
Matthew, W. D. 1918 G, 505, fig. ("Crocodylus." This species?).

#### *Bottosaurus tuberculatus* Cope.

Hay, O. P. 1902 A, 514.  
Cope, E. D. 1875 E, 253.  
Mook, C. C. 1925 A, 337.  
Toula and Kail 1885 A, 354.  
Williston, S. W. 1906 A, 3.  
Upper Cretaceous (Greensand); New Jersey.

#### Type *B. montana* Gilmore.

Cope, E. D. 1874 B, 433, 452.  
Gilmore, C. W. 1911 B, 298 (*Brachychampsia*).  
Hatcher, J. B. 1905 B, 82.  
Hay, O. P. 1903 D, 119.  
Lambe, L. M. 1902 A, 48.  
1902 B, 185.  
1904 C, 25, 37, 49.  
1905 D, 364 A.  
1907 C, 219 X.  
Osborn, H. F. 1902 H, 674.  
1902 I, 13, 17.  
Toula and Kail 1885 A, 354.  
Whiteaves, J. F. 1901 A, 185.  
Williston, S. W. 1906 A, 3 (Syn. of *Crocodylus humilis*).  
Upper Cretaceous (Denver or Arapahoe); Colorado: (Belly River); Alberta.

#### *Brachychampsia* sp. indet.

Gilmore, C. W. 1916 D, 289. Upper Cretaceous (Kirtland); New Mexico.  
1920 A, 8.  
Reeside, J. B. 1924 A, 23. Upper Cretaceous (Kirtland); New Mexico.

#### Type *C. visheri* Mehl.

Mehl, M. G. 1916 B, 56.  
O'Harra, C. C. 1910 A, 122 (*Crocodylus*).  
1920 A, 142, 160, fig. 74 (*Crocodylus*).  
Oligocene (Lower White River); South Dakota: (Cypress Hills); Saskatchewan.

#### *Caimanoidea visheri* Mehl.

Mehl, M. G. 1916 B, 47 (*Caimanoidea*); figs. 1-4 (*Caimanoideus*).  
O'Harra, C. C. 1920 A, 141, 160, fig. 75.  
Oligocene (Lower White River); South Dakota.

### CROCODILES OF UNCERTAIN RELATIONSHIPS.

#### PLIOGONODON Leidy. Type *P. priscus* Leidy.

Hay, O. P. 1902 A, 517.  
Mook, C. C. 1925 A, 356.

#### *Pliogonodon priscus* Leidy.

Hay, O. P. 1902 A, 517.  
Mook, C. C. 1925 A, 356, fig. 19.  
Upper Cretaceous (Black Creek); North Carolina.

#### POLYDECTES Cope. Type *P. biturgidus* Cope.

Hay, O. P. 1902 A, 514.  
Mook, C. C. 1925 A, 378.  
Williston, S. W. 1925 B, 290.

#### *Polydectes biturgidus* Cope.

Hay, O. P. 1902 A, 514.  
Gilmore, C. W. 1911 A, 208.  
Mook, C. C. 1925 A, 378, fig. 35.  
Stephenson, L. W. 1912 A, 120.  
Upper Cretaceous (Black Creek); North Carolina: (Ripley); Georgia.

## Order PTEROSAURI Kaup.

- Hay, O. P. 1902 A, 506.
- Abel, O. 1907 F, (253) ("pterosaurier").  
 1909 D, 222 ("flugsaurier").  
 1909 F, 470 ("pterosaurier").  
 1910 A, (146) ("pterosaurier").  
 1911 A, 145, 146 ("pterosaurier").  
 1912 E, 227 ("pterosaurier").  
 1912 F, 300, 390, 535, 695 (Pterosauria).  
 1919 A, 534, 559 (Rhaphorhynchoidea);  
 559, 631 (Pterodactyloidea).  
 1919 B, 661 ("flugsaurier").  
 1920 A, 382 (Rhaphorhynchoidea); 385 (Pterodactyloidea).
- Anderson, R. J. 1912 D, 25 (Pterosauria).
- Anthony, R. 1912 A ("ptérosauiens").  
 1913 A, 248 ("ptérosauiens").
- Ardt, T. 1907 D, 677 (Pterosauria).  
 1912 A, 669, 678, 686 (Pterosauria).
- Arthaber, G. 1906 A, 307 ("pterosaurier").  
 1919 A, 93 ("flugsaurier").  
 1921 A, 1-47 ("flugsaurier," Pterodactyl).  
 1921 B, 391-464 ("flugsaurier").
- Baur, G. 1889 L, 312 (Pterosauria).  
 1894 B, 350 (Pterosauria).
- Blainville, H. M. D. 1835 A, 238 (Pterodactyla).
- 1838 A, 365 ("ornithocéphale").
- Boas, J. E. V. 1914 B, 563 ("pterosaurier").
- Boule, M. 1902 B, 909 ("ptérosauiens").
- Boulenger, G. A. 1904 C, 480 (Ornithosauria).
- Branca, W. 1908 B ("flugthiere").
- Branson, E. B. 1918 A, 9 ("pterodactyls").
- Brauer, A. 1908 A, 92 ("flugsaurier").
- Brauns, D. 1890 A, 161, 202 (Pterodactyli).
- Bronn, H. G. 1848 B, 851 (Ornithocephalus).  
 1849 A, 833 (Pterodactyli).
- Broom, R. 1906 C, 437 ("pterodactyles").  
 1906 D, 365 (Pterosauria).  
 1913 O, 631 ("pterodactyls").  
 1922 A, 17 ("pterosaurs").  
 1924 B, 64, fig. 13 (Pterosauria).
- Carus, V. 1875 A, 402 (Pterosauria).
- Case, E. C. 1898 C, 720 (Pterosauria).  
 1923 A, 517.
- Claus, C. 1895 A, 363 ("pterosaurier").
- Cope, E. D. 1885 BB, 69 (Pterosauria).  
 1891 N, 35, 41 (Ornithosauria).
- Dabelow, A. 1926 A, 95 ("pterosaurier").
- Dames, W. 1883 C, 268 ("flugsaurier").  
 1899 E, 554 (Pterosauria).
- Depéret, C. 1907 B ("ptérodactyles").  
 1912 A, 705 ("ptérosauiens").
- Döderlein, L. 1900 A, 335 (Pterosauria).  
 1900 B, 55 ("pterosaurier").  
 1923 A, 135 (Pterosauria).
- Dollo, L. 1889 A, 664 ("ptérosauiens").  
 1889 E, 172 ("ptérosauiens").  
 1896 A, 83 ("ptérosauiens").
- Eaton, G. T. 1910 A, 24 (Pterosauria).
- Elmer, G. H. T. 1901 A, 261 ("pterosaurier").
- Fitzinger, L. 1843 A, 35 (Ornithosauri).
- Fraas, E. 1905 B, 374 ("pterosaurier").
- Frassetto, F. 1915 A, 62.
- Frech, F. 1906 A, 493 ("pterodactylen").
- Fuchs, H. 1909 B, 114, 149 (Pterosauria).
- Fürbinger, M. 1888 A, 1820 (Pterosauria).
- Fürbinger, M. 1914 A (Pterosauria).
- Gadow, H. 1901 B, 484 (Pterosauria); 486 (Pterosauri).
- 1902 B, 359 (Pterosauria).  
 1914 A, 504 ("pterosaurs").
- Gegenbaur, C. 1879 A, 522 ("pterodactylen").
- Gervais, P. 1852 A, 265 ("ptérodactyliens").  
 1853 B, 37 ("ptérodactyles").  
 1859 A, 469 ("ptérodactyliens").
- Giebel, C. G. 1855 A, 87 (Pterosauria).
- Gilmore, C. W. 1906 A, 607, pls. xxx, xxxi (Rhaphorhynchus).
- Goldfuss, A. 1831 A (Pterodactylus).
- Goodrich, E. S. 1916 A, 263 (Pterosauria).
- Green, J. R. 1861 A, 219, 226 (Pterosauria).
- Gregory, W. K. 1915 E, 448 ("pterosaurs").
- Gregory and Adams 1915 A, 764 ("pterosaurs").
- Haeckel, E. 1873 A, 512, 531 (Pterosauria).
- Hankin and Watson 1914 A, 324 ("pterodactyls").
- Heilmann, G. 1913 A, 55 (Pterosauria).  
 1916 A, 90.  
 1926 A, 146 ("pterosaurs").
- Heilprin, A. 1887 A, 163, 172 (Pterosauria).
- Hoernes, R. 1886 A, 624 (Pterosauria).
- Hoffman, C. K. 1890 B, 1318 ("pterosaurier").
- Hooley, R. W. 1913 A, 372, 412 (Ornithosauria).
- Howes, G. B. 1902 A, 525 ("pterodactyles").
- Howes and Swinnerton 1901 A, 2 (Pterosauria).
- Huene, F. 1902 A, 65 ("flugsaurier").  
 1908 B, 356, 402 ("pterosaurien").  
 1908 F, 405 ("pterosaurier").  
 1913 E, 480 ("pterosaurier").  
 1914 G, 47 ("pterosaurier").  
 1914 H, 57 ("pterosaurien").  
 1922 E, 24 (Pterosauria).  
 1922 F, 409 ("pterosaurier").  
 1925 G, 316 ("flugsaurier").  
 1927 E, 326 ("flugsaurier").
- Hutchinson, H. N. 1910 A, 199, pls. xxxii, xxxiii ("flying-dragons").
- Huxley, T. H. 1855 A, 82 (Pterodactyla).  
 1862 A, xlviii (Pterosauria).  
 1870 F, 523 (Pterosauria).  
 1870 H, 494 (Pterosauria).  
 1879 A, 399 (Pterosauria).
- Jaekel, O. 1904 A, 33 ("flugsaurier").  
 1905 B, 65 ("pterosaurier").  
 1910 C, 338, 340.  
 1910 E, 225.  
 1911 A, 165.  
 1915 B, 1.  
 1916 A, 201 ("pterosaurier").
- Kehrer, F. A. 1896 A, 348 ("pterodactylen").
- Kingsley, J. S. 1925 A, 5, 16, 51, 167, 255, 269 (Pterosauria).
- Koken, E. 1886 B, 21 ("pterosaurier").  
 1893 B, 366 ("pterosaurier").  
 1901 B, 222 ("ornithosaurier").
- Lankester, E. R. 1905 A, 231 ("pterodactyles").
- Larger, R. 1913 A, 702, 711 ("ptérosauiens").
- Lavocat, A. 1884 A, 1126 ("ptérosaures").  
 1885 A, 39 ("ptérosaures").
- Lee, Stone, Gale 1915 A, 20 ("pterodactyls").
- Leunis and Ludwig 1883 A, 597 (Pterosauria).
- Lönnberg, E. 1910 E, 19.
- Lucas, F. A. 1902 B, 209 ("pterodactyles").



- Lull, R. S. 1906 B, 546 (Pterosauria).  
1917 B, 367 ("pterodactyls").  
1924 A, chart.
- Lydekker, R. 1901 A, 645 ("pterodactyles").  
1912 C, 4, 22, 28, 97, 129 (Ornithosauria).  
1913 A, 12 ("pterodactyles").  
1915 C, 626 ("pterodactyls").
- Mantell, G. A. 1844 A, 762 ("pterosaurians").  
Martins, C. 1872 A, 307 ("ptérodactyles").  
Matthew, W. D. 1920 A, 74 ("pterodactyls").  
Meekel, J. F. 1825 A, 407, 419, 420 (Ornithocephalus).  
Meunier, S. 1903 A, 776 ("ptérosauiens").  
Meyer, H. v. 1847 B, 72, 74 (Pterodactyli).  
Moodie, R. L. 1915 I, 157 ("pterodactyls").  
Newton, E. T. 1888 B, 436 ("pterosaurian").  
Nopcsa, F. 1907 A, 224 ("pterosaurs").  
1916 A, 418.  
1917 A, 204 ("pterosaurier").  
1922 A, 116 ("pterosaurier").  
1922 B, 161 ("pterosaurier").  
1923 D, 112 (Pterosauria).  
1923 E, 1045 ("pterosaurians").  
1923 H, 1, 10, 181, 182 (Pterodactyloidea);  
5 (Ornithosauri); 2-4, 6, 8-10, 121, 175,  
176, 180, 183, 184 (Pterosauria).  
1924 B, 80 ("pterosaurier").  
1928 A, 187 (Pterosauria).
- Osborn, H. F. 1903 D, 813 ("pterosaurs").  
1903 H, 454 (Ornithosauria); 456, 504 (Pterosauria).  
1904 H, 114.  
1904 N, 308 (Pterosauria).  
1905 C, 295 (Pterosauria).  
1905 N, 240 ("pterosaurs").  
1917 D, 660 ("pterosaurs").
- Owen, R. 1842 F, 73 (Pterodactyli).  
1850 E, 703.  
1868 A, 904 (Pterosauria).  
1913 A, 248 ("pterosaurs").
- Parker and Haswell 1897 A, 314, 348 (Pterosauria).
- Petronievics, B. 1928 A, 214 ("flugsauiier").
- Plieninger, F. 1901 A, 65, 88 (Pterosauria).  
1906 A, 399 ("pterosaurier").  
1906 B, ciii ("pterosaurier").  
1907 A, 209, 294 ("pterosaurier").
- Pompeckj, J. F. 1925 A, 6 ("flugtiere").
- Reynolds, S. H. 1897 A, 271, 278, 552 (Pterosauria).
- Ridewood, W. G. 1897 D, 190 (Ornithosauria).
- Schuchert, C. 1915 A, 906 ("pterosaurs").
- Seeley, H. G. 1887 E, 192 ("ornithosaurs").  
1887 G, 206 ("ornithosaurs").
- Seeley, H. G. 1888 I, 238 (Ornithosauria).  
1899 B, 69 ("ornithosaurs").  
1901 A, 187 (Ornithosauria).
- Serres, M. 1852 A, 115 ("pterodactyles").
- Sewertsoff, A. N. 1908 A, 248 (Pterosauria).
- Short, H. 1914 A, 336 ("pterodactyls").
- Spillman, F. 1925 A, 185 ("pterosaurier").
- Steiner, H. 1922 A, 339 ("pterosaurier").
- Steinmann, G. 1907 A, 452 (Pterosauria).  
1908 A, 235 ("pterosaurier").  
1910 A, 99 (Pterosauria).
- Stromer, E. 1910 A, 85 ("pterosaurier").  
1912 A, 90, 126 (Pterosauria).  
1913 A, 49, 61 ("flugsauiier," Pterosauria).
- Terra, P. 1911 A, 238 (Pterosaurii).
- Tornier, G. 1913 B, 362, 374 (Pterosauria).
- Van den Broeck, E. 1900 A, 70, 88 ("ptérosauiens").
- Versluys, J. 1912 B, 650, 687 (Pterosauria).
- Vogt, C. 1879 A, 243 ("ptérodactyles").  
W. D. 1877 A, 124 (Pterodactylia).
- Wagner, J. A. 1837 A, 165 (Ornithocephalus).
- Wamich, P. 1913 A, 24 ("pterosaurier").
- Wegner, R. N. 1922 A, 481.
- Wilckens, O. 1911 A, 711 ("flugsauiier").
- Williston, S. W. 1885 A, 628 (Pterodactylus).  
1893 D, 110 ("pterodactyls").  
1902 G ("winged reptiles").  
1902 H, 67 ("pterodactyls").  
1904 B, 176.  
1904 C, 59 ("pterodactyls").  
1905 D, 297 (Pterosauria).  
1911 F, 661 (Pterosauria).  
1913 E, 756 (Pterosauria).  
1914 A, 18, 45.  
1917 C, 412.  
1918 A, 80 (Pterosauria).  
1925 A, *passum* (Pterosauria).  
1925 B, 214, 296 (Pterosauria).
- Wiman, C. 1924 A, 115 ("flugsauiier").  
1925 B, 15 ("flugsauiier").  
1928 A, 363 ("flugsauiier").
- Woodward, A. S. 1898 B, 224 (Ornithosauria).  
1902 B, 1 (Ornithosauria).  
1904 D, 148 (Pterosauria).  
1910 B, 465 ("pterodactyls").  
1922 C, 6 (Ornithosauria).  
1923 A, 81 (Pterosauria).
- Woodward, H. 1904 B, 148 (Pterosauria).
- Young, G. W. 1915 A, 242 (Pterosauri).
- Zittel and Broili 1911 A, 298 (Pterosauria).  
1923 A, 367, 383 (Pterosauria).
- Zittel, Eastman, etc. 1902 A, 246 (Pterosauria).

### Suborder ORNITHOCEPHALIFORMES, new name.

- Abel, O. 1909 F, 470 (Pterodactyloidea).  
1921 A, 270, 279 (Pterodactyloidea).
- Arthaber, G. 1921 A, 12 (Pterodactyloidea).
- Broili, F. 1927 B, 29-48, pls. i-iii, vii; text-figs. 1-7 (Rhamphorhynchus).  
1927 C, 49-65, pls. iv-vii.
- Gadow, H. 1901 B, 486 (Pterodactyli).
- Huene, F. 1914 G, pl. vii (Pterodactyloidea).
- Nopcsa, F. 1922 A, 113, 114 (Pterodactyloidea).  
1923 H, 120, 127, tab. (Pterodactyloidea).
- Nopcsa, F. 1928 A, 188 (Pterodactyloidea).
- Plieninger, F. 1901 A, 90 (Pterodactyloidea).  
1907 A, 813 (Pterodactyloidea).
- Seeley, H. G. 1901 A, 193 (Pterodactylia).
- Williston, S. W. 1903 B, 158 (Pterodactyloidea).  
1914 A, 18, 45 (Pterodactyloidea).  
1925 B, 214, 298 (Pterodactyloidea).
- Zittel and Broili 1911 A, 305 (Pterodactyloidea).  
1923 A, 373 (Pterodactyloidea).

## ORNITHOCEPHALIDÆ Hay.

- Unless otherwise indicated the authors as quoted use the name *Pterodactylidæ*.  
 Hay, O. P. 1902 A, 506.  
 Abel, O. 1912 E, 233 ("pterodactyliden").  
 1912 F, 301.  
 1919 A, 567, figs. 444-446.  
 Arldt, T. 1912 A, 662.  
 Arthaber, G. 1919 B, 346 ("pterosaurer").  
 1921 A, 15, 32, fig. 15 (*Pterodactylus*).  
 Dames, W. 1899 E, 554.  
 Hoernes, R. 1886 A, 625.  
 Huxley, T. H. 1868 D, 308 ("pterodactyls").  
 Matthew, W. D. 1920 B, 73 ("flying reptiles").  
 Nopcsa, F. 1923 H, 118, 120, 126.  
 1928 A, 188.  
 Plieninger, F. 1901 A, 90.  
 1907 A, 313.  
 Pycraft, W. P. 1902 B, 314.  
 Van den Broeck, E. 1900 A, 106.  
 Williston, S. W. 1903 B, 158.  
 1925 B, 298.  
 Zittel and Broili 1911 A, 306.  
 1923 A, 376.  
 Zittel, Eastman, etc. 1902 A, 253.

## ORNITHOCEPHALINÆ, new name.

- Williston, S. W. 1892 A, 12 (*Pterodactylinae*). |

## ORNITHOCEPHALUS Sömmerring.

- Unless otherwise indicated the authors, as cited, employ the name *Pterydactylus*.  
 Hay, O. P. 1902 A, 507 (*Ornithocephalus*).  
 Abel, O. 1909 D, 226.  
 1919 B, 661, figs. 2-6.  
 1921 A, 274, 276, figs. 98, 99, 101 (*Ornithocephalus*).  
 1925 A, 91, figs. 56, 60-65, 67-75.  
 1925 B, 1-12, figs. 1-4.  
 Arthaber, G. 1919 B, 391 (*Ornithocephalus*);  
 410, figs. 12-15, 31-34, 50, 51 (*Pterodactylus*).  
 1921 A, 15, 32, fig. 15.  
 Blainville, H. M. D. 1838 A, 385 ("ornithocéphale").  
 Branca, W. 1908 B, 16.  
 Broili, F. 1912 B, 493.  
 1919 A, 305.  
 1925 A, 23.  
 Bronn, H. G. 1848 B, 851 (*Ornithocephalus*).  
 Cuvier, G. 1825 A, v, 2, 350-383, pl. xxiii.  
 Dames, W. 1883 C, 269 (*Ornithocephalus*).  
 Dana, J. D. 1868 D, 131 ("pterodactyl").  
 Döderlein, L. 1900 B, 57.  
 Giebel, C. G. 1855 A, 87.  
 Goldfuss, A. 1831 A, 63.  
 Hoffmann, C. K. 1890 B, 1316.  
 Kingsley, J. S. 1925 A, 269, fig. 293.  
 Meckel, J. F. 1825 A, 407, 419, 420 (*Ornithocephalus*).  
 Münster, G. 1831 A, 49, pl. vi (*Pterodactylus*, *Ornithocephalus*).  
 Nopcsa, F. 1923 H, 118, 132, 199.  
 1928 A, 188.  
 Owen, R. 1845 B, 273.  
 1868 A, 903.  
 Phleninger, F. 1901 A, 90.  
 1906 A, 399.  
 1907 A, 261.  
 Pycraft, W. P. 1909 A, 204, fig.  
 Spillman, F. 1925 A, 187.  
 Stromer, E. 1913 A, 52.  
 Wagner, J. A. 1837 A, 165 (*Ornithocephalus*).  
 Williston, S. W. 1902 L, 918.  
 1925 B, 298, fig. 189.  
 Wiman, C. 1925 A, 1-38, pls. i, ii, 23 figs.  
 Woodward, A. S. 1922 C, 8, fig. 4.  
 Zittel and Broili 1911 A, 306.  
 1923 A, 372, figs. 483, 487.  
 Zittel, Eastman, etc. 1902 A, 233.

DERMODACTYLUS Marsh. Type *Pterodactylus montanus* Marsh.

- Hay, O. P. 1902 A, 507.  
 Dollo, L. 1889 A, 686.  
 Gilmore, C. W. 1923 B, 1.  
 Hoernes, R. 1886 A, 626.  
 Williston, S. W. 1903 B, 161.  
 1925 B, 298.  
*Dermodactylus montanus* Marsh.  
 Hay, O. P. 1902 A, 507.  
 Gilmore, C. W. 1909 B, 39.  
 Mook, C. C. 1916 A, 149.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

## PTERANODONTIDÆ Marsh.

- Hay, O. P. 1902 A, 507.  
 Abel, O. 1911 A, 147 (*Ornithocheiridæ*).  
 1919 A, 570 (*Ornithocheiridæ*).  
 1922 C, 326 ("pteranodontiden").  
 Arldt, T. 1907 D, 677.  
 Brauns, D. 1890 A, 161, 202 (*Pteranodontia*).  
 Case, E. C. 1898 C, 723.  
 Cope, E. D. 1891 N, 41.  
 Dames, W. 1899 E, 554 (*Ornithocheiridæ*).  
 Dollo, L. 1889 E, 177 ("ptéranodontes").  
 Gadow, H. 1901 B, 487 (*Pteranodontes*).  
 Hoernes, R. 1886 A, 628.  
 Hookey, R. W. 1913 A, 416 (*Ornithostomatidæ*).  
 1914 A, 557 (*Ornithostomatidæ*).  
 Jaekel, O. 1910 C, 340.  
 Nopcsa, F. 1923 D, 112 (*Ornithocheiridæ*).  
 1923 E, 1048.  
 1923 H, 127, 188.  
 1928 A, 188.  
 Seeley, H. G. 1901 A, 193 (*Ornithocheiroidea*).  
 Steinmann, G. 1907 A, 455.  
 Van den Broeck, E. 1900 A, 75.  
 Williston, S. W. 1925 B, 298 (*Pteranodontidæ*, *Ornithocheiridæ*).  
 Zittel and Broili 1911 A, 306 (*Ornithocheiridæ*).  
 1923 A, 376 (*Ornithocheiridæ*).  
 Zittel, Eastman, etc. 1902 A, 254 (*Ornithocheiridæ*).

## PTERANODONTINÆ Williston.

- Williston, S. W. 1892 A, 12.  
 Abel, O. 1919 A, 571.  
 Nopcsa, F. 1923 H, 123, 183.  
 Plieninger, F. 1907 A, 313 (Ornithocheirinae).

- Tornier, G. 1913 B, 364 (Ornithocheirinae).  
 Zittel and Broili 1911 A, 306 (Ornithocheirinae).  
 1923 A, 376 (Ornithocheirinae).

PTERANODON Marsh. Type *P. longiceps* Marsh.

- Hay, O. P. 1902 A, 507.  
 Abel, O. 1907 F (253).  
 1909 F, 472.  
 1910 A (143).  
 1911 A, 147.  
 1912 E, 227.  
 1912 F, 301, 331, 513.  
 1914 B, 70, figs. 20, 31.  
 1914 C, 327, 393.  
 1919 A, 574.  
 1920 A, 385.  
 1921 A, 301.  
 1922 C, 329, 388.  
 1925 A, 137, figs. 86, 90, 91.  
 Anthony, R. 1912 A.  
 Arthaber, G. 1919 B, 418, 453.  
 1921 A, 21, 22, 39, fig. 12.  
 Beddard, F. E. 1898 A, 157.  
 Boule, M. 1891 A, 21.  
 Case, E. C. 1898 C, 723.  
 Cooper, B. G. 1914 A, 343.  
 Dames, W. 1899 E, 553 (Ornithostoma).  
 Delafontaine, M. 1877 B, 127 ("pteranodontes").  
 Depéret, C. 1907 B.  
 Döderlein, L. 1900 B, 57.  
 1923 A, 134.  
 Dollo, L. 1888 F, 79.  
 1889 A, 666.  
 1889 E, 177.  
 Eaton, G. F. 1903 B, 82, pls. vi, vii.  
 1904 A, 318, pl. xx.  
 1908 A, 254.  
 1910 A, 1, pls. i-xxxi.  
 Gilmore, C. W. 1928 B, 1.  
 Hankin and Watson 1914 A, 325.  
 Harlé and Harlé 1912 A, 119.  
 Heilmann, G. 1913 B, 70, 85, figs. 101, 104.  
 1926 A, 61.  
 Heilprin, A. 1887 A, 169.  
 Hoernes, R. 1886 A, 628.  
 Hooley, R. W. 1913 A, 411, 416 (Ornithostoma).  
 1914 A, 531 (Ornithostoma).  
 Huene, F. 1914 G, 44.  
 1914 H, 62, fig. 8.  
 Ihde, — 1912 A, 251.  
 Jaekel, O. 1916 A, 201.  
 Knipe, H. R. 1912 A, 104, fig.  
 Langley, S. P. 1902 A, 649 (Ornithostoma).  
 Lankester, E. R. 1905 A, 231, figs. 169, 170.  
 Larger, R. 1913 A, 711.  
 Lee, Stone, Gale 1915 A, pl. v, fig. C (Ornithostoma).  
 Lucas, F. A. 1902 A, 654 (Ornithostoma).  
 1902 B, 210, fig. (Ornithostoma).  
 1902 D, 657.  
 Lull, R. S. 1906 B, 546, fig. 7.  
 1919 A, 223.  
 Lydekker, R. 1912 C, 136.  
 1913 A, 12 ("pterodactyles").  
 Matthew, W. D. 1916 E, 251, fig.

- Matthew, W. D. 1920 B, 73, figs. 1, 4.  
 Moodie, R. L. 1913 A, 185.  
 Noack, T. 1880 A, 77.  
 Nopcsa, F. 1916 A, 418.  
 1922 B, 168, 174.  
 1923 E, 1049, fig. 8.  
 1923 G, 110.  
 1923 H, 116-118, pl. iii, fig. 5.  
 1928 A, 188.  
 Osborn, H. F. 1917 B, 226.  
 Perrier, E. 1920 A, 322.  
 Plieninger, F. 1901 A, 76, 90, pl. v.  
 1902 A, 411.  
 1907 A, 283, 313.  
 Pycraft, W. P. 1909 A, 205, fig.  
 Reynolds, S. H. 1897 A, 274, 289.  
 Sauvage, H. E. 1901 B, 12.  
 Schuchert and Levene 1927 A, 294, fig.  
 Seeley, H. G. 1901 A, 180, 184 (Ornithostoma).  
 Seitz, A. L. L. 1907 A, 350.  
 Short, H. 1914 A, 341, figs. 1-5.  
 Sternberg, C. H. 1907 C, 122.  
 1909 C, 266.  
 1911 A, 71.  
 1917 A, 164 ("pteranodonts").  
 Stromer, E. 1913 A, 53.  
 Tornier, G. 1913 B, 364, fig. 43.  
 Van den Broeck, E. 1900 A, 75.  
 Versluys, J. 1912 B, 651.  
 Wieland, G. R. 1912 A, 287.  
 1912 B, 300.  
 Williston, S. W. 1902 B, 297, 305.  
 1902 C, 521 (Ornithostoma).  
 1902 G, 316, 317, text-figs. 1, 2, 4.  
 1902 H, 68 (Ornithostoma).  
 1903 B, 129.  
 1904 C, 60.  
 1908 C, 718.  
 1911 E, 700.  
 1912 B, 642.  
 1912 D, 288.  
 1913 E, 754.  
 1925 A, *passim*, figs. 71, 72, 73, 155.  
 1925 B, 298.  
 Wiman, C. 1920 A, 9.  
 1924 A, 123.  
 Woodward, A. S. 1896 D, 257.  
 1898 B, 229.  
 1902 B, 3.  
 1922 C, 7.  
 1923 A, 31.  
 Woodward, H. 1904 D, 149.  
 Young, G. W. 1915 A, 246, fig. 17.  
 Zittel and Broili 1911 A, 307.  
 1923 A, 377.

**Pteranodon comptus** Marsh.

- Hay, O. P. 1902 A, 507.  
 Eaton, G. F. 1910 A, 2.

Williston, S. W. 1903 B, 154.

Upper Cretaceous (Niobrara); Kansas.

Eaton says "no longer valid." However, two vertebrae of the type specimens, No. 2287, are not accounted for.

***Pteranodon ingens* Marsh.**

Hay, O. P. 1902 A, 508.

Abel, O. 1907 F (253).

1909 F, 472, fig. 9.

1912 F, 332, 540, 695, figs. 243, 244.

1919 A, 574, figs. 450-452.

1920 A, 384, fig. 601.

1922 C, 327, fig. 286.

1925 A, 137, 140, figs. 86-91.

Arthaber, G. 1919 B, 430, 455, figs. 47, 57.

Dames, W. 1899 E, 554 (Ornithostoma).

Döderlein, L. 1923 A, 127.

Eaton, G. F. 1910 A, 1, 9, pl. ii, fig. 1; pl. iii, fig. 1; pl. iv, figs. 1, 2; pl. v, fig. 3; pl. vi, figs. 1, 12-15; pls. x, xi; pl. xvi, fig. iv; pl. xvii, fig. 1; pl. xix, figs. 1-8; pl. xxviii, figs. 4, 5.

Lambe, L. M. 1914 H, 402.

Lucas, F. A. 1902 D, 657, pls. vi, vii; text-fig. 1 (Ornithostoma).

Plieninger, F. 1906 A, 411, fig. 5.

Sternberg, C. H. 1913 A, 48.

Versluys, J. 1912 B, 651, fig. O<sup>a</sup>.

Williston, S. W. 1902 B, 301 (Ornithostoma).

1903 B, 145, pl. xliii, figs. 1-3; pl. xlv, fig. 8; text-fig. 2.

Upper Cretaceous (Niobrara); Kansas.

***Pteranodon longiceps* Marsh.**

Hay, O. P. 1902 A, 508.

Eaton, G. F. 1904 A, 318, pl. xix.

1910 A, 2, 3.

Koken, E. 1893 B, 435.

Lull, R. S. 1917 B, 360, fig. 86.

Upper Cretaceous (Niobrara); Kansas.

***Pteranodon occidentalis* Marsh.**

Hay, O. P. 1902 A, 508.

Dollo, L. 1889 E, 177.

Eaton, G. F. 1910 A, 1, 14, pl. iii, fig. 2; pl.

xix, figs. 9-19; pl. xxiv, figs. 3, 4.

Newberry, J. C. 1871 B, 241 (Pterodactylus).

Williston, S. W. 1903 B, pl. xlv, fig. 4.

Woodward, A. S. 1922 C, 7.

Young, G. W. 1915 A, 247, fig. 18.

Upper Cretaceous (Niobrara); Kansas.

***Pteranodon?* oregonensis Gilmore.**

Gilmore, C. W. 1928 B, 2, figs. 1, 2.

Upper Cretaceous (Upper Chico or Lower Horsetown); Oregon.

***Pteranodon velox* Marsh.**

Hay, O. P. 1902 A, 508.

Eaton, G. F. 1910 A, 2 (Valid species?).

Upper Cretaceous (Niobrara); Kansas.

***Pteranodon* sp. indet.**

Wiman, C. 1920 A, 9, pl. ii; text-fig. 1. Upper Cretaceous (Niobrara); Kansas.

**NYCTOSAURINÆ Plieninger.**

Plieninger, F. 1907 A, 313.

Hay, O. P. 1902 A, 508 (Nyctosauridæ).

Abel, O. 1919 A, 571.

Dames, W. 1899 E, 554 (Nyctodactylinæ).

Hooley, R. W. 1913 A, 416.

Nopcea, F. 1923 H, 127.

Sauvage, H. E. 1901 B, 13 (Nyctodactylinæ).

Williston, S. W. 1925 B, 298 (Nyctosauridæ).

Zittel and Broili 1911 A, 307.

1923 A, 378.

**NYCTOSAURUS Marsh. Type *Pteranodon gracilis* Marsh.**

Hay, O. P. 1902 A, 508.

Abel, O. 1912 F, 334, 688.

1919 A, 571.

Arthaber, G. 1921 A, 1, 43, fig. 38.

Branca, W. 1908 B, 13.

Case, E. C. 1898 C, 724 (Nyctodactylus).

Döderlein, L. 1923 A, 128 (Nyctodactylus).

Dollo, L. 1889 A, 666 (Nyctodactylus).

Eaton, G. F. 1903 B, 83 (Nyctodactylus).

1904 A, 318 (Nyctodactylus).

1910 A, 8, 23.

Gilmore, C. W. 1928 B, 1 (Nyctodactylus).

Hooley, R. W. 1913 A, 411, 416.

Huene, F. 1914 G, 44.

1914 H, 57.

Lucas, F. A. 1902 B, 216 (Nyctodactylus).

Lull, R. S. 1919 A, 223 (Nyctodactylus).

Matthew, W. D. 1920 B, 79.

Nopcea, F. 1907 A, 228, fig. 77 (Nyctodactylus).

1922 B, 169.

1923 H, 12, 13, 116-118 (Nyctosaurus);

201, pl. iii, fig. 6 (Nyctodactylus).

1923 A, 188.

Plieninger, F. 1901 A, 81, 90 (Nyctodactylus).

1906 A, 411, figs. 6, 7.

1907 A, 313.

Sauvage, H. E. 1901 B, 12 (Nyctodactylus).

Stromer, E. 1910 A, 85 (Nyctodactylus).

1913 A, 60.

Tornier, G. 1913 B, 364.

Versluys, J. 1912 B, 651.

Williston, S. W. 1902 B, 297 (Nyctodactylus).

1902 C, 520, pls. i, ii ("Nyctodactylus").

1902 H, 8 (Nyctodactylus).

1903 B, 125, 157.

1904 C, 59 ("pterodactyls").

1908 C, 718.

1911 E, 696.

1918 A, 79, fig. 3.

1925 A, 89, 103, 138, 145, 147, 148, 196, figs. 72, 80, 94, 109, 118.

1925 B, 298, figs. 190, 191.

Young, G. W. 1915 A, 247.

Zittel and Broili 1911 A, 307.

1923 A, 378.

Zittel, Eastman, etc. 1902 A, 253 (Nyctodactylus).

***Nyctosaurus gracilis* Marsh.**

Hay, O. P. 1902 A, 508.

Abel, O. 1919 A, 572, fig. 448.

- Arthaber, G. 1919 B, 429 (Nictosaurus); 436, 444, 455, figs. 36, 47 (Nictodactylus).  
 Broili, F. 1919 A, 304.  
 Heilman, G. 1913 B, 71, figs. 99, 101.  
 Huene, F. 1914 H, 57, figs. 1, 7.  
 Lambe, L. M. 1914 H, 402.  
 Williston, S. W. 1902 B, 287, plate ("Nictodactylus").  
 1903 B, 157, pls. xl-xlii; pl. xliii, figs. 4-11; pl. xliv, figs. 1-3, 5-7; text-fig. 1.  
 Williston, S. W. 1911 E, 697, fig. 1.  
 Zittel and Broili 1911 A, 307, fig. 456.  
 1923 A, 373, fig. 489.  
 Upper Cretaceous (Niobrara); Kansas.  
**Nictosaurus nanus** (Marsh).  
 Hay, O. P. 1902 A, 508 (Pteranodon).  
 Eaton, G. F. 1910 A, 3.  
 Williston, S. W. 1903 B, 154 (Pteranodon).  
 Upper Cretaceous (Niobrara); Kansas.

### TRIBELESODONTIDÆ Nopcsa.

*Nopcsa*, F. 1922 B, 179.

### REHADOPELIX Cope. Type *R. longispinis* Cope.

- Hay, O. P. 1902 A, 461.  
 Nopcsa, F. 1922 B, 166, 179.  
 Parks, W. A. 1927 A, 10.  
 A genus of uncertain family.  
**Rhabdopelix longispinis** Cope.  
 Hay, O. P. 1902 A, 461.  
 Huene, F. 1921 B, 572, figs. 19, 20 (This genus and species?).  
 Lyman, B. S. 1894 A, 212.  
 Wherry, E. T. 1912 A, 377.  
 Triassic (Newark); Pennsylvania.

### REPTILE OF UNCERTAIN FAMILY

### APATOMERUS Williston. Type *A. mirus* Williston.

- Williston, S. W. 1903 B, 160.  
 Zittel and Broili 1923 A, 373.  
 A genus of very uncertain position.  
**Apatomerus mirus** Williston.  
 Williston, S. W. 1903 B, 160.  
 1894 B, 4, pl. i, fig. 4 ("Hyposaurus?").  
 1898 D, 76, fig. 3 ("Hyposaurus?").  
 Lower Cretaceous (Comanche); Kansas.

### Superorder DINOSAURIA Owen.

- Hay, O. P. 1902 A, 481.  
 Abel, O. 1904 B, 741.  
 1909 C, (117). ("dinosaurier").  
 1909 D, (222) ("dinosaurier").  
 1909 F, 458 ("dinosaurier").  
 1910 B, (186).  
 1910 C, (231) ("dinosaurier").  
 1911 A, 144 ("dinosaurier").  
 1912 A, 47 ("dinosaurien").  
 1912 F, 269, 292, 668.  
 1916 A, 469.  
 1919 A, 576.  
 1920 A, 385.  
 1921 A, 182, 251, 264 ("dinosaurier").  
 1924 A, 709 ("dinosaurier").  
 1926 B, 38 ("dinosaurier").  
 Agassiz, L. 1845 B, 300 ("dinosaurians").  
 Altmann, F. 1925 A, 87 ("dinosaurier").  
 Ameghino, F. 1897 B, 257.  
 1904 B, 13 ("dinosaurios").  
 1906 A, 77 ("dinosauriens").  
 1912 A, 47 ("dinosaurien").  
 Andrews, A. 1903 A, 150 ("dinosaurier").  
 Andrews, C. W. 1903 C, 1 ("dinosaurs").  
 Anonymous 1909 A, 198.  
 Anthony, R. 1912 A ("dinosaurien").  
 Arldt, T. 1907 C, 676.  
 1907 D, 650.  
 1909 A, 261 ("dinosaurier").  
 Arthaber, G. 1906 A, 307 ("dinosaurier").  
 Baird, S. F. 1876 A, 311.  
 Baur, G. 1889 L, 312.  
 Beard, J. C. 1901 A, 184 ("dinosaurs").  
 Beebe, C. W. 1906 A, 487 ("dinosaurs").  
 Bigot, A. 1897 A, 462 ("dinosauriens").  
 Bittner, F. 1912 A, 14 ("dinosaurier").  
 Boas, J. E. V. 1914 B, 561.  
 1914 C, 276 ("dinosaurier").  
 Boule, M. 1891 A, 11 ("dinosauriens").  
 1902 B, 906 ("dinosauriens").  
 Boulenger, G. A. 1903 A, 357.  
 1904 C, 480.  
 1917 C, 456 ("dinosauriens").  
 Branson, E. B. 1918 A, 92 ("dinosaurs").  
 Brauns, D. 1890 A, 186, 201, 202 (Deinosauria).  
 Braus, H. 1906 A, 276 ("dinosaurier").  
 Broili, F. 1908 A, 5 ("dinosaurier").  
 Bronn, H. G. 1849 A, 846, seq. ("pachypoden").  
 Broom, R. 1903 I, 554.  
 1906 C, 437 ("dinosaurs").  
 1906 D, 362 ("dinosaurs").  
 1913 G, 345 ("dinosaurs").  
 1913 O, 629 ("dinosaurs").  
 1917 A, 977.  
 1922 A, 17 ("dinosaurs").  
 1927 A, 74 ("dinosaurs").  
 Brown, B. 1919 A, 425 ("dinosaurs").  
 Burroughs, J. 1919 A, 491 ("dinosaurs").  
 Carus, V. 1875 A, 403.  
 Case, E. C. 1897 D, 87 ("dinosaurs").  
 1898 C, 630.  
 1923 A, 517.  
 Cleland, J. 1887 A, 391 ("dinosaurs").  
 Cope, E. D. 1891 N, 35, 41.

- Dames, W. 1883 C, 271 ("dinosauriens").  
 Depéret, C. 1896 A, 181 ("dinosauriens").  
 1912 A, 703 ("dinosauriens").  
 Diener, C. 1909 A, 41 ("dinosaurier").  
 Döderlein, L. 1900 A, 335.  
 Dollo, L. 1883 G, 594.  
 1889 G, 675 ("dinosauriens").  
 1889 H, 676 ("dinosauriens").  
 1905 B, 251 ("dinosauriens").  
 1906 A, 441 ("dinosauriens").  
 1906 C, 3 ("dinosauriens").  
 1923 B, 68 ("dinosauriens").  
 Dopp, K. E. 1904 A, 21 ("dinosaurs").  
 Douglass, E. 1902 C, 212 ("dinosaurs").  
 Du Toit, P. J. 1913 A, 245 ("dinosaurier").  
 Eastman, C. R. 1911 B, 183 ("dinosaurs").  
 1912 C, 658 ("dinosaurs").  
 1914 B, 638 ("dinosaurs").  
 Eimer, G. H. T. 1901 A, 257 ("dinosaurier").  
 Finn, F. 1894 B, 453 ("dinosaurs").  
 Fraas, E. 1902 A, 76.  
 1902 C, lxxvii ("dinosaurier").  
 1904 C, 43 ("dinosaurier").  
 1905 B, 372 ("dinosaurier").  
 1910 B, xciii ("dinosaurier").  
 1911 B, 27 ("dinosaurier").  
 1913 D, lxiv ("dinosaurier").  
 Frassetto, F. 1915 A ("dinosauri").  
 Frech, F. 1906 A, 493 ("dinosaurier").  
 Fuchs, H. 1909 B, 149.  
 1910 C, 473 ("dinosaurier").  
 1911 B.  
 Fürbringer, M. 1902 B, 727 ("dinosaurier").  
 1904 A.  
 Gadow, H. 1896 C, 204 ("dinosaurs").  
 1901 B, 412.  
 1902 B, 347, 359 ("dinosaurs").  
 1914 A, 508 ("dinosaurs").  
 Gaudry, A. 1888 A, 3 ("dinosauriens").  
 Gervais, P. 1859 A, 467.  
 Giebel, C. G. 1855 A, 86.  
 Gill, T. N. 1876 A, 153.  
 Gilmore, C. W. 1915 C, 52 ("dinosaurs").  
 1920 A, 64.  
 Goodrich, E. S. 1916 A, 262.  
 Gratacap, L. P. 1902 A, 5 ("dinosaurs").  
 Greene, J. R. 1861 A, 219, 226.  
 Gregory, W. K. 1913 B, 243 ("dinosaurs").  
 1913 E, 10 ("dinosaurs").  
 1915 E, 448 ("dinosaurs").  
 1916 C, 31 ("dinosaurs").  
 1919 A, 18 ("dinosaurs").  
 1927 D, 225 ("dinosaurs").  
 Gregory and Adams 1915 A, 764 ("dinosaurs").  
 Haeckel, E. 1868 A, 441, 455.  
 1873 A, 512, 531.  
 Hanson, F. B. 1920 B, 332.  
 Hares, C. J. 1917 A, 429 ("dinosaurs").  
 Hase, A. 1913 A, 133 ("dinosaurier").  
 Hatcher, J. B. 1905 B, 102.  
 1907 A, 10.  
 Hay, O. P. 1910 C, 1 ("dinosaurs").  
 Heilmann, G. 1913 B, 7, 50.  
 1916 A, 80.  
 1926 A, 204 ("dinosaurs").  
 Heilprin, A. 1887 A, 416.  
 Hennig, E. 1912 B, 96 ("dinosaurier").  
 1924 A, 115.  
 Hiltzheimer, M. 1913 A, 515 ("dinosaurier").  
 Hoernes, R. 1886 A, 611.  
 Holland, W. J. 1912 A, 204 ("dinosaurs").  
 Howes, G. B. 1894 A, 87 ("dinosaurs").  
 Howes and Swinnerton 1901 A, 2, 69.  
 Huene, F. 1901 B, 89 ("dinosaurier").  
 1902 A, 65, 72.  
 1905 B, 345 ("dinosaurier").  
 1906 C, 337 ("dinosaurier").  
 1908 B.  
 1908 E, 378 ("dinosaurier").  
 1908 F, 401 ("dinosaurier").  
 1909 B, 13.  
 1911 D, 47 ("dinosaurier").  
 1913 E, 480 ("dinosaurier").  
 1914 A, 145.  
 1914 B, 444.  
 1914 C, 577 ("dinosaurier").  
 1914 D, 154 ("dinosaurier").  
 1914 G, 41 ("dinosaurier").  
 Hutchinson, H. N. 1910 A, 127.  
 Huxley, T. H. 1855 A, 82 (Pachypoda).  
 1862 A, xlviii.  
 1868 D, 309.  
 1869 E, 573.  
 1869 F, 574.  
 1869 I, 395.  
 1869 J, 91.  
 1869 K, 146 (Dinosauria, Ornithoscelida).  
 1870 E, 78.  
 1870 F, 532 (Ornithoscelida).  
 1870 G, 465.  
 1870 H, 487.  
 1870 I, 23.  
 1876 F, 181.  
 Jaekel, O. 1901 B, 53 ("dinosaurier").  
 1905 B, 65 ("dinosaurier").  
 1908 B, 467 ("dinosaurier").  
 1909 C, 706 ("dinosaurier").  
 1910 C, 338 (Dinosauri).  
 1911 A, 157 (Dinosauri).  
 1912 A, 611 ("dinosaurier").  
 1913 A, 83, fig. 3 ("dinosaurier").  
 1913 B, 194 ("dinosaurier").  
 1914 A ("dinosaurier").  
 1915 A, 99 ("dinosaurier").  
 1915 B, 7 ("dinosaurier").  
 Janesch, W. 1914 A ("dinosaurier").  
 Johnson, A. 1883 A, 405 ("dinosaurs").  
 Kehr, F. A. 1896 A, 343 ("dinosaurier").  
 Kingsley, J. S. 1912 B, 93 ("dinosaurs").  
 Knowlton, F. H. 1909 A, 229 ("dinosaurs").  
 1914 A, 337.  
 Koken, E. 1886 B, 22 ("dinosaurier").  
 1893 B, 271, 364, 390, 432 ("dinosaurier").  
 1900 A, 462 ("dinosaurs").  
 Lafitte, J. P. 1905 A, 407 ("dinosauriens").  
 Lambe, L. M. 1901 B, 182.  
 Lankester, E. R. 1905 A, 192 ("dinosaurs").  
 Larger, R. 1913 A, 702 ("dinosauriens").  
 Lavocat, A. 1885 A, 39 ("dinosauriens").  
 Lebedinsky, N. G. 1913 A, 767 ("dinosaurier").  
 1913 B, 196 ("dinosaurier").  
 Lee, W. T. 1901 A, 350 ("dinosaurs").  
 1913 A, 531 ("dinosaurs").  
 1915 A, 308 ("dinosaurs").  
 1924 A, xii ("dinosaurs").  
 Leonis and Ludwig 1883 A, 596.

- Lucas, F. A. 1901 F, 482.  
 1901 H, 586 ("dinosaurs").  
 1901 J, 89, 90 ("dinosaurs").  
 1902 B, 139 ("dinosaurs").  
 1902 C, 641 ("dinosaurs").
- Lull, R. S. 1904 A, 486.  
 1910 A, 1.  
 1911 B, 173 ("dinosaurs").  
 1912 A, 208 ("dinosaurs").  
 1915 A, 117.  
 1917 A, 471 ("dinosaurs").  
 1917 B, 294, 322, 501, 504.  
 1918 C, 129 ("dinosaurs").  
 1924 A, 225-279.
- Lydekker, R. 1903 D, 75.  
 1908 B, 544.  
 1909 C, 462 ("dinosaurs").  
 1912 C, 4, 22, 29.
- McGregor, J. H. 1906 A, 86.
- Mantell, G. A. 1844 A, 729.
- Marsh, O. C. 1899 C, 72 ("dinosaurs").
- Matthew, W. D. 1910 G, 151 ("dinosaurs").  
 1915 A, 181, 275.  
 1915 C ("dinosaurs").  
 1919 A, 492 ("dinosaurs").  
 1923 C, 404, 408 ("dinosaurs").
- Meunier, S. 1903 A, 776 ("dinosaurs").
- Meyer, H. 1830, Isis, xxiii, 518 (No systematic name).  
 1845 C, 281 (Pachypodes).
- Moodie, R. L. 1909 G, 363.  
 1915 D, 238 ("dinosaurs").  
 1915 I, 139 ("dinosaurs").  
 1916 B, 86 ("dinosaurs").  
 1916 F, 36 ("dinosaurs").
- Mook, C. C. 1918 A, 467.
- Mudge, B. F. 1879 A, 224 ("dinosaurs").
- Nopcsa, F. 1901 A.  
 1901 B, 194.  
 1902 C, 173.  
 1903 B, 476 ("dinosaurier").  
 1904 A, 235 ("dinosaurier").  
 1905 A, 203 ("dinosaurs").  
 1905 B, 241 ("dinosaurs").  
 1905 C, 239.  
 1907 A, 231 ("dinosaurs").  
 1912 A, 431 ("dinosaurs").  
 1914 A, 564 ("dinosaurier").  
 1915 A, 385 ("dinosaurier").  
 1915 B, 1 ("dinosaurier").  
 1917 A, 203, 205.  
 1917 B, 332 ("dinosaurier").  
 1918 A, 136 ("dinosaurier").  
 1918 B, 235 ("dinosaurier").  
 1922 A, 115.  
 1923 C, 463 ("dinosaurs").  
 1923 D, 100-116.  
 1923 E, 1045 ("dinosaurs").  
 1923 H, 1-3, 5, 6, 8, 85, 109, 125, 171, 174-176, 180, 183, 187, 188, tab.  
 1924 B, 85 ("dinosaurier").  
 1926 A, 634.  
 1928 A, 182.
- Osborn, H. F. 1903 D, 313 ("dinosaurs").  
 1903 H, 454, 456, 466, 504.  
 1904 H, 113.  
 1904 Q, 680 ("dinosaurs").  
 1905 C, 295.
- Osborn, H. F. 1915 E, 131.  
 1917 B, 210-225.  
 1922 D, 724 ("dinosaurs").  
 1924 L, 140 ("dinosaurs").
- Oswald, F. 1911 A, 403 ("dinosaurs").
- Owen, R. 1842 F, 81, 87.  
 1866 A, 18, 70.
- Palacký, J. 1902 B, 140 ("dinosaurier").
- Parker, W. K. 1887 B, 53 (Ornithoscelida).  
 1890 A, 44 ("dinosaurs").
- Parker and Haswell 1897 A, 314.
- Peale, A. C. 1876 A, 153.
- Philippi, Frech and Volz 1903 A, 19 ("dinosaurier").
- Pictet, F. J. 1853 A, 466 ("dinosaurs").
- Pleining, F. 1901 A, 88 ("dinosaurier").
- Pompeckj, J. F. 1920 A, 109 ("dinosaurier").
- Reynolds, S. H. 1897 A, 272, 538.
- Rice and Gregory 1906 A, 175 ("dinosaurs").
- Riggs, E. S. 1901 B, 272 ("dinosaurs").  
 1903 C, 168.
- Riggs and Farrington 1902 A, 22062 ("dinosaurs").
- Romer, A. S. 1923 A, 141.  
 1923 C, 605 ("dinosaurs").  
 1927 C, 225 ("dinosaurs").
- Roth, S. 1908 A, 94 ("dinosaurier").
- Sabatier, A. 1902 A, 100 ("dinosaurs").
- Schaffer, F. X. 1912 A ("dinosaurier").
- Schuchert, C. 1913 A, 34 ("dinosaurs").  
 1914 B, 282 ("dinosaurs").  
 1915 A, 827 ("dinosaurs").  
 1918 B, 261 ("dinosaurs").
- Schuchert and Barrell 1914 A, 24 ("dinosaurs").
- Seeley, H. G. 1876 C, 159.  
 1882 A, 366.  
 1887 D, 337 ("dinosaurs").  
 1887 E, 191.  
 1889 B, 69 ("dinosaurs").  
 1904 A, 342 ("dinosaurs").
- Sewertzoff, A. N. 1908 A.
- Sinclair and Granger 1914 A, 301 ("dinosaurs").
- Stanton, T. W. 1909 A.
- Steiner, H. 1922 A, 346 ("dinosaurier").
- Steinmann, G. 1907 A, 446.  
 1910 A, 98 ("dinosaurier").  
 1922 A, 240 ("dinosaurier").
- Sternberg, C. M. 1921 A, 61.
- Stremme, H. 1909 A, 505 ("dinosaurier").
- Stromer, E. 1912 A, 83, 125.
- Terra, P. 1911 A, 241.
- Thevenin, A. 1909 A, 1226 ("dinosaurs").
- Thompson, A. H. 1906 A, 262 ("dinosaurs").
- Tolmachoff, I. 1924 A, 489.
- Tornier, G. 1909 B, 513 ("dinosaurier").  
 1913 B, 366.
- Tornquist, A. 1897 A, 683 ("dinosaurier").
- Vallois, H. V. 1921 A, 971 ("dinosaurs").
- Van den Broeck, E. 1900 A, 81 ("dinosaurs").
- Versluys, J. 1901 B, 175 ("dinosaurier").  
 1910 B, 175 ("dinosaurier").  
 1911 A, 138 ("dinosaurier").  
 1912 A, 491, 494 ("dinosaurier").  
 1912 B, 573, 653.
- Vogt, C. 1879 A, 247 ("dinosaurs").
- Wamich, P. 1913 A, 25.
- Watson, D. M. S. 1916 C, 611 ("dinosaurs").
- Weidenreich, F. 1925 A, 37 ("dinosaurier").

- White, C. A. 1885 A, 56 ("dinosaurians").  
 Whitnall, H. O. 1925 A, 1-26.  
 Wieland, G. R. 1907 A, 66 ("dinosaurs").  
   1912 A, 288.  
   1912 B, 299.  
   1925 A, 601 ("dinosaurs").  
   1925 B, 557.  
 Wilckens, O. 1911 A, 705 ("riesensaurier").  
 Williston, S. W. 1879 A, 457 ("dinosaurs").  
   1904 B, 176.  
   1909 A, 396 ("dinosaurs").  
   1911 F, 661.  
   1914 A, 18, 45.  
   1915 D, 124 ("dinosaurs").

- Williston, S. W. 1917 C, 412.  
   1925 A, *passim*.  
   1925 B, 214, 291.  
 Wiman, C. 1916 D, 413 ("dinosaurians").  
 Woodward, A. S. 1897 C, 379 ("dinosaurs").  
   1909 A, 325 ("dinosaurs").  
   1910 B, 464 ("dinosaurs").  
   1922 C, 16.  
 Woodward, H. 1904 B, 145.  
 Wright, W. 1909 A, 673 ("dinosaurs").  
 Zittel, K. A. 1897 A, 128 ("dinosaurien").  
 Zittel and Broili 1911 A, 273.  
   1923 A, 332, 383.  
 Zittel, Eastman, etc. 1902 A, 223.

## Order SAURISCHIA Seeley.

- Seeley, H. G. 1888 B, 699.  
 Abel, O. 1911 A, 159, 171.  
   1912 F, 405.  
   1916 A, 471.  
   1919 A, 576 (Saurischia); 584 (Pachypodosauria).  
   1920 A, 390 (Pachypodosauria).  
 Arldt, T. 1909 A, 261 ("saurischier").  
   1912 A, 668, 678.  
 Boas, J. E. V. 1914 B, 562.  
 Cope, E. D. 1891 N, 43.  
 Drevermann, F. 1911 A, 274.  
 Gilmore, C. W. 1924 H, 3.  
 Gregory, W. K. 1919 A, 18.  
 Haeckel, E. 1873 A, 531 (Harpagosauria).  
 Huene, F. 1908 B, 405.  
   1908 D, 294.  
   1909 B, 13.  
   1914 A, 145 (Saurischia); 146 (Pachypodosauria).  
   1914 B, 444.  
   1914 C, 577.  
   1914 D, 154.  
   1914 G, 22 (Saurischia); 37 (Pachypodosauria).  
   1914 I, 69.  
   1914 K, 11 (Saurischia); 12 (Pachypodosauria).  
   1915 B, 1 ("saurischier").  
   1919 A, 181.  
   1921 D, 395.  
   1922 E, 24.  
   1922 F, 410.  
   1923 A, 449.  
   1926 B, 35-167.  
   1926 D, 473.  
   1927 E, 326.  
   1927 F, 103 ("saurischier").

- Jaekel, O. 1910 C, 339 (Præpubici).  
   1911 A, 158 (Præpubici).  
 Lull, R. S. 1915 A, 117.  
   1917 B, 294, 504, 506 (Saurischia); 505, 508 (Pachypodosauria).  
   1924 A, 228.  
 Matthew, W. D. 1915 C, 32 (Saurischia, Pachypodosauria).  
   1921 D, 211.  
   1923 C, 408.  
 Nopcsa, F. 1911 A, 111.  
   1915 B, 1.  
   1917 A, 204.  
   1917 B, 337.  
   1918 B, 235.  
   1922 A, 115, 116.  
   1923 H, 9-179.  
   1928 A, 182.  
 Romer, A. S. 1923 A, 141.  
   1923 C, 605, fig. 1.  
 Seeley, H. G. 1887 F, 562 (Cetiosauria).  
   1888 C, 86 (Saurischia).  
   1888 G, 171.  
   1889 A, 286.  
   1892 C, 188.  
   1894 B, 233.  
   1894 D, 412.  
 Steiner, H. 1922 A, 339.  
 Steinmann, G. 1909 A, 67.  
   1910 A, 99.  
 Stromer, E. 1915 B, 28.  
 Van den Broeck, E. 1900 A, 101.  
 Watson, D. M. S. 1917 C, 180.  
 Williston, S. W. 1917 C, 414.  
   1925 A, 118, 150, 154.  
   1925 B, 214, 291.  
 Zittel and Broili 1911 A, 278.  
   1923 A, 340.

## Suborder THEROPODA Marsh.

- Hay, O. P. 1902 A, 487.  
 Abel, O. 1910 C, 231 ("theropoden").  
   1911 A, 157, 161, 171.  
   1912 E, 224 ("theropoden").  
   1912 F, 276, 292, 704.  
   1916 A, 473 ("theropoden").  
   1919 A, 591.  
   1920 A, 386.  
 Ameghino, F. 1906 A, 39.  
 Arldt, T. 1907 D, 685.  
 Arthaber, G. 1910 A, 553.

- Bigot, A. 1897 A, 463 ("théropodes").  
 Bittner, F. 1912 A, 17 ("theropoden").  
 Broom, R. 1913 J, 364.  
   1914 H, 1076 ("theropodous dinosaurs").  
   1924 B, 64, fig. 13.  
 Case, E. C. 1897 D, 88.  
   1898 C, 632.  
 Depéret, C. 1912 A, 705 ("théropodes").  
 Dollo, L. 1889 H, 679 ("théropodes").  
   1906 A, 445 ("théropodes").  
 Drevermann, F. 1911 A, 274.



- Fraas, E. 1911 B, 32 ("theropoden").  
 Fürbringer, M. 1888 A, 1620.  
 Gadow, H. 1896 C, 204.  
 1901 B, 420.  
 Gilmore, C. W. 1920 B, 1-154.  
 Gregory, W. K. 1919 A, 18.  
 Gregory and Camp 1918 A, 530.  
 Haeckel, E. 1866, Gen. Morph., II, 136 (Harpagosauria).  
 1868 A, 455 (Harpagosauria).  
 Hatcher, J. B. 1903 A, 47.  
 1907 A, 10 ("carnivorous dinosaur").  
 Hay, O. P. 1908 C, 678.  
 1910 C, 7.  
 Heilmann, G. 1926 A, 207.  
 Heilprin, A. 1887 A, 162.  
 Hennig, E. 1912 B, 98 ("theropoden").  
 1924 A, 130.  
 Hilzheimer, M. 1913 A, 515 ("theropoden").  
 Hoernes, R. 1886 A, 619.  
 Hoffmann, C. K. 1890 B, 1313 (Theropoda); 315 (Goniopoda).  
 Hooley, R. W. 1912 A, 448.  
 Huene, F. 1901 A, 160 ("theropoden").  
 1901 B, 89 ("theropoden").  
 1902 A, 72.  
 1906 A, 2 ("theropoden").  
 1908 B, 306, 340, 351.  
 1914 A, 145.  
 1914 G, 39, pl. vii ("theropoden").  
 1926 B, 46, 77 (Carnosauria).  
 Huxley, T. H. 1870 G, 478 (Goniopoda, Symphypoda).  
 Jaekel, O. 1914 A, 197 (Theropagi).  
 Janensch, W. 1925 A, 54, 77, 95 ("theropoden")  
 Johnson, A. 1883 A, 408.  
 Koken, E. 1893 B, 396 ("theropoden").  
 1900 A, 463.  
 Lafitte, J. P. 1905 A, 410.  
 Lambe, L. M. 1914 B, 129, pl. iii.  
 Lebedinsky, N. G. 1913 A, 767 ("theropoden").  
 Lucas, F. A. 1902 B, 164.  
 Lull, R. S. 1904 A, 486.  
 1904 D, 143 ("carnivorous dinosaur").  
 1910 A, 2, 4, 19.  
 1912 A, 208.  
 1914 D, 353.  
 1915 A, 180.  
 1915 F, 831.  
 1917 A, 471.  
 1917 B, 294, 505.  
 1924 A, 237.  
 Lydekker, R. 1912 C, 29.  
 Matthew, W. D. 1910 D, 555.  
 1915 A, 278.  
 1915 C, 27, 33.  
 1923 C, 408.  
 Newton, E. T. 1894 A, 601 ("theropodous dinosaur").  
 Nopcsa, F. 1901 A, 249.  
 1902 C, 174 ("theropoden").  
 1905 C, 289.  
 1907 A, 231.  
 1915 B, 15, 18 ("theropoden").  
 1917 A, 205 ("theropoden").  
 1918 B, 246 ("theropoden").  
 1922 A, 115 ("theropoden").  
 1923 H, 4, 99, 106, 173.  
 1928 A, 182 (Pachypodosauroida).  
 Osborn, H. F. 1903 H, 456, 466.  
 1904 H, 113 (Theropoda); 114 (Symphypoda).  
 1904 N, 308.  
 1904 Q, 690 ("carnivorous dinosaurs").  
 1905 C, 295.  
 1917 A, 771.  
 1917 B, 195.  
 1924 L, 143.  
 Palacký, J. 1902 B, 140.  
 Peck, F. B. 1904 A, 29.  
 Pompeckj, J. F. 1921 A, 2 ("theropoden").  
 Reynolds, S. H. 1897 A, 207, 273, 276.  
 Rice and Gregory 1906 A, 177.  
 Seeley, H. G. 1888 G, 168, 171.  
 Simpson, G. G. 1926 E, 8 ("theropods").  
 1926 H, 208.  
 Steiner, H. 1922 A, 338 ("theropoden").  
 Steinmann, G. 1907 A, 447.  
 1908 A, 220.  
 1910 A, 99.  
 Stromer, E. 1915 B, 1-32.  
 Terra, P. 1911 A, 241 ("theropoden").  
 Tornier, G. 1913 B, 367, 375 (Plateosauria).  
 Van den Broeck, E. 1900 A, 82, 83 ("theropoden").  
 Versluys, J. 1910 B, 181 ("theropoden").  
 1912 A, 499 ("theropoden").  
 1912 B, 683, 687.  
 Wieland, G. R. 1925 B, 559 ("theropods").  
 Williston, S. W. 1914 A, 18, 45.  
 1925 A, *passim*.  
 1925 B, 214, 291.  
 Woodward, A. S. 1922 C, 24.  
 Zittel and Broili 1911 A, 278.  
 1923 A, 336, 342, 366.  
 Zittel, Eastman, etc. 1902 A, 227.

*Superfamily ZANCLODONTOIDÆ, new name.*

- Greene, J. R. 1861 A, 219, 226 (Thecodontia).  
 Huxley, T. H. 1875 B, 435 (Thecodontosauria).  
 Nopcsa, F. 1923 H, 125 (Pachypodosauria, in part).  
 Owen, R. 1860 A, 163 (Thecodontia; types Thecodontosaurus, Palæosaurus, Cladyodon).

*ZANCLODONTIDÆ Zittel.*

- Zittel, K. A. 1890 A, 719.  
 Arldt, T. 1909 A, 261 ("thecodontosauriden").  
 1912 A, 662.  
 Hoffmann, C. K. 1890 B, 1313.  
 Huene, F. 1908 B, 262, 305 ("thecodontosauriden").  
 1909 B, 13.  
 Huene, F. 1914 G, pl. vii.  
 Huxley, T. H. 1870 I, 23 (Thecodontosauria).  
 1875 B, 433 (Zanclodon).  
 Lull, R. S. 1924 A, 229.  
 Matthew, W. D. 1915 C, 32.  
 Newton, E. T. 1894 A, 599 (Zanclodon).  
 1899 B, 92, 96, pl. x (Zanclodon).

Nopcsa, F. 1923 H, 125 (*Thecodontosauridae*).  
 1928 A, 182 (*Thecodontosauridae*).  
 Pheninger, T. 1847 A, 152, pl. iii (*Smilodon*,  
 syn. of *Zanclodon*).  
 Seeley, H. G. 1892 C, 189 (*Zanclodon*).

Seeley, H. G. 1899 C, 95.  
 Zittel and Broili 1911 A, 279 (*Anchisauridae*  
*Thecodontosauridae*).  
 1923 A, 340 (*Zanclodontidae*); 344 (*Theco-*  
*dontosauridae*).

### THECODONTOSAURUS Riley and Stutchbury.

Hay, O. P. 1902 A, 492.  
 Abel, O. 1919 A, 588.  
 Bronn, H. G. 1848 B, 1267.  
 1849 A, 691.  
 Cummins, W. F. 1908 A, 745 (*Paleosaurus*).  
 Depéret, C. 1912 A, 705.  
 Emmons, E. 1852 A, 141, 159 (*This genus?*).  
 Fraas, E. 1911 B, 30.  
 Giebel, C. G. 1855 A, 92.  
 Heilmann, G. 1913 B, 19, 56, figs. 63, 67.  
 Heilprin, A. 1887 A, 160.  
 Hoernes, R. 1886 A, 621.  
 Hoffmann, C. K. 1890 B, 1309.  
 Huene, F. 1901 A, 160.  
 1902 A, 57, fig. 71.  
 1905 B, 345.  
 1906 A, 2.  
 1906 B, 105, 149, 151, fig. 99.  
 1906 C, 336.  
 1908 B, 262, 301.  
 1908 C, 99.  
 1908 G, 228.  
 1909 B, 13.  
 1909 C, 321.  
 1914 F, 672.  
 1914 G, 20.  
 1914 I, 75.  
 Huxley, T. H. 1865 C, 13.  
 1869 K, 146.  
 1870 G, 481.  
 1870 H, 501, pl. xxix (*Thecodontosaurus*,  
*Paleosaurus*).  
 1875 B, 435.  
 1875 E, 80.  
 Lull, R. S. 1915 A, 129.  
 1924 A, 229.  
 Lydekker, R. 1885 G, 28.  
 Newton, E. T. 1899 B, 92 (*Thecodontosaurus*,  
*Paleosaurus*).  
 Nopcsa, F. 1901 A, 252.  
 1902 B, 106.  
 1903 B, 488.  
 1917 B, 337, 342, figs. 1, 2.  
 1918 B, 242.  
 1923 H, 97.  
 1923 A, 182.  
 Owen, R. 1842 F, 75 (*Paleosaurus*).  
 1845 B, 266 (*Thecodontosaurus*, *Paleo-*  
*saurus*).

Owen, R. 1880 A, 163 (*Thecodontosaurus*, *Paleo-*  
*saurus*).  
 1860 F, 248 (*Thecodontosaurus*, *Paleo-*  
*saurus*).  
 Pictet, F. J. 1853 A, 502.  
 Plénier, T. 1847 A, 150.  
 Seeley, H. G. 1887 E, 189.  
 1892 C, 189.  
 1899 C, 95 (*Thecodontosaurus*, *Paleosaurus*).  
 Steiner, H. 1922 A, 347, 348.  
 Versluys, J. 1910 B, 200, figs. H, J.  
 1912 A, 499.  
 1912 B, 574, 589.  
 Watson, D. M. S. 1917 C, 180.  
 Williston, S. W. 1925 B, 292.  
 Zittel and Broili 1911 A, 280.  
 1923 A, 344.

### *Thecodontosaurus gibbidens* Cope.

Hay, O. P. 1902 A, 492.  
 Huene, F. 1921 B, 571, figs. 14, 15.  
 Lyman, B. S. 1894 A, 209.  
 Nopcsa, F. 1901 B, 198.  
 Triassic (Newark); Pennsylvania.

### *Thecodontosaurus polyzelus* (Hitchcock, E. Jr.).

Hay, O. P. 1902 A, 491 (*Anchisaurus*).  
 Abel, O. 1912 F, 71, 274.  
 Heilmann, G. 1926 A, 154 (*Anchisaurus*).  
 Hitchcock, E. Jr., in Hitchcock, E. Sr. 1865 A,  
 39, pl. (*Megadactylus*).  
 Huene, F. 1906 B, 115 (*Megadactylus*); figs. 10,  
 10a (*Thecodontosaurus*).  
 1908 B, 301, 307, 317.  
 1914 I, 75, figs. 23-24.  
 1926 E, 6.  
 Lull, R. S. 1904 D, 142, fig. 1 ("dinosaur").  
 1912 D, 411 (*Anchisaurus*).  
 1915 A, 119, figs. 14-17 (*Anchisaurus*).  
 1917 D, 111, 112 (*Anchisaurus*).  
 Lyman, B. S. 1894 A, 211 (*Anchisaurus*).  
 Nopcsa, F. 1901 B, 196 (*Anchisaurus*).  
 Seeley, H. G. 1887 E, 191 (*Megadactylus*).  
 1894 D, 418.  
 Triassic (Newark); Massachusetts.

### Superfamily MEGALOSAUROIDÆ Nopcsa.

Nopcsa, F. 1928 A, 183.  
 Arldt, T. 1907 D, 664 (*Megalosauridae*).  
 1809 A, 262 ("megalosauriden").  
 Bertrand, C. E. G. 1903 A, 123 ("megalosaures").  
 Brauns, D. 1890 A, 186 ("megalosaurier").  
 Gervais, P. 1859 A, 465 ("megalosauridés").  
 Günther, A. 1886 A, 443 (*Megalosauridae*).  
 Hoernes, R. 1886 A, 619 (*Megalosauridae*).  
 Hoffmann, C. K. 1890 B, 1308 (*Megalosauridae*).

Huene, F. 1906 A, 1 (*Megalosauridae*).  
 1906 C, 336 (*Megalosaurus*).  
 1909 B, 15 (*Megalosauridae*).  
 1914 A, 146 (*Megalosauria*).  
 1914 G, 38, pl. vii (*Megalosauridae*).  
 1923 A, 451 (*Carnosauria*); 457 (*Megalo-*  
*sauridae*).  
 1926 B, 97, 103, 105 (*Megalosauridae*).  
 1926 D, 474 (*Pachypodosauria*, *Carnosauria*).

- Huxley, T. H. 1869 I, 394, pl. xxvii (Megalosaurus).  
 1869 K, 146 (Megalosauridae).  
 1870 G, 466 (Megalosaurus).  
 1870 H, 453 (Megalosauridae).  
 1870 I, 23 (Megalosaurus).  
 Janesch, W. 1920 A, 230 ("megalosauriden").  
 Koken, E. 1893 B, 365 ("megalosaurier").  
 1900 A, 463 (Megalosauridae).  
 Matthew, W. D. 1915 C, 32 (Megalosauridae).  
 Matthew and Brown 1922 A, 368, 376 (Megalosauridae).  
 Nopcsa, F. 1901 A, 249 (Megalosauridae).  
 Nopcsa, F. 1901 B, 195, 196, 198 (Megalosauridae).  
 1913 B, 240 ("megalosauriden").  
 1923 H, 126, 173, 174, tab. (Megalosauria).  
 1923 A, 183 (Megalosauridae, Megalosauridae, Megalosaurinae).  
 Osborn, H. F. 1904 H, 113 (Megalosauria).  
 1924 C, 12 (Megalosauridae).  
 Owen, R. 1842 F, 81 ("megalosaurs").  
 Prevost, C. 1825 A, 41 (Megalosaurus).  
 Tornier, G. 1913 B, 368, 375 (Megalosauridae).  
 Woodward, A. S. 1916 A, lxxiv (Megalosaurus).  
 Zittel and Eastmann, etc. 1902 A, 228 (Megalosauridae).

## ANCHISAURIDÆ Marsh.

- Hay, O. P. 1902 A, 491.  
 Abel, O. 1919 A, 588 (Zanclodontidae); 595 (Anchisauridae).  
 Arldt, T. 1907 D, 637.  
 Bittner, F. 1912 A, 16 ("anchisauriden").  
 Hoffmann, C. K. 1890 B, 1314 (Amphisauridae).  
 Huene, F. 1902 A, 72.  
 1914 D, 156 ("armosauriden").  
 1914 K, 13 (Ammosauridae).  
 Jaekel, O. 1914 A, 197 ("anchisauriden").  
 Koken, E. 1900 A, 463.  
 Lull, R. S. 1917 D, 111.  
 1924 A, 229.  
 Matthew, W. D. 1915 C, 32.  
 Nopcsa, F. 1901 A, 249 (subfam. Megalosauridae).  
 1903 B, 486 ("anchisauriden").  
 1904 A, 235.  
 1923 H, 125.  
 1923 A, 182.  
 Palacky, J. 1902 B, 140 ("anchisauriden").  
 Tornier, G. 1913 B, 368, 375.  
 Versluys, J. 1912 B, 683 ("anchisauriden").  
 Williston, S. W. 1925 B, 292.  
 Zittel and Broili 1911 A, 279.  
 1923 A, 344, 366.

ANCHISAURUS Marsh. Type *Megadactylus polyzelus* Hitchcock, E. Jr.

- Hay, O. P. 1902 A, 491.  
 Abel, O. 1910 C (231).  
 1911 A, 156, 169.  
 1912 F, 267, 292, 659.  
 1916 A, 470, fig. 1.  
 Beddard, F. E. 1898 A, 156.  
 Bigot, A. 1897 A, 462.  
 Bittner, F. 1912 A, 17.  
 Boas, J. E. V. 1914 B, 571, fig. 24.  
 Broom, R. 1906 G, 203.  
 1913 O, 628.  
 Case, E. C. 1898 C, 632.  
 Dollo, L. 1889 H, 679.  
 Fuchs, H. 1909 B, 150.  
 Gadow, H. 1896 C, 207.  
 1901 B, 421.  
 Gaudry, A. 1896 A, 94, fig. 73.  
 Gilmore, C. W. 1920 B, 145.  
 Heilmann, G. 1916 A, 85.  
 1926 A, 203, fig. 19.  
 Hitchcock, E. Jr. in Hitchcock, E. Sr. 1865 A, 39 (Megadactylus, type *M. polyzelus*; preoccupied).  
 Hoernes, R. 1886 A, 620 (Amphisaurus).  
 Huene, F. 1905 B, 345.  
 1906 B, 110, 149.  
 1908 B, 262.  
 1909 B, 13.  
 1909 C, 321.  
 1912 C, 120 (Syn. of Thecodontosaurus).  
 Hutchinson, H. N. 1910 A, 145, pl. xvii.  
 Jaekel, O. 1910 E, 224, fig. 18.  
 Lucas, F. A. 1902 B, 167.  
 Lull, R. S. 1904 A, 471.  
 1910 A, 14.  
 1915 A, 118.  
 1917 B, 508.  
 Lull, R. S. 1924 A, 229.  
 Lydekker, R. 1912 C, 24.  
 Marsh, O. C. 1893 G, 169, pl. vi.  
 Matthew, W. D. 1910 D, 555.  
 Newton, E. T. 1894 A, 600.  
 Nopcsa, F. 1900 A, 560.  
 1901 A, 250 (Amphisaurus, Anchisaurus).  
 1902 C, 168 (Anchiosaurus).  
 1903 B, 488.  
 1905 C, 292.  
 1906 A, 66.  
 1913 B, 239.  
 1923 H, 97, 146.  
 1923 A, 182.  
 Osborn, H. F. 1903 D, 471.  
 1917 B, 211, 213, 216, figs.  
 Plieninger, F. 1907 A, 295.  
 Schuchert and Levene 1927 A, 320, fig.  
 Steiner, H. 1922 A, 346.  
 Thyng, F. W. 1906 A, 62, fig. S.  
 Tornquist, A. 1897 A, 683.  
 Versluys, J. 1910 B, 200.  
 1912 A, 499.  
 1912 B, 574, 589, 643, fig. h.  
 Watson, D. M. S. 1914 C, 397.  
 Whitnall, H. O. 1925 A, 9.  
 Williston, S. W. 1879 A, 458 (Megadactylus).  
 1885 A, 629 (Megadactylus).  
 1886 A, 282 (Anchisaurus, Amphisaurus).  
 1904 B, 177, text-fig. 9.  
 1925 A, 191, 196, 197, fig. 156.  
 1925 B, 292.  
 Woodward, A. S. 1907 B, 143.  
 Woodward, H. 1904 B, 145.  
 Zittel and Broili 1911 A, 279.  
 1923 A, 344.  
 Zittel, Eastman, etc. 1902 A, 228.

**Anchisaurus colurus** Marsh.

- Hay, O. P. 1902 A, 491.  
 Abel, O. 1908 D, (210), fig. 1.  
     1909 F, 459.  
     1911 A, 157, 159.  
     1912 F, 274, 405, fig. 456.  
     1919 A, 527, figs. 41a, 461, 462.  
 Arthaber, G. 1921 B, 402.  
 Bittner, F. 1912 A, 16.  
 Boas, J. E. V. 1914 C, 278, fig. 65.  
 Case, E. C. 1922 B, 80 (A. colurus).  
 Fuchs, H. 1909 B, 130, fig. 10.  
 Gadow, H. 1901 B, 421, fig. 98 (A. colurus).  
 Hay, O. P. 1910 C, 12.  
 Heilmann, G. 1913 B, 28, fig. 73.  
     1916 A, 93, fig. 110.  
     1926 A, 169, fig. 122.  
 Huene, F. 1906 B, 102, pls. i-iii, figs. 2-7.  
     1908 B, 272, 273, 278, 307, pl. cx, figs. 3-5;  
     text-fig. 318.  
     1909 C, 318.  
     1910 E, 318.  
     1914 A, 1.  
     1914 D, 156.  
     1914 I, 69, figs. 1, 6-11.  
     1926 E, 6.  
 Hutchinson, H. N. 1910 A, 142.  
 Lambe, L. M. 1917 B, 75.  
 Lull, R. S. 1904 A, 470.  
     1912 D, 411, 412, fig. 2; 413, fig. 3; 414.  
     1915 A, 78, 130, pls. iv, x; text-figs. 18-21.  
     1917 D, 111, 112, 114, pl. iv.

**AMMOSAURUS** Marsh. Type *Anchisaurus major* Marsh.

- Hay, O. P. 1902 A, 491.  
 Huene, F. 1906 B, 107, 149.  
     1908 B, 304.  
     1908 E, 380.  
     1909 B, 13.  
     1914 I, 74, figs. 20-22.  
     1914 K, 13.  
     1926 E, 6.  
 Lull, R. S. 1910 A, 14.  
     1915 A, 148.  
     1917 B, 508, fig. 153.  
 Nopcsa, F. 1901 A, 250.  
     1923 A, 182.  
 Williston, S. W. 1925 B, 292.  
 Woodward, A. S. 1907 B, 143.  
 Zittel and Broili 1923 A, 345.

**PALÆOCTONUS** Cope. Type *P. appalachianus* Cope.

- Hay, O. P. 1902 A, 490.  
 Cross and Howe 1905 A, 468, 480, 494.  
 Huene, F. 1926 I, 76.  
 Lucas, F. A. 1901 B, 376.  
     1902 B, 140.  
 Mehl, M. G. 1915 A, 164 (Palæochtenus).  
     1915 B, 522.  
 Nopcsa, F. 1901 A, 255.  
 Sinclair, W. J. 1918 A, 459.  
 Williston, S. W. 1905 B, 340.  
     1905 D, 297.

- Lull, R. S. 1920 A, 86.  
     1927 A, 49.  
 Matthew, W. D. 1924 H, 726 ("anchisaurus").  
 Nopcsa, F. 1902 C, 168, fig. 3.  
 Rice and Gregory 1906 A, 175, text-fig. 3.  
 Schuchert, C. 1910 A, 438.  
 Smith, N. 1920 A, 146 ("human bones?" A. colurus, *fide* Huene).  
 Talbot, M. 1911 A, 475.  
 Versluys, J. 1910 B, 205, figs. K, M, N.  
     Triassic (Newark); Connecticut.

**Anchisaurus solus** Marsh.

- Hay, O. P. 1902 A, 491.  
 Huene, F. 1906 B, 110, pl. iv (This genus?).  
     1908 B, 278, 307, pl. cv, fig. 2 (This genus?).  
     1910 E, 318.  
     1914 G, 37.  
     1914 I, 72, figs. 12-19.  
     1926 E, 6.  
 Lull, R. S. 1912 D, 411, 414.  
     1915 A, 78, 144, 202, figs. 22, 23.  
     1917 D, 111, 112.  
 Marsh, O. C. 1893 G, 169.  
 Matthew, W. D. 1924 H, 726 ("anchisaurus").  
 Schuchert, C. 1910 A, 438.  
     Triassic (Newark); Connecticut.

**Anchisaurus** sp. indet.

- Lull, R. S. 1927 A, 49 (This genus?). Triassic (Newark); Connecticut.

**Ammosaurus major** Marsh.

- Hay, O. P. 1902 A, 491.  
 Abel, O. 1912 F, 71, 274, 406 (A. maior).  
 Huene, F. 1906 B, 107, 111, 114, pls. v-ix, fig. 9.  
     1908 B, 303, 307, figs. 297, 298.  
     1914 D, 156.  
 Lull, R. S. 1912 D, 411, 414.  
     1915 A, 78, 148, figs. 24, 25.  
     1917 D, 111, 114.  
     1927 A, 49.  
 Lyman, B. S. 1894 A, 211 (Anchisaurus).  
 Rice and Gregory 1906 A, 174.  
 Schuchert, C. 1910 A, 438.  
 Zittel and Broili 1911 A, 280, figs. 423 (Anchisaurus).  
 Zittel, Eastman, etc. 1902 A, 228, fig. 327 (Anchisaurus).  
     Triassic (Newark); Connecticut.

**Palæoctonus appalachianus** Cope.

- Hay, O. P. 1902 A, 490.  
 Huene, F. 1921 B, 561, 570, figs. 1, 2.  
 Lyman, B. S. 1894 A, 209.  
     Triassic (Newark); Pennsylvania.  
**Palæoctonus dumblianus** Cope.  
 Hay, O. P. 1902 A, 490.  
 Huene, F. 1926 E, 4.  
 Montgomery, T. H. 1904 A, 57. (Palæoctonus).  
     Triassic (Dockum); Texas, Arizona.

**Palæoctonus orthodon** Cope.

Hay, O. P. 1902 A, 490.

Huene, F. 1926 E, 4.

Triassic (Dockum); Texas, Arizona.

**Palæoctonus** sp. indet.

Cross, W. 1899 B, 3. Triassic (Dolores); Colorado.

1905 B, 5. Triassic (Dolores); Colorado.

1908 A. Triassic (Shinarump); Arizona.

Gregory, H. E. 1917 A, 46. Triassic (Chinle); Arizona.

**CLEPSYSAURUS** Lea. Type *C. pennsylvanicus* Lea.

Hay, O. P. 1902 A, 492.

Heilprin, A. 1887 A, 160.

Hoffmann, C. K. 1890 B, 1314.

Huxley, T. H. 1865 C, 13.

1869 K, 146.

1870 H, 507.

Nopcsa, F. 1901 A, 250.

Sinclair, W. J. 1918 A, 459.

**Clepsyssaurus fraserianus** (Cope).

Hay, O. P. 1902 A, 492 (Thecodontosaurus).

Huene, F. 1921 B, 567, fig. 10 ("Palæosaurus").

Lyman, B. S. 1894 A, 209 (Palæosaurus).

Nopcsa, F. 1901 A, 251 (Palæosaurus).

1901 B, 197 (Palæosaurus).

Triassic (Newark); Pennsylvania.

**Clepsyssaurus pennsylvanicus** Lea.

Hay, O. P. 1902 A, 492.

Abel, O. 1922 D, 52.

Emmons, E. 1857 B, 370.

Hawkins, A. C. 1914 A, 153 (Clepsyssaurus).

Huene, F. 1906 B, 101.

1921 B, 565, fig. 7.

1922 F, tab.

Jäger, G. 1856 A, 959 (Clepsyssaurus pennsylvanicus).

Lyman, B. S. 1894 A, 209, 214.

Mehl, M. G. 1915 A, 162 (Syn. of Rutiodon carolinensis).

Rogers, H. D. 1858 B, 695.

Ruschenberger and Tryon 1879 A, 13.

Wherry, E. T. 1912 A, 378.

Triassic (Newark); Pennsylvania, New Jersey, North Carolina.

**Clepsyssaurus veatleianus** Cope.

Hay, O. P. 1902 A, 492.

Huene, T. 1921 B, 567, figs. 8, 9 (Syn. of *C. fraserianus*).

Lyman, B. S. 1894 A, 209.

Sinclair, W. J. 1918 A, 461.

Triassic (Newark); Pennsylvania.

**SUCHOPRION** Cope. Type *S. cyphodon* Cope.

Hay, O. P. 1902 A, 490.

**Suchoprion aulacodus** Cope.

Hay, O. P. 1902 A, 490.

Cope, E. D. 1877 E, 184 (Palæoctonus).

Huene, F. 1921 B, 563, 567, figs. 3, 4 (Palæoctonus).

Lyman, B. S. 1894 A, 209.

Triassic (Newark); Pennsylvania.

**Suchoprion cyphodon** Cope.

Hay, O. P. 1902 A, 490.

Huene, F. 1921 B, 565, fig. 6.

Lyman, B. S. 1894 A, 209.

Triassic (Newark); Pennsylvania.

**Suchoprion sulcidens** Cope.

Hay, O. P. 1902 A, 490.

Huene, F. 1921 B, 564, fig. 5.

Triassic (Newark); Pennsylvania.

**ARCTOSAURUS** Adams. Type *A. osborni* Adams.

Hay, O. P. 1902 A, 492.

Case, E. C. 1898 C, 634.

Huene, F. 1902 A, 52.

1906 B, 102.

Nopcsa, F. 1901 A, 250.

**Arctosaurus osborni** Adams.

Hay, O. P. 1902 A, 492.

Feilden and DeRance 1878 A, 560.

Huene, F. 1902 A, 52, fig. 60.

1926 H, 514.

Jaekel, O. 1915 A, 89.

Lambe, L. M. 1904 C, 26, 38, 48.

Mesozoic; Bathurst Island.

**POPOSAURUS** Mehl. Type *P. gracilis* Mehl.

Mehl, M. G. 1915 B, 516.

Nopcsa, F. 1921 A, 348.

1923 H, 109, 128, 145.

Zittel and Broili 1923 A, 344.

A genus of uncertain affinities. Put by Nopcsa in the Orthopoda.

**Poposaurus gracilis** Mehl.

Mehl, M. G. 1915 B, 516, figs. 1, 2.

Triassic (Popo Agie); Wyoming.

## MEGALOSAURIDÆ Huxley.

Huxley, T. H. 1870 D, 34.

For citations of literature see under Megalosauroidæ.

ANTRODEMUS Leidy. Type *A. valens* Leidy.

- Unless otherwise indicated the authors, as quoted, employ for this genus, the name *Allosaurus*.
- Hay, O. P. 1902 A, 489 (*Allosaurus*, *Antrodemus*).
- Abel, O. 1908 D, (211).  
 1909 F, 459, 478.  
 1910 C, (231).  
 1911 A, 157, 160.  
 1912 F, 267, 292, 403, 589, 659.  
 1916 A, 470, figs. 1-3, 6.  
 1920 A, 387, fig. 603.  
 1921 A, 257, 266, fig. 93.  
 1922 C, 358, figs. 308, 344, 345.
- Andreae, A. 1903 A, 150.
- Anonymous 1910 B, 8.
- Beasley, W. L. 1907 D, 446, 5 figs.
- Boas, J. E. V. 1914 B, 570, fig. 23.
- Brauns, D. 1890 A, 186.
- Broili and Fischer 1917 A, 413.
- Brown, B. 1908 C, 54.
- Case, E. C. 1898 C, 635.  
 1910 C, 192.  
 1922 B, 80.
- Clark, Bibbins, and Berry 1911 A, 66.
- Darton, N. H. 1908 A, 446.
- Dollo, L. 1889 H, 680 (*Labrosaurus*).
- Eastman, C. R. 1915 C, 659.
- Fuchs, H. 1909 B, 150.
- Gadow, H. 1901 B, 422.
- Gilmore, C. W. 1915 C, 53, pl. x ("allosaur").  
 1915 E, 501, fig. 1.  
 1919 A, 111.  
 1920 B, 2, 144.  
 1924 G, 33.  
 1925 A, 360, 362.
- Gregory, W. K. 1927 C, 171.
- Gregory and Camp 1918 A, 530.
- Hartz, N. 1902 A, 167 ("dinosaur").
- Hatcher, J. B. 1901 C, 326.
- Hay, O. P. 1908 C, 678.  
 1908 E, 353 (*Antrodemus*).  
 1909 F, 93.  
 1910 C, 4.
- Heilmann, G. 1926 A, 203 (*Antrodemus*).
- Heilprin, A. 1887 A, 162.
- Hennig, E. 1924 A, 144.
- Hoernes, R. 1886 A, 621 (*Labrosaurus*).
- Huene, F. 1901 A, 160.  
 1901 B, 101.  
 1906 B, 151, fig. 98.  
 1908 B, 334 (*Labrosaurus*).  
 1909 B, 15.  
 1914 C, 577, 583.  
 1915 B, 13.  
 1923 A, 450.  
 1926 B, *passim*.  
 1926 D, 474.
- Huene and Lull 1908 A, 142.
- Hutchinson, H. N. 1910 A, 135, pl. xv; text-fig. 44.
- Janensch, W. 1925 A, *passim*.
- Koken, E. 1893 B, 396.
- Lambe, L. M. 1917 B, 52.
- Lebedinsky, N. G. 1913 A, 767.
- Loomis, F. B. 1901 A, 185.
- Lucas, F. A. 1902 A, 165, fig.
- Lull, R. S. 1904 A, 471.  
 1910 A, 2, 15 (*Labrosaurus*).  
 1911 B, 173.  
 1912 C, 680.  
 1917 A, 471.  
 1917 B, 507, fig. 151.  
 1924 A, 230, fig. 22.
- Lydekker, R. 1913 A, 14.
- Matthew, W. D. 1908 E, 3, fig.  
 1910 F, 8.  
 1915 C, 36, figs. 11, 12.
- Matthew and Brown 1922 A, 368, 369.
- Mook, C. C. 1916 A, 154 (*Antrodemus*).  
 1918 A, 467.
- Nopcsa, F. 1901 A, 253 (*Antrodemus* = *Megalosaurus*).  
 1901 B, 198 (*Allosaurus*); 199 (*Antrodemus* = *Megalosaurus*).  
 1905 C, 292.  
 1906 A, 75.  
 1923 H, 93, pl. vi, fig. 11 (*Antrodemus*); 147 (*Allosaurus*).  
 1925 A, 19.  
 1925 B, 9.  
 1928 A, 183.
- Osborn, H. F. 1904 F, 8, fig. 3.  
 1905 A, 260.  
 1906 A, 283, fig. 2.  
 1912 J, 27.  
 1917 B, 213, fig. 221.  
 1924 I, 6.
- Parks, W. A. 1928 A.
- Reed, W. R. 1909 A, 198.
- Riggs, E. S. 1904 A, 423.
- Sauvage, H. E. 1902 B, 9.
- Schuchert, C. 1918 B, 254.
- Schuchert and Levene 1927 A, 320, fig.
- Seeley, H. G. 1887 E, 211.  
 1888 G, 168, fig.
- Seitz, A. L. L. 1907 A, 314.
- Simpson, G. G. 1926 H, 211, 215.
- Steiner, H. 1922 A, 346.
- Stromer, E. 1915 B, 7.
- Tolmachoff, I. 1924 A, 490.
- Tornier, G. 1909 B, 514.  
 1913 B, 368.
- Versluys, J. 1910 B, 183, fig. D.  
 1910 C, 436.  
 1912 A, 495.
- Whitnall, H. O. 1925 A, 9.
- Williston, S. W. 1878 A, 45.  
 1901 A, 111 (*Antrodemus*).  
 1905 B, 345 (*Antrodemus*).  
 1909 A, 397.  
 1925 A, 141, 175, 191, 197, figs. 113, 141, 156.

- Woodward, H. 1904 B, 146.  
Zittel and Broili 1911 A, 282.  
1923 A, 345.  
Zittel, Eastman, etc. 1902 A, 229.

### ***Antrodemus sulcatus* (Marsh).**

- Hay, O. P. 1902 A, 489.  
Gilmore, C. W. 1920 B, 125 (Labrosaurus).  
Hay, O. P. 1908 E, 352 (Labrosaurus).  
Huene, F. 1922 A, 80 (Labrosaurus).  
1926 B, pl. i (Labrosaurus).  
Janensch, W. 1925 A, 89 (Labrosaurus).  
Nopcsa, F. 1901 A, 255 (Labrosaurus).  
Upper Jurassic or Lower Cretaceous (Morrison?); Colorado.

### ***Antrodemus? trihedrodon* (Cope).**

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
Mook, C. C. 1916 A, 140 (Dryptosaurus).  
Nopcsa, F. 1901 A, 253 (Laelaps).  
1901 B, 201 (Megalosaurus).  
Osborn and Mook 1919 A, 390 (Laelaps).  
Williston, S. W. 1878 A, 45 (Dryptosaurus).  
Upper Jurassic or Lower Cretaceous (Morrison?); Colorado.

### ***Antrodemus valens* Leidy.**

- Hay, O. P. 1902 A, 489 (Allosaurus fragilis); 490 (Antrodemus valens).  
Abel, O. 1919 A, 596, figs. 463, 464 (Allosaurus agilis).  
1922 C, 374, fig. 320.  
1925 A, 242, fig. 177.  
Brown, B. 1919 A, 429, fig. ("dinosaur").  
Gilmore, C. W. 1914 A, 25 (Allosaurus fragilis).  
1915 E, 501, figs. 2-7 (Allosaurus fragilis).  
1918 B, 62 (Allosaurus fragilis).  
1920 B, 2, 5-75, 79, 88, pls. i-xvi; text-figs. 1, 3-10, 12-52.  
1924 B, 7.  
1925 A, 355 (Antrodemus fragilis).  
Gregory, W. K. 1913 E, 11, fig. 8 (Allosaurus agilis).  
Hay, O. P. 1908 E, 352 (Allosaurus fragilis); 353 (Antrodemus valens).  
Heilmann, G. 1913 B, 13, fig. 57 (Allosaurus agilis).  
1926 A, 31, 100, 153, 162, figs. 19, 80, 109, 115, 124.  
Huene, F. 1914 C, 587, pl. vii (Allosaurus agilis).  
1919 A, 183, pl. vii, fig. 3 (Allosaurus fragilis).  
1923 A, 456.  
1926 B, 94, pl. i.  
Hutchinson, H. N. 1898 A, 84 (Allosaurus fragilis).

- Jaekel, O. 1911 A, 160, fig. 176 (Allosaurus agilis).  
Janensch, W. 1925 A, *passim* (Allosaurus); 89 (Labrosaurus ferox).  
Kingsley, J. S. 1925 A, 286, fig. 309.  
Lambe, L. M. 1917 B, 50, 56, figs. 32, 37 (Allosaurus fragilis).  
Lull, R. S. 1911 B, 173 (Allosaurus fragilis).  
1911 C, 185 (Allosaurus fragilis).  
1912 C, 680 (Allosaurus agilis).  
1917 B, 509, pl. ix; text-fig. 153 (Allosaurus fragilis).  
1924 A, 257, 268 (Allosaurus fragilis).  
Marsh, O. C. 1884 B, pl. xi, fig. 2; pl. xii (Allosaurus fragilis).  
Matthew, W. D. 1907 F, 43, fig. ("Allosaurus").  
Merrill, G. P. 1907 A, 76 (Poecilopleuron).  
Moodie, R. L. 1923 B, 154, pl. xxiii.  
Mook, C. C. 1916 A, 141 (Allosaurus fragilis); 142 (Antrodemus).  
Nopcsa, F. 1901 A, 255 (Labrosaurus fragilis; Megalosaurus valens).  
1901 B, 199 (Allosaurus fragilis); 201 (Megalosaurus valens, Labrosaurus fragilis).  
Osborn, H. F. 1904 F, 50 (Allosaurus fragilis).  
1911 C, pl. ii ("Allosaurus").  
1912 J, 1-30, figs. 9-11, 26, 27 (Allosaurus agilis).  
Schuchert, C. 1918 B, 254 (Allosaurus fragilis).  
Steiner, H. 1922 A, 346 (Allosaurus fragilis).  
Stromer, E. 1915 B, 6, 12 (Allosaurus agilis).  
Williston, S. W. 1901 A, 111 (Allosaurus fragilis).  
1905 B, 349 ("Antrodemus").  
Young and Cooper 1927 A, 5, 7 (Antrodemus fragilis).  
Zittel and Broili 1911 A, 282, fig. 427 (Allosaurus agilis).  
1923 A, 345, fig. 454 (Antrodemus).  
Upper Jurassic or Lower Cretaceous (Morrison?); Colorado.

### ***Antrodemus* sp. indet.**

- Fraas, E. 1904 B, 282, figs. 1, 2 (Allosaurus).  
Jurassic (Cape Stewart); N. E. Greenland.  
Gilmore, C. W. 1914 A, 4 (Allosaurus). Wyoming.  
1920 B, 20, text-fig. 20.  
Hartz, N. 1902 A, 167 ("dinosaur").  
Madsen, V. 1904 A, 169 ("dinosaur").  
Mook, C. C. 1916 A, 96 (Allosaurus). Jurassic or Lower Cretaceous (Morrison); Wyoming.  
Simpson, G. G. 1926 E, 3. Upper Jurassic; Wyoming.

### **CREOSAURUS Marsh.**

- Hay, O. P. 1902 A, 489.  
Abel, O. 1909 F, 478.  
Arthaber, G. 1910 A, 553.  
Brauns, D. 1890 A, 186.  
Clark, Bibbins, and Berry 1911 A, 66.  
Gilmore, C. W. 1920 B, 82, 117 (Syn. of Antrodemus).  
Hay, O. P. 1908 E, 353.  
1909 F, 93.

### **Type *C. atrox* Marsh.**

- Hoffmann, C. K. 1890 B, 1313, 1314.  
Huene, F. 1905 B, 345.  
1906 A, 2.  
1908 B, 334.  
1909 B, 15.  
Lambe, L. M. 1904 G, 24.  
Lull, R. S. 1910 A, 15.  
1911 B, 174.  
Mook, C. C. 1916 A, 154.

Mook, C. C. 1918 A, 467.

Nopcsa, F. 1901 A, 251.

Osborn, H. F. 1903 C, 697.

1904 Q, 688.

Sauvage, H. F. 1902 B, 9.

Seeley, H. G. 1888 G, 169.

Stromer, E. 1915 B, 18.

Versluys, J. 1910 B, 181, 183.

1912 A, 494, fig. 4.

Williston, S. W. 1878 A, 45.

1901 A, 111.

1905 B, 345.

This genus may be synonymous with *Antrodemus*.

### **Creosaurus atrox** Marsh.

Hay, O. P. 1902 A, 489.

Abel, O. 1912 F, 496, fig. 380.

Gilmore, C. W. 1920 B, 118.

Hay, O. P. 1908 E, 354.

Marsh, O. C. 1879 B, 90, pl. x, figs. 1, 2.

1884 B, 331, pl. ix, fig. 3; pl. xiv.

Mook, C. C. 1916 A, 141.

Nopcsa, F. 1900 A, 560.

Osborn, H. F. 1903 C, 697, 700, figs. 1, 2.

Versluys, J. 1910 B, 181, 213, figs. A-C.

1912 A, 494.

Williston, S. W. 1901 A, 113, fig. ("Creosaurus").

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

### **Creosaurus?** sp. indet.

Gregory, H. E. 1917 A, 63 (This genus?).  
Jurassic? (St. Elmo); Arizona.

Williston, S. W. 1902 E, 247 (Creosaurus? or Allosaurus?). Lower Cretaceous (Comanche); Kansas.

## **CERATOSAURIDÆ** Marsh.

Hay, O. P. 1902 A, 493.

Arlt, T. 1907 D, 644.

1909 A, 262 ("ceratosauriden").

1912 A, 668.

Gilmore, C. W. 1920 B, 76.

Huene, F. 1909 B, 15.

1926 B, 96, 98.

Jaekel, O. 1914 A, 197 ("ceratosauriden").

Koken, E. 1900 A, 463 (Ceratosauria, Ceratosauridæ).

Matthew and Brown 1922 A, 368 (Deinodontidæ).

## **CERATOSAURUS** Marsh. Type *C. nasicornis* Marsh.

Hay, O. P. 1902 A, 493.

Abel, O. 1909 F, 459.

Ameghino, F. 1898 C, 74.

1906 A, 39.

Andrews, C. W. 1921 C, 571.

Beddard, F. E. 1898 A, 155.

Boule, M. 1902 B, 908 ("ceratosaure").

Brown, B. 1917 A, 299.

Case, E. C. 1898 C, 635.

Depéret, C. 1896 A, 185.

Dollo, L. 1889 H, 680.

Fuchs, H. 1909 B, 150.

Gilmore, C. W. 1916 B, 187.

1920 B, 14, 76, 144.

1920 C, 277.

1926 F, 91, fig. 1 ("Ceratosauros").

Gratacap, L. P. 1902 A, 5.

Hay, O. P. 1908 C, 678.

1910 C, 19.

1911 B, 412.

Heilmann, G. 1926 A, 208, figs. 19, 115, 126, 127.

Hinze, R. 1910 A, 379.

Hooley, R. W. 1925 A, 25.

Huene, F. 1901 A, 159, 160.

1908 B, 335.

1909 B, 15.

1914 G, pl. vii.

1921 D, 390.

1923 A, 457.

1926 B, 70, 87, 96, pl. ii.

1926 D, 486.

Hutchinson, H. N. 1910 A, 133, pl. xiv.

Jaekel, O. 1908 B, 468.

1909 C, 706.

Janensch, W. 1920 A, 230 (This genus?).

1925 A, 55.

Kingsley, J. S. 1925 A, 168, fig. 181.

Knipe, H. R. 1912 A, 92, fig.

Lebedinsky, N. G. 1913 A, 767.

Loomis, F. B. 1901 A, 195.

Lucas, F. A. 1901 F, 485, pl. v.

1901 J, 106, figs. 23, 25.

1906 C, 316.

Lull, R. S. 1910 A, 14.

1917 B, 509.

1924 A, 229.

Lydekker, R. 1910 D, 459.

Matthew, W. D. 1908 B, 185.

Matthew and Brown 1922 A, 370.

Mook, C. C. 1918 A, 467.

Newton, E. T. 1894 A, 600.

1899 B, 92.

Nopcsa, F. 1900 A, 560.

1901 A, 253.

1903 D, 266.

1906 A, 66.

1918 A, 196.

1923 H, 93, 175.

1926 A, 636.

1928 A, 183.

Osborn, H. F. 1912 J, 5.

1917 A, 770.

Parks, W. A. 1928 A, 8.

Pycraft, W. P. 1909 A, 204, fig.

Reynolds, S. H. 1897 A, 208, 283.

Sauvage, H. E. 1902 B, 9.

Schuchert, C. 1910 A, 582.

1915 A, 875, fig. 481.

Seeley, H. G. 1888 G, 169, 170.

Simpson, G. G. 1926 H, 208, 211.

1926 J, 453.

Spurrall, H. G. F. 1906 A, 120.

Steinmann, G. 1907 A, 448, fig. 790.

1908 A, 229, fig. 137.

1909 A, 80.

Stromer, E. 1915 B, 26.



- Tornier, G. 1909 B, 514.  
 Versluys, J. 1910 C, 436.  
     1912 B, 530.  
 Williston, S. W. 1905 B, 345.  
     1925 A, 149, fig. 122.  
 Winans, W. 1916 A, 187 ("extinct reptiles").  
 Woodward, A. S. 1901 B, 131.  
     1910 A, 114.  
 Woodward, H. 1904 B, 145.  
 Zittel and Broili 1911 A, 281.  
     1923 A, 345, 347.  
 Zittel, Eastman, etc. 1902 A, 228.
- Ceratosaurus nasicornis Marsh.**
- Hay, O. P. 1902 A, 494.  
 Abel, O. 1912 F, 577.  
     1919 A, 598, fig. 465.  
     1922 C, 434, fig. 362.  
 Beard, J. C. 1901 A, 184, fig. 1.  
 Bigot, A. 1897 A, 464, figs. 3, 12.  
 Boule, M. 1891 A, 19, fig. 5.  
 Eimer, G. H. T. 1901 A, 131.  
 Gadow, H. 1901 B, 422, fig. 99.  
 Gilmore, C. W. 1909 A, 227.  
     1914 A, 25.  
     1915 E, 501, fig.  
     1920 B, 14, 20, 25, 56, 66, 76-116, pls. xvii-  
     xxxi; text-fig. 53.  
     1920 C, 277, pl. v.  
     1921 F, 66 ("Ceratosaurus").

- Gilmore, C. W. 1924 B, 2, 15.  
     1925 A, 355.  
 Hay, O. P. 1908 E, 351, 359, text-figs. 1-4.  
 Heilmann, G. 1926 A, 147, fig. 107.  
 Huene, F. 1926 B, 69, 96, 108.  
     1926 D, 474.  
 Hutchinson, H. N. 1910 A, 137, figs. 45, 46.  
 Janensch, W. 1925 A, *passim*.  
 Lambe, L. M. 1903 B, 134.  
     1904 G, 5.  
 Lucas, F. A. 1902 B, 166.  
 Lydekker, R. 1909 C, 464.  
 Merrill, G. P. 1907 A, 65.  
 Mook, C. C. 1916 A, 143.  
 Nopcsa, F. 1901 B, 201 (Megalosaurus).  
     1915 A, 388.  
 Peck, F. B. 1904 A, 29.  
 Reynolds, S. H. 1897 A, 206, fig. 35.  
 Shufeldt, R. W. 1916 A, 187.  
     1916 B, 41, fig. 5.  
 Stromer, E. 1915 B, 7.  
 Tornier, G. 1913 B, 369, figs. 47, 48.  
 Versluys, J. 1910 B, 139, figs. E-G.  
 Woodward, A. S. 1910 A, 112.  
     1922 C, 25, fig. 20.  
 Zittel and Broili 1911 A, 280, fig. 424.  
     1923 A, 346, figs. 455, 456.  
 Zittel, Eastman, etc. 1902 A, 229, figs. 328, 329.  
     Upper Jurassic or Lower Cretaceous (Morri-  
     son); Colorado.

### DEINODONTIDÆ Brown.

- Brown, B. 1914 E, 377 (Sept. 1.).  
 Hay, O. P. 1902 A, 487 (Megalosauridæ).  
 Agassiz, L. 1844 D, 137 ("mégalosaures").  
 Cope, E. D. 1868 C, 417 (Dinodontidæ).  
 Gilmore, C. W. 1920 B, 116, 144 (Megalosauridæ).  
     1924 B, 1 (Deinodontidæ, Dromæosaurinæ)  
 Huene, F. 1901 A, 160 ("dryptosauriden").  
     1923 A, 457.  
     1926 B, 101, 109 (Dinodontidæ).  
 Huxley, T. H. 1870 H, 490 (Megalosauridæ).  
 Koken, E. 1900 A, 463.
- Lull, R. S. 1924 A, 230.  
 Marsh, O. C. 1878 B, 242 (Allosauridæ).  
     1890 C, 424 (Dryptosauridæ).  
 Matthew, W. D. 1914 B, 387 (Sept. 1.).  
     1915 C, 32.  
     1921 D, 211.  
 Matthew and Brown 1922 A, 368, 376 (Deino-  
     dontidæ, Dromæosaurinæ).  
 Nopcsa, F. 1923 H, 126 (Tyrannosauridæ).  
     1928 A, 183 (Aublysodontinæ).  
 Osborn, H. F. 1906 A, 283 (Tyrannosauridæ).  
 Zittel and Broili 1923 A, 345.

### DEINODONTINÆ Matthew and Brown.

- Matthew and Brown 1922 A, 376.  
 Marsh, O. C. 1890 C, 424 (Dryptosauridæ).  
 Nopcsa, F. 1928 A, 183 (Aublysodontinæ).

### DEINODON Leidy. Type *D. horridus* Leidy.

- Hay, O. P. 1902 A, 488.  
 Baird, S. F. 1876 A, cci (Aublysodon).  
 Bowen, C. F. 1915 A, 152.  
 Brown, B. 1914 E, 377.  
 Cope, E. D. 1880 U, 148 (Aublysodon).  
     1892 K, 242 (Amblypodon, misprint).  
 Gilmore, C. W. 1920 B, 123.  
 Hatcher, J. B. 1905 B, 85.  
 Hay, O. P. 1903 D, 119.  
     1908 E, 356.  
 Henning, C. L. 1914 A, 771.  
 Hoffmann, C. K. 1890 B, 1315.  
 Huene, F. 1909 B, 15.  
     1926 B, 93, 101 (Deinodon).  
 Lambe, L. M. 1904 G, 5.  
     1917 B, 9.  
 Lull, R. S. 1924 A, 231.
- Matthew, W. D. 1913 E, 792.  
 Matthew and Brown 1922 A, 370, 374.  
 Nopcsa, F. 1901 A, 253 (Aublysodon; Dimodon  
     = Megalosaurus).  
     1902 B, 106 (Aublysodon).  
     1928 A, 183 (Aublysodon).  
 Osborn, H. F. 1902 H, 674.  
     1902 I, 9, 17.  
     1905 A, 259, 261.  
     1924 I, 6 (Deinodon).  
 Peale, A. C. 1913 A, 979.  
 Stanton and Hatcher 1905 A, 38 (Deinodon);  
     50 (Aublysodon).  
 Williston, S. W. 1902 K, 953 (Aublysodon).  
 Zittel and Broili 1911 A, 281 (Aublysodon,  
     Deinodon).  
     1923 A, 345 (Deinodon).

**Deinodon? falcus (Cope).**

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
 Bowen, C. F. 1915 A, 132, 149, 150.  
 Hatcher, J. B. 1905 B, 86.  
 Matthew and Brown 1922 A, 376 (Dromæosaurus? sp.).  
 Nopcsa, F. 1901 A, 253 (Laelaps).  
 1901 B, 199 (Laelaps).  
 Osborn, H. F. 1902 I, 13.  
 Upper Cretaceous (Judith River); Montana.

**Deinodon hazenianus (Cope).**

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
 Bowen, C. F. 1915 A, 132, 149, 150.  
 Hatcher, J. B. 1905 B, 86.  
 Hay, O. P. 1910 B, 299.  
 Matthew and Brown 1922 A, 376 (Deinodon horridus?).  
 Osborn, H. F. 1902 I, 13.  
 Peale, A. C. 1912 A, 754.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana (Lance); Wyoming.

**Deinodon horridus Leidy.**

- Hay, O. P. 1902 A, 489.  
 Bowen, C. F. 1915 A, 132, 143, 149, 151 (Deinodon horridus); 130, 151 (Aublysodon mirandus).  
 Brown, B. 1914 E, 378 (Aublysodon mirandus).  
 Gilmore, C. W. 1916 D, 288, pl. lxxiii, fig. 4 (This genus and species?).  
 Hatcher, J. B. 1905 B, 83 (Deinodon horridus, Aublysodon mirandus).  
 Hay, O. P. 1902 A, 488 (Dryptosaurus kenabekides).  
 1903 D, 119; 120 (Ornithomimus mirandus).  
 1908 E, 356.  
 1910 B, 299.  
 Huene, F. 1926 B, 101, pl. i (Dinodon).  
 Lambe, L. M. 1902 A, 49.  
 1903 B, 137.  
 1904 C, 23, 37, 48.  
 1904 E, 36.  
 Matthew and Brown 1922 A, 376.  
 Nopcsa, F. 1901 A, 253 (Aublysodon); 255 (Megalosaurus).

- Nopcsa, F. 1901 B, 199 (A. cristatus); 201 (Megalosaurus).  
 Osborn, H. F. 1902 I, 13.  
 1905 A, 259.  
 Peale, A. C. 1912 A, 754 (Aublysodon mirandus).  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana (Belly River); Alberta, New Mexico?.

**Deinodon incrassatus (Cope).**

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
 Ballou, W. H. 1897 A, 20 (Dryptosaurus).  
 Bowen, C. F. 1915 A, 132, 148-150.  
 Cope, E. D. 1892 K, 240 (Laelaps).  
 Hatcher, J. B. 1905 B, 85.  
 Hay, O. P. 1908 E, 356 (Dryptosaurus).  
 Matthew and Brown 1922 A, 376 (Deinodon horridus?).  
 Nopcsa, F. 1901 A, 253 (Laelaps).  
 1901 B, 199 (Syn. of Laelaps).  
 1902 B, 104 (Laelaps).  
 Osborn, H. F. 1902 H, 675 (Dryptosaurus).  
 1905 A, 260 (Laelaps, Dryptosaurus).  
 Sternberg, C. H. 1914 A, 134.  
 Stromer, E. 1915 B, 4, 12 (Dryptosaurus).  
 Upper Cretaceous (Judith River); Montana (Belly River); Alberta.

**Deinodon lateralis Cope.**

- Hay, O. P. 1902 A, 489.  
 Bowen, C. F. 1915 A, 132.  
 Hatcher, J. B. 1905 B, 85.  
 Matthew and Brown 1922 A, 376 (D. horridus?).  
 Nopcsa, F. 1901 A, 253 (Aublysodon).  
 1901 B, 199 (Aublysodon).  
 Osborn, H. F. 1902 I, 13.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana.

**Deinodon? sp. indet.**

- Brown, B. 1907 A, 842 (Aublysodon). Upper Cretaceous (Hell Creek); Montana.  
 Gilmore, C. W. 1916 D, 287, pl. lxxiii, figs. 1, 4. Upper Cretaceous (Ojo Alamo); New Mexico.  
 Matthew, W. D. 1920 D, 536, fig. ("Deinodon"). Upper Cretaceous (Belly River); Alberta.

**DRYPTOSAURUS Marsh. Type *Laelaps aquilunguis* Cope.**

- Hay, O. P. 1902 A, 487.  
 Abel, O. 1914 B, 87 (Laelaps).  
 Andreas, A. 1903 A, 150 (Laelaps).  
 Baird, S. F. 1876 A, cci, 353 (Laelaps).  
 Brauns, D. 1890 A, 186.  
 Cope, E. D. 1872 QQ, 2 (Laelaps).  
 1880 U, 147 (Laelaps).  
 Depéret, C. 1912 A, 705.  
 Hay, O. P. 1908 E, 356.  
 1910 B, 299.  
 Hoffmann, C. K. 1890 B, 1315 (Laelaps).  
 Huene, F. 1905 B, 345.  
 1908 B, 336.  
 1909 B, 15.  
 1923 A, 456.  
 1926 B, 102, 105, 108.  
 Huxley, T. H. 1870 G, 476 (Laelaps).  
 Lambe, L. M. 1903 B, 136.

- Lambe, L. M. 1904 G, 5.  
 Lull, R. S. 1910 A, 15.  
 1924 A, 231.  
 Matthew and Brown 1922 A, 374, 383.  
 Moodie, R. L. 1926 A, 86, text-fig. 7.  
 Newberry, J. S. 1878 C, 647 (Laelaps).  
 Nopcsa, F. 1901 A, 253 (Dryptosaurus, Laelaps).  
 1901 B, 199 (Syn. of Laelaps).  
 1906 A, 73.  
 1918 B, 239 (Laelaps).  
 1928 A, 183.  
 Osborn, H. F. 1902 H, 674, 675.  
 1902 I, 9, 17.  
 1905 A, 259, 260, 261.  
 1924 I, 6.  
 Perrier, E. 1920 A, 320 (Laelaps).  
 Seitz, A. L. L. 1907 A, 343.  
 Stanton and Hatcher 1905 A, 51 (Laelaps).

- Stromer, E. 1915 B, 26.  
 Wieland, G. R. 1925 B, 553 (Laelaps).  
 Williston, S. W. 1904 F, 830.  
 Zittel and Brouh 1911 A, 282.  
 1923 A, 345 (Dryptosaurus, Laelaps).  
 Zittel, Eastman, etc. 1902 A, 230 (Laelaps).
- Dryptosaurus aquilunguis (Cope).**  
 Hay, O. P. 1902 A, 488.  
 Ballou, W. H. 1897 A, 14, 20, fig. ("Laelaps").  
 Cannon, G. L. 1906 B, 195 (Laelaps).  
 Cope, E. D. 1867 H, 71 (Laelaps).  
 Gilmore, C. W. 1921 E, 584, pl. cxiv, fig. 2.  
 Huene, F. 1903 B, 335, fig. 314.  
 1923 A, 456.  
 1926 B, 93, pls. i, ii.  
 Huxley, T. H. 1870 G, 477 (Laelaps).  
 Matthew and Brown 1922 A, 378.  
 Nat. Sci. 1898 A, 230.  
 Nopcsa, F. 1901 A, 253 (Laelaps).  
 1901 B, 189 (Laelaps).  
 1902 B, 105 (Laelaps).  
 Osborn, H. F. 1904 F, 19, 44 (Laelaps).  
 1905 A, 280 (Laelaps).  
 Stromer, E. 1915 B, 12, 21.  
 Upper Cretaceous (Hornerstown); New Jersey.

**Dryptosaurus? medius (Marsh).**

- Marsh, O. C. 1888 A, 93 (Allosaurus).  
 Hay, O. P. 1902 A, 489 (Antrodemus).  
 Clark, Bibbins and Berry 1911 A, 89 (Allosaurus).

- Gilmore, C. W. 1920 B, 119, pl. xxxiv, figs. 1-4 (Dryptosaurus?).  
 1921 E, 583, 591, pl. cx, fig. 2.  
 Hay, O. P. 1903 E, 353 (Allosaurus).  
 Lull, R. S. 1911 B, 173 (Allosaurus).  
 1911 C, 183, pl. xiv, figs. 1-3 (Allosaurus).  
 Matthew and Brown 1922 A, 376 (This genus?).  
 Merrill, G. P. 1907 A, 63 (Allosaurus).  
 Mook, C. C. 1916 A, 143 (Allosaurus).  
 Schuchert, C. 1910 A, 588 (Allosaurus).  
 Simpson, G. G. 1926 H, 207 (This genus?).  
 Lower Cretaceous (Arundel); Maryland.

**Dryptosaurus? potens (Lull).**

- Lull, R. S. 1911 C, 186, pl. xiv, fig. 4 (Creosaurus).  
 Clark, Bibbins and Berry 1911 A, 89 (Creosaurus).  
 Gilmore, C. W. 1920 B, 116, pl. xxxii; text-fig. 66 (Dryptosaurus?).  
 1921 E, 584, 591, pl. cxi, fig. 2.  
 Huene, F. 1926 B, pl. i.  
 Lull, R. S. 1911 B, 174 (Creosaurus).  
 Mook, C. C. 1916 A, 143 (Creosaurus).  
 Simpson, G. G. 1926 H, 207 (This genus?).  
 Lower Cretaceous (Arundel); Washington, D. C.

**Dryptosaurus sp. indet.**

- Hay, O. P. 1903 D, 119.  
 Williston, S. W. 1907 B, 53. Cretaceous (Rattlesnake); Texas.

**GORGOSAURUS Lambe. Type *G. libratus* Lambe.**

- Lambe, L. M. 1914 D, 13.  
 Abel, O. 1926 F, (39).  
 Gilmore, C. W. 1920 B, *passim*.  
 1924 G, 32.  
 Heilmann, G. 1926 A, 205, figs. 123, 124.  
 Huene, F. 1923 A, 456.  
 1926 B, 46, 89, 93, 101.  
 Janensch, W. 1925 A, *passim*.  
 Joleaud, L. 1920 A, 494.  
 Lambe, L. M. 1915 B, 118.  
 1917 B, 1-84.  
 Lull, R. S. 1924 A, chart.  
 Matthew, W. D. 1920 D, 544.  
 Matthew and Brown 1922 A, 368, 374, 383 (Syn.? of Deinodon).  
 Nopcsa, F. 1923 C, 472, fig. 7.  
 1923 H, 93.  
 1923 A, 183.  
 Osborn, H. F. 1917 A, 771.  
 Parks, W. A. 1928 A.  
 Rogers, A. F. 1924 A, 538, 546.  
 Simpson, G. G. 1926 I, 454.  
 Sternberg, C. H. 1917 A, 75.  
 Sternberg, C. M. 1921 A, 65.  
 Williston, S. W. 1925 A, 141, 175, 196, figs. 113, 141.  
 Zittel and Brouh 1923 A, 346 (Syn. of Deinodon).

**Gorgosaurus libratus Lambe.**

- Lambe, L. M. 1914 D, 13.  
 Abel, O. 1924 A, 710, figs. 2, 3.  
 Gilmore, C. W. 1915 E, 513.  
 1920 B, 26, 53.  
 1924 B, 7.  
 Heilmann, G. 1926 A, 168, fig. 120.  
 Huene, F. 1926 B, 89, pls. i, ii (G. libratus); 101 (G. fibratus).  
 Janensch, W. 1925 A, 89.  
 Joleaud, L. 1920 A, 494, fig. 9.  
 Lambe, L. M. 1914 F, 293, 297.  
 1915 B, 117.  
 1916 A, 195, 196.  
 1917 B, 1-84, with 45 illust.  
 Lydekker, R. 1915 C, 630.  
 Matthew, W. D. 1916 A, 484.  
 Matthew and Brown 1923 A, 1, figs. 1-3, 5.  
 Sternberg, C. H. 1917 A, 53, 53, figs. 11-14, 39.  
 1918 A, 207.  
 Upper Cretaceous (Belly River); Alberta.

**Gorgosaurus sternbergi Matthew and Brown.**

- Matthew and Brown 1923 A, 7, fig. 4.  
 Upper Cretaceous (Belly River); Alberta.

ALBERTOSAURUS Osborn. Type *A. sarcophagus* Osborn.

- Osborn, H. F. 1905 A, 259.  
 Brown, B. 1913 D, 144.  
     1914 E, 377.  
 Gilmore, C. W. 1916 D, 233.  
 Hay, O. P. 1908 E, 356.  
 Huene, F. 1908 B, 336.  
     1909 B, 15.  
     1923 A, 456.  
     1926 B, 93, 101.  
 Matthew, W. D. 1915 C, 55.  
 Matthew and Brown 1922 A, 363, 374 (Syn.? of *Deinodon*).  
     1923 A, 9.  
 Nopcsa, F. 1923 A, 133.  
 Osborn, H. F. 1912 J, 5, 29.  
 Sternberg, C. M. 1926 A, 103.  
 Zittel and Broili 1911 A, 231.  
     1923 A, 346 (Syn.? of *Deinodon*).
- Albertosaurus arctunguis Parks.**  
 Parks, W. A. 1923 A, 1-42, pl. i; 20 text-figs.  
     Upper Cretaceous (Edmonton); Alberta.
- Albertosaurus sarcophagus Osborn.**  
 Osborn, H. F. 1905 A, 265.  
 Brown, B. 1914 E, 374.  
     1919 A, 413 ("Albertosaurus").  
 Cope, E. D. 1892 K, 240 (*Laelaps incrassatus*).  
     1892 Z, 17 (*Laelaps incrassatus*).
- Hay, O. P. 1908 E, 356.  
 Huene, F. 1906 B, 105, fig. 1 (*Dryptosaurus incrassatus*).  
     1908 B, 336.  
     1914 I, 70, figs. 2-5 (*Dryptosaurus*).  
     1926 B, 101, pls. i, ii.  
 Lambe, L. M. 1899 B, 184A, 187A (*Laelaps incrassatus*).  
     1903 B, 133, pls. i-iii (*Dryptosaurus incrassatus*).  
     1904 C, 26, 33, 43 (*Dryptosaurus incrassatus*).  
     1904 F, 205 A (*Dryptosaurus incrassatus*).  
     1904 G, 5, pls. i-viii; text-figs. A, B (*D. incrassatus*).  
     1905 D, 362 A (*Dryptosaurus incrassatus*).  
     1914 H, 393, 401 (*Dryptosaurus*).  
 Matthew, W. D. 1912 D, 219 ("Albertosaurus").  
 Matthew and Brown 1922 A, 377 (*Deinodon?*).  
 Osborn, H. F. 1902 H, 675 (*Dryptosaurus incrassatus*).  
     1902 I, 13 (*Deinodon incrassatus*).  
     1905 A, 260 (*Dryptosaurus incrassatus?*).  
 Parks, W. A. 1923 A (*A. sarcophagus*, *Dryptosaurus incrassatus*).  
 Sternberg, C. M. 1926 A, 104 (*A. sarcophagus*).  
 Whiteaves, J. F. 1901 A, 184, 189 (*Laelaps incrassatus*).  
     Cretaceous (Edmonton); Alberta.

## TYRANNOSAURINÆ.

- Matthew and Brown 1922 A, 378. | Osborn, H. F. 1906 A, 233 (*Tyrannosauridæ*).

TYRANNOSAURUS Osborn. Type *T. rex* Osborn.

- Osborn, H. F. 1905 A, 259, 262.  
 Abel, O. 1910 C, (231).  
     1911 A, 157.  
     1912 F, 497.  
     1916 A, 470, fig. 1.  
     1919 A, 593.  
 Adams, L. A. 1919 A, 132, pl. xiii.  
 Brown, B. 1908 B, 199.  
     1908 C, 54.  
     1914 A, 547.  
     1914 E, 377.  
     1915 A, 271, pls. and figs.  
 Case, E. C. 1910 C, 192, 195.  
     1922 B, 79.  
 Christman, E. S. 1921 A, 623.  
 Eastman, C. R. 1912 C, 658.  
 Fraas, E. 1911 B, 32.  
 Gilmore, C. W. 1915 C, 59.  
     1920 A, 67.  
     1920 B, *passim*.  
     1924 G, 32.  
     1925 A, 360.  
 Gregory, W. K. 1913 B, 244.  
     1913 E, 7.  
     1920 B, 123, fig. 42.  
 Gregory and Adams 1915 A, 763.  
 Heilmann, G. 1926 A, 207.  
 Hennig, E. 1924 A, 144.  
 Huene, F. 1908 B, 336, 408.  
     1909 B, 15 (= *Dynamosaurus*).  
     1914 C, 583.  
     1923 A, 456.
- Huene, F. 1925 B, 153.  
     1926 B, 46, 93, 101.  
 Janensch, W. 1925 A, *passim*.  
     1925 B, 274.  
 Joleaud, L. 1920 A, 493.  
 Knowlton, F. H. 1909 A, 232.  
 Lambe, L. M. 1917 B, 21.  
 Lull, R. S. 1910 A, 2, 15.  
     1912 A, 208 (*Dynamosaurus*).  
     1912 B, 776.  
     1917 A, 472, 474.  
     1917 B, 335, 728.  
     1924 A, 231, 271, fig. 23.  
 Lydekker, R. 1907 C, 456.  
 Matthew, W. D. 1910 D, 550.  
     1910 F, 3.  
     1915 C, 33, 46, figs. 15, 16.  
     1915 L, 26, 33, 46, figs. 5, 14-16.  
     1920 D, 544.  
     1922 C, 333.  
 Matthew and Brown 1922 A, 363, 374, 382.  
     1923 E, 9.  
 Moodie, R. L. 1913 A, 251.  
 Nopcsa, F. 1917 B, 333.  
     1918 A, 196.  
     1922 A, 114.  
     1923 H, 12, 93, 94, 110, 175, pl. iii, fig. 3.  
     1926 A, 633, text-fig. 3.  
     1928 A, 183.  
 Osborn, H. F. 1905 A, 259, 263 (*Dynamosaurus*; type *D. imperiosus* Osborn).  
     1906 A, 231, 284 (*Dynamosaurus*).

- Osborn, H. F. 1909 A, 198.  
 1912 J, 4 (*Dynamosaurus* a syn.).  
 1913 A, 91.  
 1916 C, 150.  
 1917 A, 733.  
 1917 B, 215, 224, fig.  
 1917 C, 9, fig. 10.  
 1922 D, 723, 724, fig. 3.  
 1924 L, 145.
- Parks, W. A. 1928 A.
- Pompeckj, J. F. 1920 A, 112, 119.
- Romer, A. S. 1923 A, 142, fig.  
 1923 C, 606, 611, figs. 2, 4-8.  
 1927 C, 231, fig. 1.
- Schuchert and Levene 1927 A, 317, 324, figs.
- Stanton, T. W. 1909 A, 247, 278.
- Sternberg, C. H. 1911 B, 222.
- Stromer, E. 1915 B, 4, 26.
- Tornier, G. 1913 B, 368.
- Troxell, E. L. 1921 A, 476.
- Versluys, J. 1910 B, 253.
- Whitnall, H. O. 1925 A, 10, pl. i.
- Wieland, G. R. 1925 B, 559.
- Williston, S. W. 1925 A, 87, fig. 70.
- Zittel and Broili 1911 A, 281.  
 1923 A, 346.
- Tyrannosaurus? amplus (Marsh).**
- Hay, O. P. 1902 A, 488 (*Deinodon*).  
 Bowen, C. F. 1915 A, 132, 149, 150 (*Deinodon*).  
 Matthew and Brown 1922 A, 376 (*Tyrannosaurus?* sp.).
- Nopcsa, F. 1901 A, 253 (*Aublysodon*).  
 1901 B, 199 (*Aublysodon*).
- Osborn, H. F. 1902 I, 13 (*Aublysodon*).  
 Upper Cretaceous (Lance); Wyoming.
- Tyrannosaurus rex Osborn.**
- Osborn, H. F. 1905 A, 262, fig. 1.
- Abel, O. 1908 D, (211).  
 1909 F, 460.  
 1911 B, 160.  
 1912 F, 405, fig. 379.  
 1916 A, 473, fig. 4.  
 1919 A, 599, figs. 466-472.  
 1922 C, 344, fig. 300.  
 1925 A, 67, 248, figs. 43, 44, 183, 184.
- Anonymous 1906 B, 228.  
 1906 E, 411.  
 1910 B, 3 ("*Tyrannosaurus?*").  
 Bowen, C. F. 1915 A, 134.
- Brown, B. 1907 A, 841, 842.  
 1914 E, 358.  
 1915 C, 322, 6 figs. ("*Tyrannosaurus?*").  
 1919 A, 429, fig. ("*dinosaur?*").
- Gilmore, C. W. 1916 D, 288 (*Dynamosaurus imperiosus*).  
 1920 B, 9, 12, 37, 121, text-fig. 2.  
 1924 B, 7.
- Gregory, W. K. 1906 A, 15.  
 1913 E, 12, fig. 9.
- Hay, O. P. 1910 B, 299.  
 1910 C, 4.  
 1911 B, 400.
- Heilmann, G. 1913 B, 31, fig. 75.  
 1926 A, 47, figs. 32, 109, 122.
- Huene, F. 1908 B, 281.  
 1915 B, 21, text-fig. 14.  
 1926 B, 89, pls. i, ii.
- Hutchinson, H. N. 1910 A, 139, fig. 48.
- Krull, F. 1906 A, 350.
- Lull, R. S. 1907 B, 185.  
 1917 B, 510, pl. x; text-fig. 154.
- Lydekker, R. 1913 A, 14.
- Marsh, O. C. 1896 C, 206 (*Ornithomimus grandis*; not of 1890).
- Matthew, W. D. 1910 F, 3, figs.  
 Matthew and Brown 1922 A, 378.
- Moodie, R. L. 1915 D, 288.  
 1915 I, 156, 178, figs. 18, 19.
- Osborn, H. F. 1905 A, 263, fig. 2 (*Dynamosaurus imperiosus*).  
 1906 A, 281, 284, pl. xxxix; text-figs. 1, 3-12 (*Dynamosaurus imperiosus*).  
 1912 J, pls. i-iv; text-figs. 1-8, 17-25.  
 1913 A, 91, pls. iv-vi.  
 1917 A, 762, pls. xxv, xxvii; text-figs. 17-21.
- Peterson, W. 1924 A, 391, figs. 1-3?; fig. 4.
- Pompeckj, J. F. 1920 A, 119.
- Romer, A. S. 1927 B, 686 ("*Tyrannosaurus?*").
- Schuchert, C. 1910 A, 596.
- Schuchert and Levene 1927 A, 319.
- Sternberg, C. H. 1909 A, 115.  
 1909 C, 277.  
 1917 A, 153.
- Stromer, E. 1915 B, 22, 27.
- Woodward, A. S. 1910 C, 13, fig. 2.
- Zittel and Broili 1923 A, 337, fig. 446.  
 Upper Cretaceous (Hell Creek); Montana; (Lance); Wyoming.

## DROMÆOSAURINÆ Matthew and Brown.

Matthew and Brown 1922 A, 378.

DROMÆOSAURUS Matthew and Brown. Type *D. albertensis* Matthew and Brown.

Matthew and Brown 1922 A, 385.

Gilmore, C. W. 1924 B, 1.

Nopcsa, F. 1928 A, 183.

Simpson, G. G. 1926 H, 208.

**Dromæosaurus albertensis** Matthew and Brown.

Matthew and Brown 1922 A, 385, fig. 1.

Gilmore, C. W. 1924 B, 1, 7.

Upper Cretaceous (Belly River); Alberta.

**Dromæosaurus? cristatus** (Cope).Hay, O. P. 1902 A, 488 (*Dryptosaurus*).Bowen, C. F. 1915 A, 132, 149, 150 (*Deinodon*).Gilmore, C. W. 1924 B, 3 (*Deinodon*).Hatcher, J. B. 1905 B, 86 (*Deinodon*).Matthew and Brown 1922 A, 376, 378 (*Dromæosaurus?*).Nopcsa, F. 1901 A, 253 (*Aublysodon*).Osborn, H. F. 1902 I, 13 (*Deinodon*).Peale, A. C. 1912 A, 754 (*Deinodon*).

Upper Cretaceous (Lance); Wyoming; (Judith River); Montana.

**Dromæosaurus? explanatus** (Cope).

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
 Bowen, C. F. 1915 A, 132, 143 (Deinodon).  
 Hatcher, J. B. 1903 D, 372 (Aublysodon).  
 1905 B, 86 (Deinodon).  
 Hay, O. P. 1910 B, 299 (Deinodon).  
 Lambe, L. M. 1902 A, 49 (Deinodon).  
 1904 C, 37, 43 (Deinodon).  
 Matthew and Brown 1922 A, 376 (Dromæosaurus sp.?).  
 Nopcsa, F. 1901 A, 253 (Lælaps).  
 1901 B, 199 (Lælaps).  
 1902 B, 104 (Lælaps).  
 Osborn, H. F. 1902 I, 13 (Deinodon).  
 1924 I, 7, fig. 7 (Deinodon).  
 Peale, A. C. 1912 A, 754 (Deinodon).  
 Upper Cretaceous (Judith River); Montana: (Belly River); Alberta.

**Dromæosaurus? gracilis** (Marsh).

- Hay, O. P. 1902 A, 493 (Cælurus).  
 Clark, Bibbins and Berry 1911 A, 89 (Cælurus).  
 Gadow, H. 1901 B, 423 (Cælurus).

- Gilmore, C. W. 1920 B, 126, pl. xxxvi, figs. 3, 4 (Cælurus).  
 1921 E, 585, 591, pl. cx, fig. 5 (Cælurus).  
 Huene, F. 1926 B, pl. i (Cælurus).  
 Lull, R. S. 1911 B, 174 (Cælurus).  
 1911 C, 187, pl. xv, fig. 1 (Cælurus).  
 Matthew and Brown 1922 A, 376, 378 (Dromæosaurus?).  
 Merrill, G. P. 1907 A, 66 (Cælurus).  
 Mook, C. C. 1916 A, 143 (Cælurus).  
 Simpson, G. G. 1926 H, 207 (Cælurus?).  
 Lower Cretaceous (Arundel); Maryland.  
 A species of doubtful generic position.

**Dromæosaurus lævifrons** (Cope).

- Hay, O. P. 1902 A, 488 (Dryptosaurus).  
 Bowen, C. F. 1915 A, 132, 149, 150 (Deinodon).  
 Gilmore, C. W. 1924 B, 3 (Deinodon).  
 Hatcher, J. B. 1905 B, 86 (Deinodon).  
 Matthew and Brown 1922 A, 376.  
 Osborn, H. F. 1902 I, 13 (Deinodon).  
 Upper Cretaceous (Judith River); Montana.

**ZAPSALIS** Cope. Type *Z. abradens* Cope.

- Hay, O. P. 1902 A, 490.  
 A genus of uncertain position.

**Zapsalis abradens** Cope.

- Hay, O. P. 1902 A, 490.  
 Bowen, C. F. 1915 A, 130, 149.  
 Hatcher, J. B. 1905 B, 84 (Zaphsalis abradus).

- Hay, O. P. 1910 B, 299.  
 Matthew and Brown 1922 A, 376 ("Dromæosaurus?").  
 Osborn, H. F. 1902 I, 12.  
 Peale, A. C. 1912 A, 754 (Zaphalis abradus).  
 Upper Cretaceous (Judith River); Montana: (Lance); Wyoming.

**ORNITHOMIMIDÆ** Marsh.

- Hay, O. P. 1902 A, 494.  
 Arldt, T. 1907 D, 669.  
 Fürbringer, M. 1902 B, 729.  
 Gilmore, C. W. 1920 B, 129, 131.  
 1924 B, 10.  
 Huene, F. 1920 A, 162.  
 1921 D, 395.  
 1926 B, 97, 100, 103, 109.  
 Janensch, W. 1920 A, 229 ("Cœlosaurier").  
 1925 A, 50.  
 Lull, R. S. 1924 A, 232.

- Matthew, W. D. 1914 B, 387.  
 1915 C, 32.  
 1921 D, 211.  
 Matthew and Brown 1922 A, 368, 375, 378.  
 Nopcsa, F. 1923 H, 125 (Ornithomimines).  
 1928 A, 183 (Ornithomimines).  
 Osborn, H. F. 1917 A, 733.  
 1924 C, 12.  
 Van den Broeck, E. 1900 A, 87.  
 Williston, S. W. 1925 B, 292.  
 Zittel, K. A. 1890 A, 767.  
 Zittel and Broili 1923 A, 342, 366.

**CŒLOSABRUS** Leidy. Type *C. antiquus* Leidy.

- Hay, O. P. 1902 A, 489.  
 Huene, F. 1909 B, 16.  
 Janensch, W. 1925 A, 50.  
 Lull, R. S. 1924 A, 232.  
 Matthew and Brown 1922 A, 373, 378.  
 Nopcsa, F. 1901 A, 253.  
 1928 A, 183.  
 Simpson, G. G. 1926 H, 208.

**Cœlosaurus affinis** (Gilmore).

- Gilmore, C. W. 1920 B, 121, 131, 137, text-figs. 71-78 (Ornithomimus).  
 Clark, Bibbins and Berry 1911 A, 89 (Dryosaurus grandis).  
 Gilmore, C. W. 1921 E, 586, 591, pl. cxii, figs. 1, 3; pl. cxiii, figs. 1, 3; pl. cxiv, fig. 1.  
 Huene, F. 1926 B, 98, pls. i, ii (Ornithomimus).  
 Janensch, W. 1925 A, 32.  
 Lull, R. S. 1911 B, 176 (Dryosaurus grandis).

**Cœlosaurus antiquus** Leidy.

- Hay, O. P. 1902 A, 489 (Cœlosaurus); 488 (Dryptosaurus macropus).  
 Huene, F. 1908 B, 336 (Dryptosaurus macropus).  
 1926 B, pl. i.  
 Matthew and Brown 1922 A, 373, 376 (Lælaps macropus a syn.?).  
 Upper Cretaceous (Greensand); New Jersey.

ORNITHOMIMUS Marsh. Type *O. velox* Marsh.

- Hay, O. P. 1902 A, 494.  
 Abel, O. 1911 A, 176.  
     1912 F, 265, 292, 408.  
     1916 A, 405.  
     1919 A, 583.  
     1921 A, 264, 266.  
     1924 A, 711 (*Struthiomimus*).  
     1926 F, (37) (*Ornithomimus*, *Struthiomimus*).  
 Anonymous 1917 A, 213 (*Struthiomimus*).  
 Beddard, F. E. 1898 A, 155.  
 Boas, J. E. V. 1914 B, 570, fig. 22.  
 Brown, B. 1914 E, 377.  
     1919 A, 411.  
 Cannon, G. L. 1894 A, 260.  
 Gadow, H. 1896 C, 205.  
     1901 B, 429.  
 Gaudry, A. 1898 A, 127.  
 Gilmore, C. W. 1920 B, 129, 131.  
     1924 A, 66.  
     1924 B, 1, 4, 6 (*Ornithomimus*, *Struthiomimus*).  
 Hatcher, J. B. 1902 H, 831.  
     1905 B, 87.  
 Hay, O. P. 1908 E, 357.  
 Hellmann, G. 1913 A, 8.  
     1913 B, 18, 64.  
     1914 A, 11.  
     1926 A, 206, 207, fig. 109 (*Struthiomimus*).  
 Huene, F. 1901 A, 160.  
     1908 B, 339, 408.  
     1909 B, 15.  
     1914 A, 146.  
     1914 D, 155.  
     1914 G, 34, pl. vii.  
     1920 A, 162.  
     1921 D, 390, 394.  
     1923 A, 455.  
     1925 B, 157.  
     1926 B, 82, 85, 87 (*Ornithomimus*); 87 (*Struthiomimus*).  
     1926 D, 487.  
 Janensch, W. 1920 A, 229.  
     1925 A, 2, 41 (*Ornithomimus*); *passim* (*Struthiomimus*).  
 Joleaud, L. 1920 A, 493 (*Struthiomimus*).  
 Lambe, L. M. 1903 C, 463 A.  
 Lucas, F. A. 1902 B, 168, fig.  
 Lull, R. S. 1904 A, 472.  
     1910 A, 15.  
     1912 D, 415.  
     1915 A, 155.  
     1917 A, 472 (*Struthiomimus*).  
     1917 B, 299, 513 (*Ornithomimus*); 513, 532 (*Struthiomimus*).  
     1924 A, 231, 232, 256 (*Struthiomimus*, *Ornithomimus*).  
 Lydekker, R. 1912 C, 96.  
 Matthew, W. D. 1915 C, 58.  
     1920 D, 544 (*Struthiomimus*).  
 Matthew and Brown 1922 A, 368, 373 (*Ornithomimus*, *Struthiomimus*).  
 Nopcea, F. 1901 A, 255.  
     1905 C, 292.  
     1907 A, 232, fig. 79.  
     1918 B, 239.  
 Nopcea, F. 1922 C, 152, fig. 1 (*Struthiomimus*).  
     1923 C, 459, fig. 5 (*Struthiomimus*).  
     1923 E, 1046 (*Ornithomimus*, *Struthiomimus*).  
     1923 H, 93, 95, 96, 173, 188 (*Struthiomimus*); 95, 96 (*Ornithomimus*).  
     1924 B, 84 (*Struthiomimus*).  
     1928 A, 183 (*Ornithomimus*, *Struthiomimus*).  
 Osborn, H. F. 1902 H, 673, 674, 675.  
     1902 I, 9, 17, 18.  
     1916 C, 150.  
     1917 A, 733, 734 (*Struthiomimus*).  
     1917 B, 213-215 (*Ornithomimus*); 213-215, 221, figs. (*Struthiomimus*).  
     1917 C, 6 (*Ornithomimus*); 6, figs. 2-4 (*Struthiomimus*).  
     1917 D, 660 (*Struthiomimus*).  
     1922 D, 724 (*Ornithomimus*).  
     1924 C, 9 (*Ornithomimus*, *Struthiomimus*).  
     1924 L, 145 (*Ornithomimus*, *Struthiomimus*).  
 Perrier, E. 1920 A, 318.  
 Rogers, A. F. 1924 A, 546 (*Struthiomimus*).  
 Schuchert, C. 1910 A, 596.  
 Simpson, G. G. 1926 H, 208.  
     1926 J, 459.  
 Stanton, T. W. 1909 A, 247.  
 Steinmann, G. 1922 A, 241.  
 Sternberg, C. M. 1926 A, 103.  
 Versluys, J. 1910 B, 246.  
 Williston, S. W. 1925 A, 189, 191, fig. 156 (*Ornithomimus*); 191, 198, fig. 156 (*Struthiomimus*).  
 Zittel and Broili 1911 A, 283.  
     1923 A, 342 (*Struthiomimus*).
- Ornithomimus altus** Lambe.  
 Lambe, L. M. 1902 A, 50, pls. xiii, xiv, xv, figs. 1-8.  
 Abel, O. 1919 A, 583, fig. 455.  
     1922 C, 339, fig. 296 (*Struthiomimus*).  
 Bowen, C. F. 1915 A, 134, 148.  
 Brown, B. 1907 A, 842.  
     1914 E, 358, 374, 378 (*This species?*).  
 Case, E. C. 1922 B, 80 (*Struthiomimus*).  
 Gilmore, C. W. 1919 E, 395 (*Struthiomimus*).  
     1921 E, 587.  
     1924 B, 1 (*Ornithomimus*).  
 Hatcher, J. B., 1905 B, 87.  
 Hellmann, G. 1913 B, 21, fig. 64.  
     1926 A, 31, 47, 155, figs. 19, 32, 110, 118, 120, 126, 132 (*Struthiomimus*).  
 Huene, F. 1908 B, 305, fig. 300.  
     1921 D, 392 (*Struthiomimus*).  
     1926 B, 99, pl. i.  
 Janensch, W. 1925 A, *passim* (*Struthiomimus*).  
 Joleaud, L. 1920 A, 493, fig. 8 (*Struthiomimus*).  
 Lambe, L. M. 1903 B, 137.  
     1904 A, 254.  
     1904 C, 23, 37, 48.  
     1904 E, 33, pl. i; pl. ii, figs. 4-7.  
     1904 G, 20.  
     1905 D, 363 A.  
     1907 B, 179.  
     1907 C, 222.

Lambe, L. M. 1914 D, 15.

1914 F, 297.

1915 B, 117.

1917 B, 28, 75.

Matthew, W. D. 1916 A, 484.

1921 G, 658, fig. (Struthiomimus).

Matthew and Brown 1922 A, 377, 379 (Struthiomimus).

Moodie, R. L. 1917 B, 392, fig. 20 (Struthiomimus).

1918 B, 336, 393, fig. 4 (Struthiomimus).

1923 B, 327, 331, pl. lxvii (Struthiomimus).

Osborn, H. F. 1902 H, 675.

1902 I, 13, 18.

1917 A, 737, pls. xxiv, xxvi, figs. 3-8, 11, 14-17 (Struthiomimus).

1924 C, 12 (Struthiomimus).

Peale, A. C. 1912 A, 754.

Stenmann, G. 1922 A, 242, fig. 1.

Van Straelen, V. 1928 A, 305 (Struthiomimus).

Zittel and Brouli 1911 A, 283.

1923 A, 342, fig. 451 (Struthiomimus).

Upper Cretaceous (Belly River); Alberta; (Hell Creek); Montana.

### **Ornithomimus grandis Marsh.**

Hay, O. P. 1902 A, 494.

Bowen, C. F. 1915 A, 134.

Gadow, H. 1901 B, 429.

Gilmore, C. W. 1920 B, 122, 131 (Deinodon?).

Hatcher, J. B. 1902 H, 831.

1904 A, 356.

1905 B, 12, 41, 87.

Hay, O. P. 1910 B, 299.

Huene, F. 1921 D, 392 (Struthiomimus).

Lambe, L. M. 1904 E, 33.

Matthew and Brown 1922 A, 377, 383 (Deinodon horridus?).

Osborn, H. F. 1902 I, 13.

1917 A, 740 (Deinodon?).

Stanton and Hatcher 1905 A, 12, 41.

Upper Cretaceous (Eagle); Montana; (Lance); Wyoming.

A species of doubtful generic position.

### **Ornithomimus minutus Marsh.**

Hay, O. P. 1902 A, 494.

Bowen, C. F. 1915 A, 134.

Gilmore, C. W. 1920 B, 131, 142, fig. 79.

Lambe, L. M. 1904 E, 33.

Matthew and Brown 1922 A, 377 ("indeterminate").

Osborn, H. F. 1902 I, 13.

Upper Cretaceous (Lance); Wyoming.

### **Ornithomimus sedens Marsh.**

Hay, O. P. 1902 A, 494.

Bigot, A. 1897 A, 464, fig. 4.

Bowen, C. F. 1915 A, 134.

Gilmore, C. W. 1920 B, 131, pl. xxxv, fig. 1; text-figs. 67-69.

Janensch, W. 1925 A, *passim*.

Lambe, L. M. 1904 E, 33, pl. ii, fig. 9.

Matthew and Brown 1922 A, 377, 378.

Merrill, G. P. 1907 A, 74.

Osborn, H. F. 1902 I, 13.

Upper Cretaceous (Lance); Wyoming.

### **Ornithomimus tennis Marsh.**

Hay, O. P. 1902 A, 494.

Bowen, C. F. 1915 A, 132.

Gilmore, C. W. 1920 B, 131, 135, text-fig. 70.

Hatcher, J. B. 1902 H, 831.

1905 B, 87.

Huene, F. 1921 D, 392 (Struthiomimus).

Lambe, L. M. 1904 E, 33.

Matthew and Brown 1922 A, 377, 378 (Struthiomimus).

Osborn, H. F. 1902 I, 13.

1917 A, 740 (Struthiomimus).

Upper Cretaceous (Judith River); Montana.

### **Ornithomimus velox Marsh.**

Hay, O. P. 1902 A, 494.

Bigot, A. 1897 A, 467, figs. 11, 12.

Bowen, C. F. 1915 A, 134.

Cannon, G. L. 1906 B, 197.

Cross, W. 1896 A, 227.

Gilmore, C. W. 1920 B, 131.

Hatcher, J. B. 1902 H, 831.

Hay, O. P. 1908 E, 357.

Heilmann, G. 1926 A, 159, figs. 113, 126.

Huene, F. 1921 D, 392.

Lambe, L. M. 1904 C, 23.

1904 E, 33.

Matthew and Brown 1922 A, 377, 378.

Osborn, H. F. 1902 I, 13.

1917 A, 738, fig. 3 a.

Upper Cretaceous (Denver); Colorado; (Hell Creek); Montana.

### **Ornithomimus sp. indet.**

Gilmore, C. W. 1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

Hay, O. P. 1903 D, 119.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

## **MANOSPONDYLUS Cope. Type *M. gigas* Cope.**

Hay, O. P. 1902 A, 500.

Hatcher, J. B. 1907 B, 113, 298.

Hay, O. P. 1903 D, 117.

Huene, F. 1909 B, 15.

Lull, R. S. 1907 B, 166, 298.

Troxell, E. L. 1921 A, 476.

### **Manospondylus gigas Cope.**

Hay, O. P. 1902 A, 500.

Bowen, C. F. 1915 A, 140.

Hatcher, J. B. 1905 B, 96 (Monospondylus).

1907 A, 113, 298, fig. 105.

Lull, R. S. 1907 B, 298.

Matthew and Brown 1922 A, 383.

Osborn, H. F. 1902 I, 15.

1917 A, 762, fig. 17a.

Upper Cretaceous (Lance?); South Dakota?, Wyoming?.



## LABROSAURIDÆ Marsh.

Marsh, O. C. 1832 A, 84, 85.  
 Hay, O. P. 1902 A, 487 (Megalosauridæ).  
 Hoffmann, C. K. 1890 B, 1314.

Nopcsa, F. 1901 A, 249.  
 1923 A, 184.  
 Zittel and Broili 1911 A, 280.  
 1923 A, 245, 366.

LABROSAURUS Marsh. Type *Allosaurus lucaris* Marsh.

Marsh, O. C. 1879 B, 91.  
 Hay, O. P. 1902 A, 489 (Antrodemus, in part).  
 1903 E, 351.  
 Hoernes, R. 1886 A, 621.  
 Huene, F. 1909 B, 15.  
 1926 B, 88, 99, 109.  
 Janensch, W. 1925 A, 86, 89.  
 Lull, R. S. 1910 A, 15.  
 Nopcsa, F. 1901 A, 255.  
 1901 B, 201.  
 1902 B, 106.  
 Simpson, G. G. 1926 H, 211.  
 Stromer, E. 1915 B, 14 (Syn. of Antrodemus).  
 Zittel and Broili 1911 A, 280.  
 1923 A, 345.

**Labrosaurus ferox** Marsh.

Marsh, O. C. 1884 B, 333, pl. ix.  
 Hay, O. P. 1902 A, 490 (Antrodemus valens, part).

Gilmore, C. W. 1914 A, 25.  
 1920 B, 124, pl. xxxiii, figs. 1-3.  
 Hay, O. P. 1908 E, 352.  
 Huene, F. 1926 B, 89, pl. i.  
 Merrill, G. P. 1907 A, 73.  
 Nopcsa, F. 1901 A, 255.  
 Upper Jurassic or Lower Cretaceous (Morrisson); Colorado.  
 A species of uncertain generic position.

**Labrosaurus lucaris** (Marsh).

Hay, O. P. 1902 A, 489 (Antrodemus).  
 1908 E, 35.  
 1920, in Gilmore, C. W. 1920 B, 125.  
 Janensch, W. 1925 A, 89.  
 Mook, C. C. 1916 A, 141 (Antrodemus).  
 Upper Jurassic or Lower Cretaceous (Morrisson); Colorado.

*Superfamily* CŒLUROIDÆ, new name.

Abel, O. 1920 A, 388 (Cœlurosauria).  
 Heilmann, G. 1926 A, 204 ("cœlurosaur").  
 Huene, F. 1914 A, 146 (Cœlurosauria).  
 1914 D, 154 (Cœlurosauria).  
 1914 F, 670 ("cœlosaurier").  
 1914 G, 32, 37 (Cœlurosauria).  
 1914 K, 11 (Cœlurosauria).  
 1920 A, 162 ("cœlurosaurier").  
 1921 C, 315 (Cœlurosauria).  
 1921 D ("cœlurosaurier").  
 1923 A, 457 (Cœlurosauria).  
 1925 G, 316 ("cœlurosaurier").  
 1926 B, 81, 98, 109 (Cœlurosauria).

Huene, F. 1926 D, 474 (Cœlurosauria).  
 Janensch, W. 1925 A, *passim* ("cœlosaurier").  
 Lull, R. S. 1917 B, 504, 508 (Compsognatha).  
 1924 A, 231, 256 (Cœlurosauria).  
 Matthew, W. D. 1915 C, 32 (Cœlurosauria).  
 Nopcsa, F. 1922 A, 115 ("cœlurosaurier").  
 1923 H, 100, 103, 125, 146, 147, 173, 183, 184, tab. (Cœlurosauria).  
 1923 A, 183 (Cœlurosauroidæ).  
 Simpson, G. G. 1926 I, 454 (Cœlurosauria).  
 1926 J, 458 (Cœlurosauria).  
 Williston, S. W. 1925 B, 292 (Cœlurosauridæ).  
 Zittel and Broili 1923 A, 340, 366 (Cœlurosauria).

## CŒLURIDÆ Marsh.

Hay, O. P. 1902 A, 492.  
 Abel, O. 1919 A, 531.  
 Arldt, T. 1907 D, 646.  
 1909 A, 261 ("cœluriden").  
 1912 A, 662, 668.  
 Depéret, C. 1912 A, 705 ("cœluridés").  
 Gilmore, C. W. 1924 B, 10.  
 Günther, A. 1886 A, 443 (Cœluria).  
 Hoernes, R. 1886 A, 621.  
 Hoffmann, C. K. 1890 B, 1314 (Cœluria).  
 Huene, F. 1908 B, 264.  
 1914 A, 146.  
 1914 D, 155 ("cœluriden").  
 1914 G, 37, pl. vii.  
 1920 A, 162.  
 1921 D, 393, 395.  
 1926 B, 98.

Koken, E. 1900 A, 463 (Cœloruria, Cœluridæ).  
 Lull, R. S. 1910 A, 14.  
 1924 A, 231.  
 Matthew, W. D. 1915 C, 32.  
 Matthew and Brown 1922 A, 368, 375.  
 Nopcsa, F. 1901 A, 249, 275.  
 1923 H, 96, 125, 146, 172, 175 (Cœluridæ, Cœlurinæ).  
 1928 A, 183 (Compsognathidæ).  
 Palacký, J. 1902 B, 140 ("cœluriden").  
 Seeley, H. G. 1888 G, 169 (Cœluria).  
 Simpson, G. G. 1926 J, 458 (Cœlurosauria).  
 Tornier, G. 1913 B, 368, 375.  
 Wamich, P. 1913 A, 24 ("ornitholestiden").  
 Zittel and Broili 1911 A, 280.  
 1923 A, 341, 366.  
 Zittel, Eastman, etc. 1902 A, 231.

CÆLURUS Marsh. Type *C. fragilis* Marsh.

- Unless otherwise indicated the authors, as cited, use for this genus the name *Ornitholestes*.
- Hay, O. P. 1902 A, 493 (Cœlurus).
- Abel, O. 1911 A, 169, 175.  
1912 F, 71, 341.  
1916 A, 471, 494.  
1919 A, 583.  
1920 A, 389.  
1922 C, 434.
- Andrews, C. W. 1921 C, 573.
- Anonymous 1917 A, 213.
- Case, E. C. 1898 C, 635 (Cœlurus).
- Clark, Bibbins, and Berry 1911 A, 66 (Cœlurus).
- Darton, N. H. 1908 A, 446.
- Depéret, C. 1912 A, 705 (Cœlurus).
- Gilmorg, C. W. 1920 B, 61, 64, 82, 145, 158;  
126 (Ornitholestes a syn. ? of Cœlurus).  
1924 B, 4.
- Gregory and Camp 1918 A, 515, pl. xlii.
- Heilmann, G. 1913 A, 57, fig. 46.  
1913 B, 36, 49.  
1914 A, 64.  
1916 A, 85, 105, fig. 198.  
1926 A, 204, 206, fig. 19 (Ornitholestes, Cœlurus).
- Hoernes, R. 1886 A, 621 (Cœlurus).
- Huene, F. 1901 A, 160 (Cœlurus).  
1906 B, 150.  
1908 B, 273, 337 (Ornitholestes); 338 (Cœlurus).  
1909 B, 13 (Cœlurus); 15 (Ornitholestes).  
1914 D, 155 (Cœlurus).  
1914 G, 34.  
1915 A, 501.  
1920 A, 162 (Cœlurus, Ornitholestes).  
1921 C, 318.  
1921 D, 390, 393, 395 (Ornitholestes, Cœlurus).  
1923 A, 455.  
1925 B, 158 (Ornitholestes, Struthiomimus).  
1926 B, 86, pl. ii (Cœlurus); 85, 99, pl. ii (Ornitholestes).  
1926 D, 486.
- Janensch, W. 1920 A, 229.  
1925 A, 20, 32, 46 (Cœlurus); *passim* (Ornitholestes).
- Joleaud, L. 1920 A, 493.
- Kingsley, J. S. 1923 A, 169, fig. 182.
- Lambe, L. M. 1904 E, 34.
- Lebedinsky, N. G. 1913 A, 767 (Cœlurus).
- Lull, R. S. 1904 D, 144.  
1910 A, 2, 15 (Ornitholestes); 14 (Cœlurus).  
1911 B, 174 (Cœlurus).  
1912 D, 415.  
1915 A, 155.  
1917 B, 508 (Cœlurus); 512, fig. 155 (Ornitholestes).  
1924 A, 231 (Cœlurus); 231, fig. 24 (Ornitholestes).
- Lydekker, R. 1912 C, 129 (Cœlurus).
- Matthew, W. D. 1915 C, 27, 55, figs. 17, 18.
- Matthew and Brown 1922 A, 368, 371, 375.
- Mook, C. C. 1916 A, 153, 154 (Cœlurus).  
1918 A, 467.
- Nopcsa, F. 1901 A, 256 (Cœlurus).  
1902 B, 106 (Cœlurus).  
1906 A, 66 (Cœlurus, Ornitholestes).  
1907 A, 235.  
1918 B, 239.  
1923 C, 469, fig. 5 (Ornitholestes); 470, fig. 6 (Cœlurus).  
1923 E, 1046.  
1923 H, 95, 96 (Ornitholestes); 96 (Cœlurus).  
1928 A, 183 (Cœlurus, Ornitholestes).
- Osborn, H. F. 1903 A, 459 (Ornitholestes, type *O. hermanni*).  
1903 G, 701.  
1904 Q, 692, figs.  
1915 E, 147.  
1916 C, 150.  
1917 A, 733.  
1917 B, 213.  
1917 C, 5, fig. 1.  
1924 C, 12.
- Perrier, E. 1920 A, 316 (Cœlurus).
- Romer, A. S. 1923 C, 609, 616.
- Sauvage, H. E. 1902 B, 9 (Cœlurus).
- Seeley, H. G. 1887 E, 197 (Cœlurus).  
1904 A, 339 (Cœlurus); 341 (Ornitholestes).
- Simpson, G. G. 1926 H, 206, 208, 215 (Cœlurus); 211, 215 (Ornitholestes).
- Versluys, J. 1910 B, 192.
- Whitnall, H. O. 1925 A, 22.
- Wieland, G. R. 1925 B, 558 (Ornitholestes, Struthiomimus).
- Williston, S. W. 1885 A, 629 (Cœlurus).  
1886 A, 282 (Cœlurus).  
1905 B, 345 (Cœlurus).  
1925 A, 176.
- Zittel and Broili 1911 A, 280 (Cœlurus); 283 (Ornitholestes).  
1923 A, 341 (Cœlurus, Ornitholestes).
- Zittel, Eastman, etc. 1902 A, 231 (Cœlurus).
- Cœlurus agilis Marsh.**
- Hay, O. P. 1902 A, 493.
- Gilmore, C. W. 1914 A, 25.  
1920 B, 128, pl. xxxiv, figs. 5, 6.
- Heilmann, G. 1926 A, 23, fig. 12.
- Huene, F. 1926 B, pl. i.
- Mook, C. C. 1916 A, 142.  
Upper Jurassic or Lower Cretaceous (Morrisson); Wyoming, Colorado.
- Cœlurus fragilis Marsh.**
- Hay, O. P. 1902 A, 493.
- Gilmore, C. W. 1909 B, 39, fig. 3.  
1914 A, 4.  
1920 B, 127, pl. xxxiv, figs. 4, 17, 18.  
1921 E, 585.
- Hoernes, R. 1886 A, 621.
- Huene, F. 1908 B, 305, fig. 299.  
1926 B, 99, pl. i.
- Janensch, W. 1925 A, 20, 32.
- Lull, R. S. 1911 C, 187.
- Mook, C. C. 1916 A, 142.
- Simpson, G. G. 1926 E, 3.  
Upper Jurassic or Lower Cretaceous (Morrisson); Wyoming.

***Caelurus hermanni* (Osborn).**

Unless otherwise indicated the writers, as quoted, use the generic name *Ornitholestes*.

Osborn, H. F. 1903 A, 459, figs. 1-3.

Abel, O. 1920 A, 390, fig. 606.

1921 A, 187, 264, fig. 46.

1922 C, 436, fig. 364.

1925 A, 66, fig. 42.

Brown, B. 1919 A, 428, fig. ("dinosaur").

Gilmore, C. W. 1915 E, 507 (*O. hermanni*).

1920 B, 81.

1924 B, 5, 7, fig. 2.

Heilmann, G. 1913 B, 38, figs. 80, 81.

Huene, F. 1926 B, 82, 85, pl. 1.

Janensch, W. 1925 A, 20, 32, 36.

Joleaud, L. 1920 A, 494.

Lambe, L. M. 1904 A, 254.

1904 C, 23.

1904 E, 34, pl. ii, fig. 8.

1904 G, 22.

1914 B, 130.

Mook, C. C. 1916 A, 143.

Osborn, H. F. 1903 G, 701.

1904 B, 254.

1904 F, 36.

1917 A, 735, pl. xxvi; text-figs. 1-3.

Upper Jurassic or Lower Cretaceous (Morrisson); Wyoming.

**CHIROSTENOTES Gilmore. Type *C. pergracilis* Gilmore.**

Gilmore, C. W. 1924 B, 3.

Osborn, H. F. 1924 C, 12.

***Chirostenotes pergracilis* Gilmore.**

Gilmore, C. W. 1924 B, 3, pl. i; text-figs.

1, 3, 4.

Upper Cretaceous (Belly River); Alberta.

**CAELOPHYSIS Cope. Type *C. bauri* Cope; here chosen.**

Hay, O. P. 1902 A, 493.

Broili, F. 1915 B, 51.

Case, E. C. 1922 B, 80.

1927 B, 209.

Huene, F. 1906 B, 149.

1908 B, 273, 305.

1909 B, 13.

1909 C, 322.

1914 D, 154.

1914 G, 32.

1915 A, 500.

1920 A, 162.

1921 C, 318.

1921 D, 393.

1922 H, 148, 150.

1926 B, 104.

1926 E, 2.

Lull, R. S. 1910 A, 14.

Nopcsa, F. 1901 A, 255 (Syn. *Tanystropheus*).

1922 B, 170 (*Tanystropheus*).

1923 H, 96.

1928 A, 183.

Zittel and Broili 1911 A, 280.

1923 A, 341.

***Caelophysis bauri* Cope.**

Hay, O. P. 1902 A, 493.

Abel, O. 1912 F, 274.

Broili, F. 1915 B, 51.

Case, E. C. 1922 B, 80.

1927 B, 209.

Huene, F. 1906 B, 118, pl. xi, figs. 3, 4; pl. xii, fig. 1; text-fig. 20.

1908 B, 273, 307, 318, pl. cx, fig. 1.

1915 A, 500, figs. 42-51.

1921 D, 392.

1926 E, 5.

Nopcsa, F. 1901 A, 256, 257 (*Tanystropheus*).  
Triassic; New Mexico.

***Caelophysis longicollis* Cope.**

Hay, O. P. 1902 A, 493.

Abel, O. 1912 F, 274.

Broili, F. 1915 B, 51.

Case, E. C. 1922 B, 80, 81.

1927 B, 209, pl. i; text-figs. 1-9 (This species?).

Huene, F. 1906 B, 118, pl. x, figs. 2-10; pl. xi, figs. 1, 2; text-figs. 11-19.

1908 B, 273, 307, 318.

1915 A, 500, figs. 28-40.

1921 D, 392.

1926 E, 5.

Nopcsa, F. 1901 A, 255, 257 (*Tanystropheus*).  
Triassic; New Mexico.

***Caelophysis willistoni* Cope.**

Hay, O. P. 1902 A, 493.

Abel, O. 1912 F, 274.

Broili, F. 1915 B, 51.

Case, E. C. 1922 B, 80.

1927 B, 209.

Huene, F. 1906 B, 118.

1908 B, 307, 318.

1915 A, 500, figs. 52-64.

1921 D, 392.

1926 E, 5.

Nopcsa, F. 1901 A, 255-257 (*Tanystropheus*).  
Triassic; New Mexico.

***Caelophysis* sp. indet.**

Case, E. C. 1922 B, 81, fig. 31.

1926 A, 54. Triassic (Dockum); Texas.

1927 A, 227. Triassic (Dockum); Texas.

Huene, F. 1926 E, 5. Triassic (Upper?); Texas.

**TICHOSTEUS Cope. Type *T. lucasani* Cope.**

Hay, O. P. 1902 A, 493.

Huene, F. 1909 B, 13.

Nopcsa, F. 1901 A, 261.

Osborn and Mook 1921 A, 272, 274.

***Tichosteus aequifacies* Cope.**

Hay, O. P. 1902 A, 493.

Mook, C. C. 1916 A, 142.

Osborn and Mook 1919 A, 390.

Osborn and Mook 1921 A, 273, text-fig. 16.  
Upper Jurassic or Lower Cretaceous (Morri-  
son); Colorado.

**Tichosteus lucasanus** Cope.

Hay, O. P. 1902 A, 493.

Cope, E. D. 1877 F, 195.

Mook, C. C. 1916 A, 142.

Osborn and Mook 1919 A, 390.

1921 A, 272, text-fig. 15.

Upper Jurassic or Lower Cretaceous (Morri-  
son); Colorado.

**MACOLOGNATHIDÆ** Marsh.

Hay, O. P. 1902 A, 505.

**MACOLOGNATHUS** Marsh. Type *M. vagans* Marsh.

Hay, O. P. 1902 A, 505.

**Macelognathus vagans** Marsh.

Hay, O. P. 1902 A, 505.

Gilmore, C. W. 1909 B, 39.

Moodie, R. L. 1908 C, 321.

Mook, C. C. 1916 A, 147.

Simpson, G. G. 1926 E, 3.

Upper Jurassic or Lower Cretaceous (Morri-  
son); Wyoming.

**PODOKESAURIDÆ** Huene.

Huene, F. 1914 A, 146.

Abel, O. 1919 A, 580.

Huene, F. 1914 D, 154 ("podokesauriden").

1914 G, pl. vii.

1914 K, 11.

1915 A, 501.

1920 A, 162.

1921 D, 394, 399.

Lull, R. S. 1915 A, 155.

1917 D, 111.

1924 A, 231.

Matthew, W. D. 1915 C, 32.

Nopcea, F. 1923 H, 125 (Podokeosaurinæ).

1928 A, 183 (Podokesauridæ, Podokesau-  
rinæ, Cœlophysinæ).

**PODOKESAURUS** Talbot. Type *P. holyokensis* Talbot.

Talbot, M. 1911 A, 469.

Abel, O. 1920 A, 388, fig. 604.

Heilmann, G. 1916 A, 90.

Huene, F. 1914 D, 154.

1914 F, 672.

1914 G, 31.

1920 A, 162.

1921 D, 393.

1923 A, 456.

1926 B, pl. ii.

Janensch, W. 1925 A, 50 (Podokesaurus).

Lull, R. S. 1912 D, 414.

1915 A, 156.

1924 A, 231.

Nopcea, F. 1923 E, 1045 (Podokeosaurus).

1923 H, 96 (Podokeosaurus).

1928 A, 183.

Osborn, H. F. 1917 B, 211, fig.

Schuchert and Levene 1927 A, 318, fig.

Whitnall, E. O. 1925 A, 9.

Zittel and Broili 1923 A, 340.

**Podokesaurus holyokensis** Talbot.

Talbot, M. 1911 A, 469, pl. iv; text-figs. 1-4.

Abel, O. 1912 F, 71, 274.

1926 B, 20, 38.

Heilmann, G. 1913 B, 25, 56, figs. 68, 90, 93-95.

1916 A, 113, fig. 202.

1926 A, 206, figs. 114, 121.

Huene, F. 1914 G, 31, pl. vi.

1926 E, 6.

Lull, R. S. 1914 D, 411, 414, 415, fig. 4.

1915 A, 157, 201, pl. xi; text-figs. 26-29.

1917 B, 508, fig. 152.

1917 D, 111, 112, pl. iii, fig. 2.

Moodie, R. L. 1913 A, 251.

Shufeldt, R. W. 1916 F, 253.

Triassic (Newark); Massachusetts.

**HALLOPIDÆ** Marsh.

Hay, O. P. 1902 A, 494.

Abel, O. 1919 A, 581.

Brauns, D. 1890 A, 187 ("hallopoden").

Hoernes, R. 1886 A, 623 (Hallopoda).

Hoffmann, C. K. 1890 B, 1314 (Hallopoda,  
Hallopodidæ).

Huene, F. 1914 A, 146 (Hallopoda).

1914 D, 155 (Hallopoda).

1914 G, 37, pl. vii (Hallopoda).

1920 A, 162 (Hallopoda).

1921 D, 394, 399 (Hallopoda).

Huene, F. 1926 B, 97, 98, 101 (Hallopoda).

Koken, E. 1900 A, 462 (Hallopida, Hallopodidæ).

Lull, R. S. 1924 A, 231.

Matthew, W. D. 1915 C, 32 (Hallopodidæ).

Nopcea, F. 1901 A, 249 (Hallopodidæ; subfam.  
Cœluridæ).

1901 B, 195, 201 (Hallopodidæ).

1923 H, 96, 125 (Hallopodidæ, Hallopodinæ,  
Hallopodidæ).

1928 A, 183 (Hallopodidæ).

Zittel and Broili 1923 A, 340, 366 (Hallopodidæ).

**HALLOPUS** Marsh. Type *Nanosaurus victor* Marsh.

Hay, O. P. 1902 A, 494.

Abel, O. 1911 A, 190.

1912 F, 292.

Beddard, F. E. 1898 A, 157.

Case, E. C. 1898 C, 635.

Cross and Howe 1905 A, 494.

Hay, O. P. 1910 C, 17.

Hoernes, R. 1886 A, 623.

- Hoffmann, C. K. 1890 B, 1314.  
 Huene, F. 1901 A, 160.  
     1908 B, 392.  
     1914 G, 21, 22.  
     1920 A, 162.  
     1921 D, 393.  
     1926 B, 98.  
 Huene and Lull 1908 A, 134, 143.  
     1908 B, 112.  
 Lull, R. S. 1910 A, 17.  
     1924 A, 231.  
 Nopcsa, F. 1901 A, 256.  
     1905 C, 292.  
     1918 B, 239.  
     1923 E, 1045.  
     1923 H, 96, 146, pl. vi, fig. 12a.  
     1928 A, 183.  
 Peck, F. B. 1904 A, 36 (Hollopus).  
 Schuchert, C. 1918 B, 262.  
 Williston, S. W. 1925 A, 118, 190, 192, fig. 155.  
 Woodward, A. S. 1907 B, 143.  
 Woodward, H. 1904 B, 145.
- Zittel and Broili 1911 A, 261.  
     1923 A, 340.  
 Zittel, Eastman, etc. 1902 A, 231.
- Hallopus victor Marsh.**  
 Hay, O. P. 1902 A, 494.  
 Dollo, L. 1889 H, 680.  
 Gadow, H. 1901 B, 423.  
 Gilmore, C. W. 1925 B, 404 (Nannosaurus).  
 Hoffmann, C. K. 1890 B, 1314.  
 Huene, F. 1914 G, 23, pl. v; text-figs. 50-58.  
     1921 D, 392.  
 Huene and Lull 1908 B, 113, figs. 1-6.  
 Lambe, L. M. 1917 B, 75.  
 Lull, R. S. 1926 A, 458 ("Hallopus").  
 Lydekker, R. 1909 C, 461 (Hallopas).  
 Nopcsa, F. 1902 C, 152 (Nanosaurus).  
 Peck, F. B. 1904 A, 30.  
 Williston, S. W. 1905 B, 338.  
     1915 D, 127 ("Hallopus").  
 Upper Triassic (Hallopus beds); Colorado.
- Suborder SAUROPODA Marsh.**
- Marsh, O. C. 1878 F, 412.  
 Hay, O. P. 1902 A, 482 (Opisthocœlia).  
 Abel, O. 1909 C, (119) ("sauropoden").  
     1911 A, 159.  
     1912 F, 404 ("sauropoden").  
     1916 A, 494 ("sauropoden").  
     1919 A, 606.  
 Ameghino, F. 1906 A, 38 ("sauropodes").  
 Anonymous 1878 A, 76.  
     1910 A, 198 ("sauropod dinosaurs").  
     1922 A, 184.  
 Arldt, T. 1907 D, 680.  
     1909 A, 263 ("sauropoden").  
     1912 A, 668, 678.  
 Bigot, A. 1897 A, 463 ("sauropodes").  
 Broom, R. 1914 H, 1076.  
     1924 B, 64, fig. 13.  
 Case, E. C. 1897 D, 88.  
     1898 C, 636.  
 Cope, E. D. 1885 BB, 68 (Opisthocœlia).  
 Depéret, C. 1896 A, 181 ("sauropodes").  
     1912 A, 705 ("sauropodes").  
 Dollo, L. 1889 H, 677 ("sauropodes").  
     1905 B, 251 ("sauropodes").  
     1906 A, 445 ("sauropodes").  
 Drevermann, F. 1911 A, 274.  
 Fraas, E. 1908 A, 137.  
     1911 B, 32 ("sauropoden").  
 Fürbringer, M. 1888 A, 1620.  
 Gadow, H. 1896 C, 204.  
     1901 B, 418.  
 Gilmore, C. W. 1907 A, 164 (Opisthocœlia).  
     1909 A, 239 (Opisthocœlia).  
     1927 B, 96.  
 Gregory, W. K. 1919 A, 18.  
 Günther, A. 1886 A, 443.  
 Haeckel, E. 1868 A, 455 (Stenosauria).  
 Hatcher, J. B. 1901 D, 54.  
     1903 A, 47 (Opisthocœlia).  
     1904 A, 353.  
     1907 A, 10.  
 Hay, O. P. 1908 C, 672.  
     1911 B, 398.
- Heilprin, A. 1887 A, 161.  
 Hennig, E. 1912 B, 99 ("sauropoden").  
 Hoernes, R. 1886 A, 612.  
 Hoffmann, C. K. 1890 B, 1311.  
 Holland, W. J. 1905 E, 683.  
     1912 A, 206.  
     1915 C, 153 ("sauropod dinosaur").  
     1923 A, 477.  
 Huene, F. 1908 B, 340.  
     1908 D, 294 ("sauropoden").  
     1909 B, 13.  
     1914 A, 145.  
     1914 D, 155 ("sauropoden").  
     1914 G, 27.  
     1922 A, 80, 86 ("sauropoden").  
     1926 D, 474.  
     1927 B, 444 ("sauropoden").  
     1927 C, 121.  
 Jaekel, O. 1910 A, 276 ("sauropoden").  
     1914 A, 197 (Allophagi).  
 Janensch, W. 1914 A, 43, figs. 16, 17.  
 Johnson, A. 1883 A, 408.  
 Koken, E. 1893 B, 395 ("sauropoden").  
     1900 A, 463.  
 Lafitte, J. P. 1905 A, 409 ("sauropodes").  
 Larkin, P. 1910 A, 93, figs. 1-4 ("sauropod").  
 Lebedinsky, N. G. 1913 A, 769 ("sauropoden").  
 Lucas, F. A. 1902 B, 153.  
 Lull, R. S. 1910 A, 2, 6, 16.  
     1912 A, 209.  
     1914 D, 355.  
     1915 C, 324.  
     1915 F, 833.  
     1917 A, 472.  
     1917 B, 505, 513.  
     1918 C, 130.  
     1919 C (Sauropoda).  
     1924 A, 229, 232, 258, 275.  
 Lydekker, R. 1912 C, 29.  
 Matthew, W. D. 1910 D, 549.  
     1915 A, 275.  
     1915 C, 24, 28, 32, 60 (Opisthocœlia, Sauropoda).

- Matthew, W. D. 1923 C, 408.  
 Moodie, R. L. 1909 G, 363.  
     1926 A, 87, text-fig. 8 ("sauropods").  
 Mook, C. C. 1917 A, 355.  
     1918 A, 458.  
 Mudge, B. F. 1897 A, 224.  
 Nopcsa, F. 1900 A, 560 ("sauropoden").  
     1901 A, 257.  
     1901 B, 203.  
     1902 C, 174.  
     1905 C, 289 (Saurischia).  
     1905 D, 289.  
     1907 A, 231.  
     1911 A, 148.  
     1915 B, 18.  
     1917 A, 204.  
     1917 B, 338.  
     1918 B, 240 ("sauropoden").  
     1922 A, 115 ("sauropoden").  
     1923 D, 107, 113.  
     1923 E, 1046.  
     1923 H, 97-175, tab.  
     1926 A, 640.  
     1928 A, 184.  
 Osborn, H. F. 1903 D, 456, 466 (Ceteosauria).  
     1903 G, 761, 837.  
     1904 H, 114 (Opisthocoelia).  
     1904 I, 271, 272 (Opisthocoelia).  
     1904 J, 255 (Opisthocoelia).  
     1904 N, 308 (Opisthocoelia).  
     1905 C, 295 (Opisthocoelia).  
     1906 D, 283.  
     1912 J, 6.  
     1917 B, 320.  
 Osborn and Granger 1901 A, 199.  
 Osborn and Mook 1919 A, 396.  
     1921 A.  
 Owen, R. 1866 A, 17, 69 (Opisthocoelia).  
 Palacký, J. 1902 B, 141.  
 Peale, A. C. 1912 A, 748.  
 Peck, F. B. 1904 A, 30.  
 Perrier, E. 1920 A, 312 ("sauropodes").  
 Pompeckj, J. F. 1921 A, 2 ("sauropoden").  
 Reynolds, S. H. 1897 A, 205, 273, 276.  
 Riggs, E. S. 1903 C, 165, 167 (Opisthocoelia).  
     1904 B, 244 (Opisthocoelia).  
 Schaffer, F. X. 1912 A, 198 ("sauropoden").  
 Seeley, H. G. 1888 G, 163, 171.  
 Simpson, G. G. 1926 H, 205.  
 Steinmann, G. 1907 A, 449.  
     1908 A, 219 ("sauropoden").  
     1910 A, 99 ("sauropoden").  
 Stremme, H. 1909 B, 796 ("sauropoden").  
 Stromer, E. 1912 A, 56.  
     1913 A, 62.  
 Terra, P. 1911 A, 241 ("sauropoden").  
 Thevenin, A. 1907 B, 124, 128 ("sauropodes").  
 Tornier, G. 1913 B, 363, 374<sup>2</sup> (Diplodocia).  
 Van den Broeck, E. 1900 A, 82 ("sauropodes").  
 Van Straelen, V. 1925 A, 3, fig. 2 ("dinosaur, duckbilled type").  
 Versluys, J. 1910 B, 214 ("sauropoden").  
     1910 C, 425 ("sauropoden").  
     1912 B, 633, 687.  
 Wieland, G. R. 1907 A, 66 ("sauropods").  
     1910 C, 93 ("sauropod").  
     1925 B, 557 ("sauropods").  
 Williston, S. W. 1914 A, 18, 45.  
     1917 C, 412.  
     1918 A, 79.  
     1925 A, 95, 100, 102, 111, 123, 142, 170, 176, 197.  
     1925 B, 212, 292.  
 Woodward, A. S. 1905 A, 243.  
     1922 C, 16.  
 Woodward, H. 1904 B, 146.  
 Zittel and Broili 1911 A, 283.  
     1923 A, 336, 347, 366.  
 Zittel, Eastman, etc. 1902 A, 231.

## CAMARASAURIDÆ Cope.

- Cope, E. D. 1877 R, 3.  
 Unless otherwise indicated the authors, as quoted, call this family Morosauridæ.  
 Hay, O. P. 1902 A, 482 (Morosauridæ); 484 (Atlantosauridæ).  
 Arlét, T. 1907 D, 666.  
     1909 A, 262 ("morosauriden").  
     1912 A, 668, 678, 679, 689.  
 Dollo, L. 1889 H, 677.  
 Fraas, E. 1908 A, 140.  
 Frech, F. 1906 A, 495 ("morosaurier").  
 Günther, A. 1886 A, 443.  
 Hoernes, R. 1886 A, 613.  
 Hoffmann, C. K. 1890 B, 1311.  
 Huene, F. 1908 B, 347 (Cetiosauridæ).  
     1908 D, 296 ("cetiosauriden").  
     1909 B, 14.  
     1914 G, 38, pl. vii.  
 Huene, F. 1927 B, 460.  
     1927 C, 123.  
 Jaekel, O. 1914 A, 197 ("morosauriden").  
 Koken, E. 1898 A, 141.  
     1900 A, 463 (Morosauridæ, Pleurocölidæ).  
 Lull, R. S. 1915 C, 232 (Morosauridæ); 333 (Pleurocölidæ).  
     1924 A, 234.  
 Matthew, W. D. 1915 C, 32 (Cetiosauridæ).  
 Nopcsa, F. 1923 H, 99, 126.  
     1928 A, 184 (Morosauridæ, Camarasaurinæ).  
 Tornier, G. 1913 B, 370, 375.  
 Williston, S. W. 1925 B, 293.  
 Woodward, A. S. 1905 A, 243.  
 Zittel and Broili 1911 A, 287 (Morosauridæ); 285 (Cetiosauridæ).  
     1923 A, 351, 366.

CAMARASAURUS Cope. Type *C. supremus* Cope.

- Cope, E. D. 1877 Q, 7 (Not Cope, E. D. 1877 A, as in Hay, O. P. 1902 A, 485).  
 Unless otherwise indicated the authors, as cited, used for this genus the name *Morosaurus*.  
 Hay, O. P. 1902 A, 483 (Morosaurus); 485 (Camarasaurus).  
 Abel, O. 1909 C, (120).  
     1910 D.  
     1912 F, 248.

- Abel, O. 1916 A, 469, fig. 1.  
1925 A, 243 (Camarasaurus, Morosaurus).
- Andreae, A. 1903 A, 151 (Camarasaurus, Morosaurus).
- Arthaber, G. 1924 A, 450.
- Brauns, D. 1890 A, 187.
- Case, E. C. 1893 C, 633 (Camarasaurus); 720 (Morosaurus).
- Christman, E. S. 1921 A, 622, 623, figs.
- Cope, E. D. 1880 U, 145 (Camarosaurus).
- Cross, W. 1907 A, 640.
- Darton, N. H. 1908 A, 446.
- Dollo, L. 1889 H, 677.
- Fraas, E. 1903 A, 140 (Morosaurus); 141 (Camarasaurus).
- Gaudry, A. 1896 A, 61 (Camarosaurus); 146 (Morosaurus).
- Gilmore, C. W. 1907 A, 153, fig. 9.  
1922 A, 2, 4 (Camarasaurus).  
1925 A, 350 (Camarasaurus).  
1925 B, 408 (Camarasaurus).
- Gratacap, L. P. 1902 A, 5 (Camarasaurus, Morosaurus).
- Gregory, W. K. 1901 A, 145.  
1920 C, 16 (Camarasaurus).  
1921 B, 622, 623, figs. (Camarasaurus).  
1927 C, 171 (Camarasaurus).
- Hatcher, J. B. 1901 C, 336.  
1901 D, 40.  
1902 B, 356, text-fig. 14.  
1903 A, 14.
- Hay, O. P. 1903 C, 680 (Camarasaurus).  
1924 E, 112 (Camarasaurus).
- Heilprin, A. 1887 A, 161 (Morosaurus); 169 (Camarasaurus).
- Hoffmann, C. K. 1890 B, 1315 (Camarasaurus).
- Holland, W. J. 1912 A, 204.  
1923 A, 477-479 (Camarasaurus).  
1924 A, 120 (Camarasaurus).
- Hookey, R. W. 1917 A, 149.
- Huene, F. 1904 A, 323.  
1906 B, 151, fig. 100.  
1908 B, 347 (Camarasaurus, Morosaurus).  
1908 D, 294.  
1909 B, 14 (Camarasaurus, Morosaurus).  
1914 C, 578, pl. viii, figs. 1, 2; 579, pl. viii, fig. 3 (Camarasaurus).  
1922 A, 87 (Camarosaurus).  
1927 A, 123 (Camarasaurus).  
1927 C, 123 (Camarasaurus).
- Janensch, W. 1914 B, 91.  
1922 A, 478.
- Knight, W. C. 1900 A, 454 ("dinosaur").
- Lebedinsky, N. G. 1913 A, 767.
- Lucas, F. A. 1902 B, 155, fig. (Camarasaurus); 163 (Morosaurus).
- Lull, R. S. 1910 A, 7.  
1911 C, 191.  
1915 C, 331, 332.  
1917 A, 474.  
1924 A, 234 (Morosaurus, Camarasaurus).
- Lydekker, R. 1887 E, 153 (Camarasaurus, Morosaurus).
- Matthew, W. D. 1915 C, 27, fig. 6 (Camarasaurus).  
1923 B, 108 (Camarasaurus).  
1923 C, 408 (Camarasaurus).
- Mook, C. C. 1914 A, 223 (Camarasaurus); 225 (Morosaurus).  
1914 B, 19 (Morosaurus a syn.).  
1917 B, 815 (Camarasaurus).
- Mudge, B. F. 1879 A, 225 (Camarasaurus).
- Nopcsa, F. 1900 A, 560 (Camarasaurus).  
1901 A, 258 (Camarasaurus); 260 (Morosaurus).  
1902 B, 111 (Camarasaurus).  
1917 B, 341, fig. 6 (Camarasaurus).  
1923 H, 97, 98, 99 (Camarasaurus); 98 (Morosaurus).  
1925 A, 19 (Morosaurus).
- Osborn, H. F. 1901 G, 159.  
1904 C, 181, seq., figs. 1, 2.  
1904 I, 35 (Morosaurus); 36 (Camarasaurus).  
1904 Q, 686 (Camarasaurus); 689 (Morosaurus).  
1905 G, 374.  
1906 D, 282, 284.  
1915 E, 145 (Camarasaurus).  
1916 D, 151 (Morosaurus a syn.).  
1917 B, 219, fig. (Camarasaurus).  
1924 I, 1, fig. 1 (Camarasaurus).
- Osborn and Granger 1901 A, 199, figs. 1-3, 5, 6.
- Osborn and Mook 1917 A, 215 (Camarasaurus).  
1919 A, 386, 391, pl. i, figs. 1-3 (Morosaurus a syn.).  
1920 A, 15 (Camarasaurus).  
1921 A, 249, pls. lx-lxxxv; text-figs. 29-126 (Camarasaurus).
- Peck, F. B. 1904 A, 31.
- Pompeckj, J. F. 1920 A, 112, 127.  
1921 A, 2.
- Reynolds, S. H. 1897 A, 207, 294.
- Riggs, E. S. 1901 C, 275 (Morosaurus); 281, pl. xlii, fig. 4 (Camarasaurus).  
1903 A, 304 (Morosaurus, Camarasaurus).  
1903 C, 165, 181, pl. xlix, fig. 2 (Morosaurus); 180 (Camarasaurus).  
1904 B, 245 (Camarasaurus, Morosaurus).
- Riggs and Farrington 1902 A, 22062.
- Romer, A. S. 1923 C, 606, fig. 2 (Camarasaurus).
- Ryder, J. A. 1919 A, 390 (Camarasaurus).
- Schuchert, C. 1910 A, 582.
- Seeley, H. G. 1888 G, 168, fig.
- Seitz, A. L. L. 1907 A, 309.
- Simpson, G. G. 1926 E, 4.  
1926 H, 205, 206, 210.
- Steinmann, G. 1907 A, 443.
- Stose, G. W. 1912 A, 3.
- Thevenin, A. 1907 B, 124.
- Tornier, G. 1909 B, 510, figs. 2, 3 (Morosaurus); 515 (Camarasaurus).  
1909 C, 537.  
1910 A, 543.  
1913 B, 370.
- Versluys, J. 1910 B, 214.  
1910 C, 423, figs. C, D.
- Wieland, G. R. 1920 A, 530 (Camarasaurus).
- Williston, S. W. 1909 A, 397.  
1909 E, 194.  
1925 A, 141, 175, 191, figs. 113, 141, 156.  
1925 B, 293 (Camarasaurus).
- Zittel and Broili 1911 A, 287 (Camarasaurus, Morosaurus).

Zittel and Broili 1923 A, 347, figs. 460, 461 (Camarasaurus, Morosaurus).  
Zittel, Eastman, etc. 1902 A, 233 (Camarasaurus); 235 (Morosaurus).

### **Camarasaurus agilis (Marsh).**

Hay, O. P. 1902 A, 483 (Morosaurus).  
Baur, G. 1894 B, 350 (Morosaurus).  
Gilmore, C. W. 1907 A, 151, pls. xu, xii; text-figs. 1-5, 7 (Morosaurus).  
1914 A, 25 (Morosaurus).  
1925 A, 352, 368 (Not this genus).  
Huene, F. 1908 B, 281, fig. 317 (Morosaurus).  
Merrill, G. P. 1907 A, 74 (Morosaurus).  
Mook, C. C. 1916 A, 139 (Morosaurus).  
Pompeckj, J. F. 1920 A, 112 (Morosaurus).  
Riggs, E. S. 1901 C, 275 (Morosaurus).  
Tornier, G. 1909 C, 542 (Morosaurus).  
Versluys, J. 1910 B, 214 (Morosaurus).  
Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

### **Camarasaurus impar (Marsh).**

Unless otherwise indicated the authors, as quoted, refer this species to *Morosaurus grandis*.  
Hay, O. P. 1902 A, 483 (M. grandis, M. impar).  
Abel, O. 1919 A, 608, fig. 475.  
1922 C, 422, fig. 350.  
1925 A, 244, fig. 179.  
Anonymous 1878 A, 76.  
Gadow, H. 1901 B, 419, fig. 96.  
Gaudry, A. 1896 A, 146, fig. 119.  
Geinitz and Deichmüller 1882 B, 14.  
Gilmore, C. W. 1907 A, 151, fig. 6 (M. grandis); 163 (M. impar).  
1925 A, 352 (C. impar, M. impar); 353, 373, 380, 382 (C. grandis); 352, 353, 371, 380, 381 (M. grandis).  
Huene, F. 1908 B, 342, fig. 319.  
Janensch, W. 1914 B, 96.  
Kehrer, F. A. 1896 A, 355, figs. 25, 26.  
Lull, R. S. 1911 C, 191.  
Mook, C. C. 1916 A, 135 (M. grandis); 137 (M. impar).  
Nopce, F. 1901 A, 257 (Apatosaurus grandis) 1901 B, 203, 206 (Apatosaurus grandis).  
Osborn, H. F. 1906 D, 283, fig. 2.  
Pompeckj, J. F. 1920 A, 112, 120.  
Riggs, E. S. 1901 C, 275, pls. xl, xli; pl. xlii, figs. 1, 2 (M. grandis); 275 (M. impar).  
1903 C, 170 (Apatosaurus grandis).  
Schuchert, C. 1918 B, 253, 255.  
Versluys, J. 1910 B, 214, figs. P, Q.  
Williston, S. W. 1909 E, 198.  
Zittel and Broili 1911 A, 286, figs. 432, 433.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming, Colorado.

### **Camarasaurus lentus (Marsh).**

In the following citations this species is referred to *Morosaurus* unless otherwise indicated.  
Hay, O. P. 1902 A, 483.  
Bigot, A. 1897 A, 466, fig. 8.  
Gilmore, C. W. 1907 A, 163.  
1909 A, 198.

Gilmore, C. W. 1914 A, 4.  
1925 A, 352, pls. xii-xvii; text-figs. 1-5.  
Huene, F. 1908 B, 343, fig. 320.  
1927 B, 460, 465 (Camarasaurus).  
1927 C, 124 (Camarasaurus).  
Lull, R. S. 1911 C, 194.  
1919 C, 39.  
Moodie, R. L. 1907 A, 89.  
Mook, C. C. 1916 A, 138.  
Riggs, E. S. 1901 C, 275.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### **Camarasaurus leptodirns Cope.**

Hay, O. P. 1902 A, 486.  
Mook, C. C. 1916 A, 137.  
Osborn and Mook 1921 A, 267, text-fig. 14.  
Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

### **Camarasaurus robustus (Marsh).**

Hay, O. P. 1902 A, 483 (Morosaurus).  
Gilmore, C. W. 1907 A, 163 (Morosaurus).  
1925 A, 352.  
Janensch, W. 1914 B, 96 (Morosaurus).  
Mook, C. C. 1916 A, 137 (Morosaurus).  
Riggs, E. S. 1901 C, 275, pl. xlii, fig. 3 (Morosaurus).  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### **Camarasaurus supremus Cope.**

Hay, O. P. 1902 A, 486.  
Abel, O. 1925 A, 244, figs. 178, 181, 182, 185.  
Ballou, W. H. 1897 A, 22.  
Cope, E. D. 1878 KK, 476.  
1891 N, 43, fig. 21.  
Gilmore, C. W. 1925 A, 352, 366, 370.  
Gregory, W. K. 1927 C, 172, fig. 3.  
Hatcher, J. B. 1901 C, 339.  
Holland, W. J. 1924 A, 124, fig. 2.  
Huene, F. 1922 A, 87 (Camarasaurus).  
1927 B, 460 (Morosaurus).  
Lull, R. S. 1926 A, 453.  
Matthew, W. D. 1903 F, 5 ("Camarasaurus").  
Mook, C. C. 1914 A, 223, figs. 1-3.  
1914 B, 19, fig. 1.  
1916 A, 135.  
Osborn, H. F. 1906 D, 282.  
Osborn and Mook 1921 A, 262, pls. lxxi-lxxxv; text-figs. 7-13, 31.  
Riggs, E. S. 1903 A, 305.  
Williston, S. W. 1915 D, 127.  
Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

### **Camarasaurus sp. indet.**

Cross, W. 1907 B, 6 (Morosaurus). Upper Cretaceous (McElmo); Colorado.  
Lee, W. T. 1902 A, 37 (Morosaurus). Upper Jurassic or Lower Cretaceous (Morrison); Colorado.  
Mook, C. C. 1916 A, 57, 94, 96 (Morosaurus). Upper Jurassic or Lower Cretaceous (Morrison); Colorado, Wyoming.  
Simpson, G. G. 1926 E, 3 (Morosaurus). Upper Jurassic; Wyoming.



UINTASAURUS Holland. Type *U. douglassi* Holland.

Holland, W. J. 1919 A, 38.

1924 A, 119.

Huene, F. 1927 B, 467.

1927 C, 125.

**Uintasaurus douglassi** Holland.

Holland, W. J. 1919 A, 38.

Gilmore, C. W. 1925 A, 384.

Holland, W. J. 1924 A, 119, pls. x-xiv; 7 text-figs.

Huene, F. 1927 B, 465.

Lower Cretaceous or Upper Jurassic (Morrison); Utah.

EPANTERIAS Cope. Type *E. amplexus* Cope.

Hay, O. P. 1902 A, 483.

Cope, E. D. 1880 U, 146.

Huene, F. 1909 B, 15.

Nopcsa, F. 1901 A, 259.

Osborn and Mook 1920 A, 15.

1921 A, 282, 284.

Williston, S. W. 1925 B, 293.

**Epanterias amplexus** Cope.

Hay, O. P. 1902 A, 483.

Mook, C. C. 1916 A, 137.

Osborn and Mook 1921 A, 282, text-figs. 24-27.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

HAPLOCANTHOSAURUS Hatcher. Type *H. priscus* Hatcher.Hatcher, J. B. 1903 G, 100 (To replace *Haplocanthus*, preoccupied).

Fraas, E. 1908 A, 141.

Gilmore, C. W. 1907 A, 163.

1922 A, 2, 4.

1925 A, 367, 372.

1903 A, 1, 14, figs. 7-13.

Hatcher, J. B. 1903 A, 1, 14, figs. 7-13.

1903 F, 1 (Haplocanthus, preoccupied).

Holland, W. J. 1910 A, 265, fig. 4.

1912 A, 204 (Haplocanthosaurus).

1924 A, 124 (Haplocanthosaurus).

Huene, F. 1908 B, 347.

1908 D, 294.

1909 B, 14.

1927 B, 457.

1927 C, 122, 123.

Janensch, W. 1925 B, 272 (Haplocanthosaurus).

Joleaud, L. 1920 A, 493.

Lull, R. S. 1910 A, 2.

1919 C, 41.

1924 A, 234.

Moodie, R. L. 1907 A, 89.

Mook, C. C. 1916 A, 154.

Nopcsa, F. 1906 A, figs. 1, 3, 13, 16.

1923 H, 98.

1928 A, 184.

Osborn, H. F. 1915 A, 298.

Riggs, E. S. 1904 B, 229.

Seitz, A. L. L. 1907 A, 312.

Simpson, G. G. 1926 H, 205.

Versluys, J. 1910 C, 436.

Williston, S. W. 1905 B, 345.

1925 B, 293.

Zittel and Broili 1911 A, 285 (Haplocanthosaurus).

1923 A, 351 (Haplocanthosaurus).

**Haplocanthosaurus priscus** Hatcher.

Hatcher, J. B. 1903 F, 1 (Haplocanthus, preoccupied).

Abel, O. 1922 C, 411.

Gilmore, C. W. 1914 A, 25.

1925 A, 367.

Hatcher, J. B. 1903 A, 6, figs. 1, 3, 14, pls. i, iii, iv, v.

Huene, F. 1922 A, 88.

1927 B, 457.

Mook, C. C. 1916 A, 140.

Osborn, H. F. 1903 G, 702 (Haplocanthus).

Osborn and Mook 1919 A, 388.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**Haplocanthosaurus utterbackii** Hatcher.

Hatcher, J. B. 1903 A, 27, pl. ii; text-figs. 1, 15-20.

Abel, O. 1922 C, 411.

Gilmore, C. W. 1914 A, 25.

Holland, W. J. 1924 A, 124, fig. 2 (Haplocanthosaurus).

Huene, F. 1922 A, 88.

1927 B, 457.

Mook, C. C. 1916 A, 140.

Osborn and Mook 1919 A, 388.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

CAULODON Cope. Type *C. diversidens* Cope.

Hay, O. P. 1902 A, 484.

Cope, E. D. 1880 U, 146.

Huene, F. 1909 B, 15.

Nopcsa, F. 1901 A, 258.

Osborn, H. F. 1924 I, 4 (Syn. of Camarasaurus).

Osborn and Mook 1921 A, 269, 271.

Williston, S. W. 1925 B, 293.

**Caulodon diversidens** Cope.

Hay, O. P. 1902 A, 484.

Mook, C. C. 1916 A, 135.

Osborn and Mook 1921 A, 270, pl. ix.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**Caulodon leptoganus** Cope.

Hay, O. P. 1902 A, 484.

Mook, C. C. 1916 A, 138.

Osborn and Mook 1921 A, 271, pl. lxi.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**SYMPHYROPHUS** Cope. Type *S. musculosus* Cope.

Hay, O. P. 1902 A, 484.

Abel, O. 1910 D, 5 (*Symphysosaurus*).Huene, F. 1908 B, 348 (*Symphysosaurus*).

Nopcsa, F. 1901 A, 261.

Osborn and Mook 1921 A, 280, 281.

Williston, S. W. 1925 B, 293.

**Symphrophus musculosus** Cope.

Hay, O. P. 1902 A, 484.

Mook, C. C. 1916 A, 138.

Nopcsa, F. 1901 A, 261.

Osborn and Mook 1919 A, 390,

1921 A, 280, text-figs. 22, 23.

Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**ELOS SAURUS** Peterson and Gilmore. Type *E. parvus* Peterson and Gilmore.

Peterson and Gilmore 1902 A, 490.

Huene, F. 1909 B, 15.

1922 A, 86.

1927 B, 459.

Nopcsa, F. 1923 H, 98.

1928 A, 184.

Williston, S. W. 1925 B, 293.

Zittel and Broili 1923 A, 352 (Synonym of *Pelorosaurus*).**Elosaurus parvus** Peterson and Gilmore.

Peterson and Gilmore 1902 A, 490, pl. xxv; text-figs. 1-10.

Hatcher, J. B. 1903 B, 12.

Huene, F. 1922 A, 87.

1927 B, 457.

Mook, C. C. 1916 A, 139.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**ASTRODON** Johnston. Type *A. johnstoni* Leidy.Unless otherwise indicated, the authors, as cited, use for this genus the name *Pleurocelus*.Hay, O. P. 1902 A, 483 (*Pleurocelus*); 484 (*Astrodon*).

Gilmore, C. W. 1919 E, 395.

1921 E, 588 (*Astrodon*).1922 A, 7 (*Astrodon*, *Pleurocelus*).Hatcher, J. B. 1903 B, 9, 11 (*Astrodon*).

Huene, F. 1908 B, 347.

1908 D, 297.

1909 B, 13 (*Pleurocelus*); 15 (*Astrodon*).

1926 B, 79.

1927 B, 459.

1927 C, 123.

Lucas, F. A. 1904 B, 436 (*Astrodon*, *Pleurocelus*).

Lull, R. S. 1910 A, 16.

1911 B, 174 (*Pleurocelus*); 175 (*Astrodon*).

1915 C, 331.

1917 B, 517.

1924 A, 235.

Nopcsa, F. 1901 A, 257 (*Astrodon*); 260 (*Pleurocelus*).

1923 H, 195.

1928 A, 184.

Simpson, G. G. 1926 H, 205, 206.

Whitnall, H. O. 1925 A, 15.

Williston, S. W. 1905 B, 345.

1925 B, 293 (*Pleurocelus*, *Astrodon*).**Astrodon altus** (Marsh).Hay, O. P. 1902 A, 483 (*Pleurocelus*).Clark, Bibbins, Berry 1911 A, 89 (*Pleurocelus*).

Gilmore, C. W. 1921 E, 583.

Hatcher, J. B. 1903 B, 12 (*Pleurocelus*).Lull, R. S. 1911 B, 175 (*Pleurocelus*).

1911 C, 200, pl. xviii, fig. 3; pl. xix, figs.

1-4 (*Pleurocelus*).Merrill, G. P. 1907 A, 76 (*Pleurocelus*).Mook, C. C. 1916 A, 138 (*Pleurocelus*).Schuchert, C. 1910 A, 586 (*Pleurocelus*).

Lower Cretaceous (Arundel); Maryland.

**Astrodon johnstoni** Leidy.

Hay, O. P. 1902 A, 484.

Clark, Bibbins, Berry 1911 A, 89.

Gilmore, C. W. 1921 E, 583, 587.

Hatcher, J. B. 1903 B, 9, figs. 1-6.

Lull, R. S. 1911 C, 202, pl. xix, fig. 5.

Mook, C. C. 1916 A, 134.

Osborn, H. F. 1903 G, 701.

Lower Cretaceous (Arundel); Maryland.

**Astrodon? montanus** (Marsh).Hay, O. P. 1902 A, 483 (*Pleurocelus*).Hatcher, J. B. 1903 B, 12 (*Pleurocelus*).Huene, F. 1927 B, 451 (*Pleurocelus*).

Lull, R. S. 1915 C, 331 ("Morrison species").

Mook, C. C. 1916 A, 139 (*Pleurocelus*).

Upper Jurassic or Lower Cretaceous (Morrison); Colorado or Wyoming.

**Astrodon nanus** (Marsh).Hay, O. P. 1902 A, 483 (*Pleurocelus*).Clark, Bibbins, Berry 1911 A, 89 (*Pleurocelus*).

Gilmore, C. W. 1921 E, 583.

Hatcher, J. B. 1903 B, 9 (Syn. of *A. johnstoni*).Huene, F. 1927 B, 457 (*Pleurocelus*).Lull, R. S. 1911 B, 174 (*Pleurocelus*).

1911 C, 188, pl. xi; pl. xiv, figs. 5-8; pl.

xv, figs. 2-5; pls. xvi, xvii; pl. xviii, figs.

1, 2 (*Pleurocelus*).Merrill, G. P. 1907 A, 76 (*Pleurocelus*).Miller, B. L. 1911 A, pl. iv (*Pleurocelus*).Mook, C. C. 1916 A, 138 (*Pleurocelus*).Osborn, H. F. 1903 G, 701 (*Pleurocelus*).Pompeck, J. F. 1920 A, 126 (*Pleurocelus*).Schuchert, C. 1910 A, 586 (*Pleurocelus*).Zittel and Broili 1923 A, 351 (*Pleurocelus*).

Lower Cretaceous (Arundel); Maryland.

## ATLANTOSAURIDÆ Marsh.

- Hay, O. P. 1902 A, 484.  
 Abel, O. 1919 A, 611.  
 Arltdt, T. 1907 D, 640.  
     1909 A, 262 ("atlantosauriden").  
     1912 A, 668.  
 Dollo, L. 1889 H, 677.  
 Fraas, E. 1903 A, 141 ("atlantosauriden").  
 Hoernes, R. 1886 A, 612.  
 Hoffmann, C. K. 1890 B, 1311.  
 Huene, F. 1908 B, 348.  
     1908 D, 297 ("atlantosauriden").  
     1909 B, 14.  
     1914 G, 38, pl. vii.

- Huene, F. 1927 B, 467 ("apatosauriden").  
     1927 C, 125 (Apatosauridæ).  
 Jaekel, O. 1914 A, 197 ("atlantosauriden").  
 Koken, E. 1900 A, 463.  
 Lull, R. S. 1924 A, 234.  
 Thevenin, A. 1907 B, 132 ("atlantosauridés").  
 Tornier, G. 1913 B, 370, 375.  
 Williston, S. W. 1925 B, 293.  
 Zittel and Broili 1911 A, 285.  
     1923 A, 351, 366.  
 Zittel, Eastman, etc. 1902 A, 233 (Camara-sauridæ).

ATLANTOSAURUS Marsh. Type *Titanosaurus montanus* Marsh.

- Hay, O. P. 1902 A, 484.  
 Abel, O. 1909 F, 459.  
 Bigot, A. 1897 A, 462.  
 Brauns, D. 1890 A, 187.  
 Gaudry, A. 1896 A, 61.  
 Giebel, C. G. 1878 A, 126 (Titanosaurus).  
 Heilprin, A. 1887 A, 161.  
 Huene, F. 1908 B, 348.  
     1908 D, 294.  
     1909 B, 14.  
     1919 A, 182.  
 Hutchinson, H. N. 1910 A, 148, pl. xviii.  
     1917 A, 363.  
 Johnson, A. 1883 A, 408.  
 Koken, E. 1893 B, 396.  
 Lankester, E. R. 1905 A, 11, fig. 6.  
 Lee, W. T. 1903 A, 292.  
 Riggs, E. S. 1901 A, 549.  
     1901 C, 281.  
     1903 A, 304.  
 Schaffer, F. X. 1912 A, 198.  
 Schuchert, C. 1910 A, 532.  
 Stremme, H. 1909 B, 796.  
 Van den Broeck, E. 1900 A, 61, 82.  
 Williston, S. W. 1925 B, 293.

*Atlantosaurus immanis* Marsh.

- Hay, O. P. 1902 A, 484.  
 Anonymous 1878 A, 76.  
 Cannon, G. L. 1894 A, 244.  
     1906 A, 116.  
     1906 B, 196.  
 Gadow, H. 1901 B, 419.  
 Gaudry, A. 1893 A, 21.  
 Lull, R. S. 1926 A, 458.  
 Mook, C. C. 1916 A, 136.  
 Peck, F. B. 1904 A, 30.  
 Van den Broeck, E. 1900 A, 82.  
 Williston, S. W. 1915 D, 126 (Titanosaurus).  
 Woodward, H. 1904 B, 146.  
     Upper Jurassic or Lower Cretaceous (Morri-son); Colorado, Wyoming?.

*Atlantosaurus montanus* Marsh.

- Hay, O. P. 1902 A, 484.  
 Cannon, G. L. 1894 A, 244.  
 Gilmore, C. W. 1907 A, 154.  
     1925 A, 355.  
 Holland, W. J. 1923 A, 479.  
 Huene, F. 1906 C, 336 (Apatosaurus).  
 Mook, C. C. 1916 A, 135.  
 Osborn, H. F. 1919 A, 69 ("Atlantosaurus").  
     Upper Jurassic or Lower Cretaceous (Mor-ri-son); Colorado.

## APATOSAURUS Marsh.

- Hay, O. P. 1902 A, 485.  
 Abel, O. 1909 F, 461.  
 Brown, B. 1908 B, 196.  
 Fraas, E. 1903 A, 141.  
 Gilmore, C. W. 1907 A, 153.  
     1925 A, 366, 374.  
 Gregory, W. K. 1916 D, 106 (Brontosaurus).  
     1920 C, 16.  
 Hay, O. P. 1910 C, 8.  
 Hoffmann, C. K. 1890 B, 1311.  
 Holland, W. J. 1916 A, 143.  
     1916 D, 153 (Brontosaurus a syn.).  
     1923 A, 478, 479.  
     1924 A, 120, 124.  
 Huene, F. 1908 B, 348.  
     1909 B, 14.  
     1927 C, 125.  
 Huene and Lull 1908 A, 142.  
 Hutchinson, H. N. 1917 A, 363 (Brontosaurus).  
 Janensch, W. 1914 B, 91, 96 (Syn. of Bronto-saurus).

Type *A. ajax* Marsh.

- Janensch, W. 1922 A, 478.  
 Lull, R. S. 1910 A, 2, 7.  
     1924 A, 234.  
 Moodie, R. L. 1907 A, 90.  
     1917 B, 388, fig. 14.  
     1918 C, 272, figs. 12-14.  
     1918 D, 509, fig. 45.  
     1920 E, 460, fig. 1.  
     1923 B, 123, 162, pls. xxiii, xxviii, xxix.  
     1926 A, 67, 68 (This genus?).  
 Mook, C. C. 1917 A, 355.  
 Nopcsa, F. 1901 A, 257.  
     1905 C, 292.  
     1906 A, 73.  
     1911 A, 111.  
     1915 B, 15.  
     1918 B, 239.  
     1923 H, 97, 98.  
 Osborn, H. F. 1917 B, 213, 219-221, figs.  
 Osborn and Mook 1919 A, 396.  
 Riggs, E. S. 1903 C, 165, 169, pls. xlv-li, liii.

- Schuchert, C. 1910 A, 582.  
 Stromer, E. 1915 B, 18.  
 Tornier, G. 1913 B, 370 (Syn. of *Brontosaurus*).  
 Williston, S. W. 1925 A, 103, 149, figs. 80, 122, 1925 B, 293.  
 Zittel and Broili 1911 A, 235.  
 1923 A, 350.

***Apatosaurus ajax* Marsh.**

- Hay, O. P. 1902 A, 485.  
 Cannon, G. L. 1894 A, 245.  
 1906 A, 116.  
 1906 B, 196.  
 Holland, W. J. 1923 A, 479.  
 Huene, F. 1922 A, 87 ("Apatosaurus").  
 Mook, C. C. 1916 A, 135.  
 1917 A, 357.  
 Riggs, E. S. 1903 C, 170.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

***Apatosaurus laticollis* Marsh.**

- Hay, O. P. 1902 A, 485.  
 Cannon, G. L. 1894 A, 245.

**BRONTOSAURUS Marsh.**

- Hay, O. P. 1902 A, 485.  
 Abel, O. 1909 C, (120).  
 1909 F, 453.  
 1910 D.  
 1912 F, 248, 663, fig. 181.  
 1914 B, 87.  
 1916 A, 470, figs. 2, 3.  
 1919 A, 607.  
 1920 A, 387, fig. 603.  
 1922 C, 358, 415, fig. 308.  
 1925 A, 231.  
 Anonymous 1880 A, 113.  
 Arthaber, G. 1924 A, 450.  
 Beard, J. C. 1901 A, 184, fig. 1.  
 Beasley, W. L. 1907 D, 446, 1 fig.  
 Bigot, A. 1897 A, 462.  
 Boule, M. 1891 A, 12.  
 Burroughs, J. 1919 A, 491.  
 Case, E. C. 1898 C, 637.  
 Cockerell, T. D. A. 1916 B, 189, fig.  
 Creevey, C. A. 1899 A, 41 ("brontosaur." This genus?).  
 Dames, W. 1883 C, 273.  
 Darton, N. H. 1908 A, 446.  
 1915 A, 67, pl. xi.  
 Depéret, C. 1907 B.  
 Dollo, L. 1889 H, 677.  
 1905 B, 251.  
 Eastman, C. R. 1914 B, 689.  
 Eimer, G. H. T. 1901 A, 250.  
 Fraas, E. 1902 A, 79, figs.  
 1902 C, lxvii.  
 1908 A, 141.  
 Frech, F. 1906 A, 495 ("brontosaurier").  
 Gaudry, A. 1893 A, 21.  
 1896 A, 49, 61.  
 1898 A, 127.  
 Gilmore, C. W. 1915 C, 52.  
 1925 B, 409.  
 Gratacap, L. P. 1902 A, 5, fig. 3.  
 Gregory, W. K. 1901 A, 145.  
 1905 A, 572.

- Mook, C. C. 1916 A, 137.  
 Riggs, E. S. 1901 A, 550.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

***Apatosaurus ionisæ* Holland.**

- Holland, W. J. 1916 A, 144.  
 Eastman, C. R. 1917 B, 656.  
 Eastman, Gregory and Matthew 1917 A, 119.  
 Gilmore, C. W. 1925 A, 367.  
 Holland, W. J. 1924 A, 120, fig. 2.  
 1924 B, 333, 336.  
 Huene, F. 1927 B, 465.  
 Moodie, R. L. 1923 B, 192, pl. xxix.  
 Mook, C. C. 1916 A, 140.  
 Upper Jurassic or Lower Cretaceous (Morrison); Utah.

***Apatosaurus minimus* Mook.**

- Mook, C. C. 1917 A, 368, figs. 1, 2.  
 Osborn, H. F. 1904 C, 136, fig. 4 (*Brontosaurus* sp.).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Type *B. excelsus* Marsh.**

- Gregory, W. K. 1927 C, 171.  
 Gregory and Camp 1918 A, 530.  
 Hatcher, J. B. 1901 E, 1015.  
 1902 B, 356, pls. xix, xx.  
 1903 A, 14, pl. iv, fig. 1.  
 1903 B, 13.  
 1903 E, 72.  
 Hay, O. P. 1908 C, 676.  
 1910 C, 1.  
 1911 B, 404.  
 Heilprin, A. 1887 A, 161.  
 Hoernes, R. 1886 A, 613.  
 Hoffmann, C. K. 1890 B, 1311.  
 Holland, W. J. 1910 A, 285, fig. 4.  
 1912 A, 205.  
 1915 B, 274.  
 1915 C, 153.  
 Huene, F. 1904 A, 322.  
 1908 B, 289.  
 1908 E, 380.  
 1927 A, 123 (Syn. of *Camarasaurus*).  
 Hutchinson, H. N. 1910 A, 146, pl. xix.  
 Janensch, W. 1922 A, 477 (Syn. of *Apatosaurus*).  
 Joleaud, L. 1920 A, 493.  
 Kingsley, J. S. 1925 A, 268, fig. 291.  
 König, F. 1910 A, 150.  
 Lafitte, J. P. 1905 A, 408.  
 Lankester, E. R. 1905 A, 204, fig. 147.  
 Lebedinsky, N. G. 1913 A, 767.  
 Lönnberg, E. 1910 A, 17.  
 Loomis, F. B. 1901 A, 195.  
 Lucas, F. A. 1901 J, 96, 109, 119, figs. 19, 20.  
 1902 B, 152, fig.  
 1902 C, 642.  
 Lull, R. S. 1910 A, 7.  
 1911 C, 191.  
 1914 D, 355.  
 1915 F, 833, pl. xxxii, fig. 1.  
 1917 A, 473.  
 1917 B, 220, 335, 515.  
 1918 C, 130.

- Lull, R. S. 1919 C, 19, 41.  
 1924 A, 234, 269, fig. 26.
- Lydekker, R. 1887 E, 158.  
 1906 B, 391.  
 1907 C, 457.  
 1912 C, 51, 128, 141, 156.
- Matthew, W. D. 1905 E, 63, figs. 1, 3, 4.  
 1910 D, 547.  
 1914 J, 443.  
 1915 C, 62, figs. 5, 8, 19-22.  
 1919 A, 492.
- Moodie, R. L. 1915 I, 172, fig. 12.
- Mook, C. C. 1914 A, 225.
- Nopcsa, F. 1900 A, 560.  
 1901 A, 258.
- Osborn, H. F. 1901 G, 159.  
 1903 G, 701.  
 1904 C, 181, 186, 189, 190, figs. 4a-c, 6.  
 1904 I, 272.  
 1904 Q, 682.  
 1905 G, 375.  
 1906 D, 282.  
 1917 B, 219, 220.  
 1926 A, 188.
- Osborn and Granger 1901 A, 199, figs. 1, 3, 6.
- Pütter, A. 1923 A, 221.
- Reynolds, S. H. 1897 A, 207, 288.
- Riggs, E. S. 1901 A, 549.  
 1903 A, 305.  
 1903 B, 393.  
 1903 C, 165, 170.
- Romer, A. S. 1923 C, 613.
- Sauvage, H. E. 1902 B, 9 ("brontosaurus").
- Schuchert, C. 1910 A, 582.  
 1915 A, 882.  
 1918 B, 255.
- Schuchert and Levene 1927 A, 321, fig.
- Seitz, A. L. 1907 A, 300.
- Simpson, G. G. 1926 H, 210.
- Stanton, T. W. 1905 A, 662.
- Sternberg, C. H. 1917 A, 21, 56.
- Stose, G. W. 1912 A, 3.
- Stremme, H. 1909 B, 796.  
 1910 A, 547.
- Thevenin, A. 1907 B, 129.
- Tornier, G. 1909 B, 512.  
 1909 C, 537.  
 1910 A, 543.  
 1913 B, 370.
- Trouessart, E. L. 1903 A, 306.
- Van den Broeck, E. 1900 A, 82.
- Versluys, J. 1910 B, 220.  
 1910 C, 425, fig. E.  
 1912 B, 580.
- Whitnall, H. O. 1925 A, 14, pl. ii.
- Williston, S. W. 1925 B, 293.
- Woodward, A. S. 1905 A, 242.
- Woodward, H. 1904 B, 146.
- Zittel and Broili 1911 A, 285 (Syn. of *Apatosaurus*).  
 1923 A, 347 (Syn. of *Apatosaurus*).
- Zittel, Eastman, etc. 1902 A, 235.
- Brontosaurus amplius Marsh.**  
 Hay, O. P. 1902 A, 485.  
 Mook, C. C. 1916 A, 138.
- Osborn, H. F. 1904 C, 189.
- Riggs, E. S. 1903 C, 170 (*Apatosaurus*).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Brontosaurus excelsus Marsh.**  
 Hay, O. P. 1902 A, 485.  
 Abel, O. 1910 D, 22.  
 1916 A, 494, fig. 7.  
 1919 A, 612, figs. 480, 481.  
 1922 C, 410, 414, figs. 342, 344.  
 1925 A, 232, figs. 168, 169, 171, 172-175.
- Anonymous 1880 A, 113.  
 1905 A, 42.  
 1906 E, 411 ("Brontosaurus").
- Bigot, A. 1897 A, 463, figs. 1, 2.
- Boule, M. 1891 A, 12, fig. 1.  
 1902 B, 906, fig. 7.
- Gadow, H. 1901 B, 418, fig. 95.
- Genitz and Deichmüller 1882 B, 14.
- Gregory, W. K. 1905 A, 572.
- Hatcher, J. B. 1901 D, 52, fig. 22.
- Hoffmann, C. K. 1890 B, 1311.
- Holland, W. J. 1910 A, 260, fig. 1.  
 1916 A, 144 (*Apatosaurus*).
- Huene, F. 1906 B, 112, fig. 8.  
 1927 C, 124 (*Camarasaurus*).
- Knight, W. C. 1900 A, 454 ("dinosaur").
- Koken, E. 1893 B, 395.
- Lull, R. S. 1917 B, 515, pl. xi; text-fig. 156.
- Merrill, G. P. 1907 A, 64.
- Moodie, R. L. 1917 B, 389, fig. 17 ("Brontosaurus").
- Mook, C. C. 1916 A, 138.  
 1917 B, 357.
- Osborn, H. F. 1903 G, 701.  
 1904 C, 189.  
 1904 F, 49.  
 1904 Q, 685.  
 1905 L, 562 ("Brontosaurus").  
 1906 D, 282, figs. 1, 3.  
 1915 E, 136.
- Peck, F. B. 1904 A, 30, 38.
- Reed, W. H. 1909 A, 198.
- Riggs, E. S. 1901 A, 549.  
 1903 B, 393.  
 1903 C, 170, pl. lii (*Apatosaurus*, *Brontosaurus*).
- Schuchert, C. 1918 B, 253.
- Sternberg, C. H. 1909 C, 78, fig. 16 ("Brontosaurus").
- Stromer, E. 1912 A, 87, fig. 88.
- Woodward, A. S. 1922 C, 18, fig. 12.
- Wortman, J. L. 1900 A, 164 ("Brontosaurus").
- Zittel and Broili 1911 A, 286, figs. 431, 434 (*Apatosaurus*).  
 1923 A, 350, fig. 459 (*Apatosaurus*).
- Zittel, Eastman, etc. 1902 A, 234, figs. 335, 336.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Brontosaurus sp. indet.**  
 Mook, C. C. 1916 A, 94, 96. Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

## BRACHIOSAURIDÆ Riggs.

- Riggs, E. S. 1904 B, 229.  
 Gilmore, C. W. 1907 A, 163.  
 Holland, W. J. 1912 A, 207.  
 Huene, F. 1927 B, 460.  
 1927 C, 122.  
 Lull, R. S. 1915 C, 333 (Brachiosauridæ or Barosauridæ).  
 Moodie, R. L. 1916 A, 51.  
 Nopcsa, F. 1923 D, 107.  
 1923 H, 99, 195.  
 1923 A, 184.  
 Williston, S. W. 1905 B, 345.

BRACHIOSAURUS Riggs. Type *B. altithorax* Riggs.

- Riggs, E. S. 1903 A, 299.  
 Abel, O. 1916 A, 495.  
 1919 A, 606.  
 1921 A, 262, 301, 302.  
 1922 C, 434, figs. 353, 355.  
 1925 A, 266.  
 Allis, E. P. 1898 A, 444.  
 Eastman, C. R. 1915 C, 659.  
 Fraas, E. 1908 A, 141.  
 Gilmore, C. W. 1922 A, 4.  
 Hay, O. P. 1910 C, 8.  
 Huene, F. 1908 B, 347.  
 1908 D, 295.  
 1909 B, 14.  
 1919 A, 182.  
 1927 B, 459.  
 1927 C, 122, 123.  
 Janensch, W. 1914 B, 82, 86, figs. 1-6.  
 1922 A, 470, figs. 5-7.  
 Koken, E. 1893 B, 240.  
 Lucas, F. A. 1911 A, 18.  
 Lull, R. S. 1915 C, 329.  
 1915 F, 835.  
 1917 B, 220, 516, fig. 158.  
 1919 C, 19, 41.  
 1924 A, 233, fig. 25.  
 Matthew, W. D. 1914 J, 443.  
 1915 C, 73, 74, fig. 24.  
 1915 J, 153.  
 1921 B, 156.  
 Moodie, R. L. 1907 A, 90.  
 Mook, C. C. 1914 A, 227.  
 Mook, C. C. 1916 A, 154.  
 Nopcsa, F. 1906 A, 73.  
 1918 A, 186.  
 1923 H, 97-99, 195.  
 1923 A, 184.  
 Osborn, H. F. 1904 Q, 689.  
 1915 E, 145.  
 1917 B, 217, 219, fig.  
 1924 I, 6.  
 Riggs, E. S. 1904 B, 229, 230.  
 Simpson, G. G. 1926 H, 205, 211.  
 Whitnall, H. O. 1925 A, 15.  
 Williston, S. W. 1905 B, 345.  
 1925 B, 293.  
 Zittel and Broili 1911 A, 285.  
 1923 A, 349.  
 Brachiosaurus altithorax Riggs.  
 Riggs, E. S. 1903 A, 299, figs. 1-7.  
 Abel, O. 1920 A, 393, fig. 610.  
 Branca, W. 1914 A, 74.  
 Huene, F. 1922 A, 87, 88.  
 1927 B, 457.  
 Janensch, W. 1914 B, 93, 97.  
 Lull, R. S. 1915 C, 329.  
 Mook, C. C. 1916 A, 140.  
 Osborn, H. F. 1905 L, 566, fig. 4.  
 Riggs, E. S. 1904 B, 240, pls. lxxi-lxxv; text-fig. 1.  
 Wieland, G. R. 1920 A, 529.  
 Upper Jurassic or Lower Cretaceous (McElmo); Colorado.

## DIPLODOCIDÆ Marsh.

- Hay, O. P. 1902 A, 486.  
 Abel, O. 1919 A, 610.  
 Arltdt, T. 1907 D, 651.  
 1909 A, 262 ("diplodociden").  
 1912 A, 668.  
 Dollo, L. 1889 H, 677.  
 Günther, A. 1886 A, 443.  
 Holland, W. J. 1915 B, 274.  
 Huene, F. 1908 B, 347.  
 1909 B, 14.  
 1914 G, 38.  
 1922 A, 86 ("diplodociden").  
 Huene, F. 1927 B, 463, 466.  
 1927 C, 124.  
 Jaekel, O. 1914 A, 197 ("diplodociden").  
 Koken, E. 1900 A, 463.  
 Matthew, W. D. 1915 C, 32.  
 Nopcsa, F. 1923 H, 126, 195.  
 1923 A, 184.  
 Tormer, G. 1913 B, 370, 375.  
 Williston, S. W. 1925 B, 293.  
 Zittel and Broili 1911 A, 288.  
 1923 A, 352, 366.  
 Zittel, Eastman, etc. 1902 A, 236.

DIPLODOCUS Marsh. Type *D. longus* Marsh.

- Hay, O. P. 1902 A, 486.  
 Abel, O. 1909 C, (118).  
 1909 F, 459, 477.  
 1910 A, (146).  
 1910 D.  
 1911 A, 175.  
 1912 F, 248, 591, 669, fig. 216.  
 1919 A, 608.  
 1920 A, 390.  
 Abel, O. P. 1921 A, 302.  
 1925 A, 251.  
 Andreae, A. 1903 A, 151.  
 Anonymous 1905 D.  
 1909 A, 334.  
 1922 A, 184.  
 Arthaber, G. 1924 A, 450.  
 Beasley, W. L. 1907 B, 491, 7 figs.  
 Beddard, F. E. 1898 A, 156.

- Boas, J. E. V. 1914 B, 572, fig. 26.  
 Boule, M. 1902 B, 908, fig. 14.  
 Branca, W. 1914 A, 74.  
 Broili and Fischer 1917 A, 412.  
 Case, E. C. 1893 C, 638.  
 Cockerell, T. D. A. 1916 B, 183, 189, fig.  
 Darton, N. H. 1908 A, 446.  
 Deniker, J. 1909 A, 221, figs. 1, 2.  
 Dollo, L. 1889 H, 677.  
 1905 B, 251.  
 Drevermann, F. 1907 A, 152.  
 1910 A, 399.  
 1911 A, 272.  
 Eastman, C. R. 1914 B, 689.  
 Fraas, E. 1908 A, 141.  
 Gilmore, C. W. 1907 A, 158.  
 1909 A, 210.  
 1915 C, 52.  
 1922 A, 2, 4.  
 1924 G, 20.  
 1925 A, 353, 363.  
 1926 E, 35.  
 1927 B, 97, fig. 2.  
 Gratacap, L. P. 1902 A, 5.  
 Gregory, W. K. 1916 D, 108.  
 Hatcher, J. B. 1901 D, 55.  
 1903 A, 14.  
 1903 E, 72, figs. 1, 2.  
 Hay, O. P. 1908 B, 517.  
 1908 C, 673.  
 1908 E, 366.  
 1909 E, 829, text-fig. 5.  
 1910 C, 1, pl. i; text-figs. 2, 4-7.  
 1911 B, 399.  
 Heilmann, G. 1913 B, 7.  
 1916 A, 86.  
 Hennig, E. 1915 A, 578.  
 1916 A, 177.  
 1924 A, 208.  
 Hoernes, R. 1886 A, 613.  
 Holland, W. J. 1905 D, 935.  
 1905 E, 683, pl.  
 1906 A, 227, pls. xxvi-xxviii; text-figs.  
 2-22, 25, 26, 29, 30.  
 1908 E, 645.  
 1910 A, 261, figs. 2-4, 9-12, 15-17, 19.  
 1912 A, 205.  
 1915 B, 274.  
 1915 C, 153.  
 1916 D, 153.  
 1918 A, 130.  
 1923 A, 478, 479.  
 1924 A, 120.  
 1924 B, 379-403, pls. xl-xliii, figs. 1-11.  
 Huene, F. 1904 A, 823, figs. 9, 14.  
 1905 B, 346.  
 1908 B, 341, 350, text-fig. 316.  
 1908 D, 294, 297.  
 1909 B, 14.  
 1914 C, 579, pl. ix, fig. 3.  
 1914 G, pl. vii.  
 1919 A, 182.  
 1927 B, 464, 467.  
 1927 C, 125.  
 Hutchinson, H. N. 1910 A, 153, fig. 52.  
 1916 A, 539.  
 1917 A, 356, text-figs. 1-8.  
 Jaekel, O. 1908 B, 467.  
 Jaekel, O. 1910 A, 270.  
 Janensch, W. 1914 B, 96.  
 1922 A, 477.  
 Joleaud, L. 1920 A, 493.  
 Knight, W. C. 1900 A, 454 ("dinosaur").  
 Knipe, H. R. 1912 A, 90, fig.  
 König, F. 1910 A, (146).  
 Lafitte, J. P. 1905 A, 407, fig. 1.  
 1909 A, 222.  
 Lankester, E. R. 1905 A, 204.  
 Loomis, F. B. 1901 A, 195.  
 Lucas, F. A. 1901 J, 99, 109.  
 1902 B, 153, fig.  
 Lull, R. S. 1910 A, 2.  
 1914 D, 355.  
 1915 C, 333.  
 1915 F, 835, pl. xxxii, fig. 2.  
 1917 B, 335, 514.  
 1918 C, 130.  
 1924 A, 233, 236, 269, fig. 27.  
 Lydekker, R. 1905 A, 304.  
 1906 B, 391.  
 1907 C, 457.  
 1909 C, 463.  
 1910 D, 459.  
 1910 F, 667.  
 1911 A, 678.  
 1912 C, 6, 51, 128, 141, 156.  
 Martin, E. A. 1905 A, 159.  
 Matthew, W. D. 1910 D, 547.  
 1914 J, 443.  
 1915 C, 72, figs. 20, 23.  
 Moodie, R. L. 1915 I, 156.  
 1923 B, 162, fig. 15.  
 Mook, C. C. 1914 A, 225.  
 1917 B, 815.  
 Nopcea, F. 1900 A, 560.  
 1901 A, 261.  
 1902 B, 102, 110.  
 1905 D, 289, figs. 46, 47.  
 1906 A, figs. 1, 13, 16.  
 1907 A, 231.  
 1911 A, 143.  
 1915 B, 15.  
 1917 B, 341, fig. 5.  
 1918 A, 195.  
 1918 B, 239.  
 1923 D, 107.  
 1923 H, 12, 13, 97, 98, 195, pl. vi, fig. 15.  
 1925 A, 19.  
 1926 A, 642, text-fig. 4.  
 1928 A, 184.  
 Osborn, H. F. 1903 I, 978.  
 1904 C, 181, 186, 189, 190.  
 1904 I, 35.  
 1905 G, 875.  
 1906 D, 283, fig. 4.  
 1915 E, 142.  
 1917 B, 219, 221, fig.  
 Osborn and Granger 1901 A, 189, figs. 1-4, 6.  
 Peck, F. B. 1904 A, 30.  
 Perrier, E. 1920 A, 313.  
 Pompeckj, J. F. 1920 A, 110.  
 1921 A, 2.  
 Pütter, A. 1923 A, 221.  
 Pycraft, W. P. 1909 A, 204, fig.  
 Riggs, E. S. 1903 B, 394.  
 1903 C, 181.

- Riggs, E. S. 1904 B, 230.  
 Romer, A. S. 1923 C, 611.  
 Sauvage, H. E. 1902 B, 9, 12.  
 Schuchert, C. 1910 A, 582.  
 1915 A, 882.  
 Seeley, H. G. 1888 G, 170.  
 1892 C, 189.  
 1904 A, 843.  
 Seitz, A. L. L. 1907 A, 303.  
 Simpson, G. G. 1926 H, 210.  
 Sternfeld, R. 1909 A, 374, figs. 7-9.  
 Stose, G. W. 1912 A, 3.  
 Stremme, H. 1909 B, 796, figs. 1, 2.  
 1910 A, 545, fig. 1.  
 Thevenin, A. 1907 B, 124, figs. 3, 7, 8.  
 Tornier, G. 1909 A, 193.  
 1909 B, 505.  
 1909 C, 536.  
 1910 A, 536, figs. 1, 4, 5, 11, 12.  
 1910 B, 402.  
 1913 B, 355, 366, fig. 36.  
 Versluys, J. 1910 B, 214, figs. R-T.  
 1910 C, 425, figs. A, B.  
 Whitnal, H. O. 1925 A, 15.  
 Wieland, G. R. 1920 A, 529.  
 Williston, S. W. 1911 B, 97.  
 1918 A, 79, fig. 3.  
 1925 A, 87, 94, 103, 104, figs. 70, 75, 80, 81.  
 1925 B, 293.  
 Woodward, A. S. 1905 A, 288.  
 Woodward, H. 1904 B, 146.  
 Zittel and Broili 1911 A, 288.  
 1923 A, 347, 353, fig. 463.  
 Zittel, Eastman, etc. 1902 A, 236.
- Diplodocus carnegii** Hatcher.  
*Hatcher, J. B.* 1901 D, 20, pls. iii-ix; pl. x, figs. 1, 2; pls. xi-xiii; text-figs. 6-9, 11-21, 23.  
*Abel, O.* 1909 F, 461, fig. 3.  
 1910 D, 9, figs. 1, 2 (D. carnegiei).  
 1912 F, 247, figs. 180, 182, 183 (D. carnegiei).  
 1916 A, 494, fig. 7 (D. carnegiei).  
 1919 A, 609, figs. 477-479 (D. carnegiei).  
 1920 A, 392, fig. 609 (D. carnegiei).  
 1922 C, 411, 417, figs. 346, 347, 349, 351, 352 (D. carnegiei).  
 1925 A, 49, 253, figs. 34, 35, 187, 188, 190, 192, 194, 196-198, 200 (D. carnegiei).  
*Anonymous* 1905 C, 82, fig. 1.  
 1905 D, pls. xvii, xviii.  
 1905 E, 576, pl. xxv (D. carnegiei).  
 1906 E, 411 ("Diplodocus").  
 1909 A, 334 ("Diplodocus").  
 1910 A, 198.  
*Branca, W.* 1914 A, 74 (D. carnegiei).  
*Brauer, A.* 1908 A, 92, fig. 7 (D. carnegiei).  
*Drevermann, F.* 1910 A, 399.  
 1911 A, 278, pls.  
*Gilmore, C. W.* 1925 A, 355, 384 (D. carnegiei).  
*Hatcher, J. B.* 1903 A, ii, pl. iv.  
 1903 C, 570.  
 1903 E, 73, pl. vi.  
*Hay, O. P.* 1908 B, 517 ("Diplodocus").  
*Holland, W. J.* 1904 A, 601.  
 1905 B, 443.  
 1905 D, 935.  
 1906 A, 228, pls. xxix, xxx; text-fig. 1.  
 1908 B, 160.
- Holland, W. J.* 1910 A, 259.  
 1916 B, 2.  
 1924 A, 124, fig. 2 (D. carnegiei).  
 1924 B, 383 (D. carnegiei).  
*Huene, F.* 1914 C, pl. ix, fig. 1.  
 1922 A, 87 (D. carnegiei).  
 1927 B, pl. xv.  
*Hutchinson, H. N.* 1910 A, 155, pls. xxi, xxii.  
 1916 A, 539 (D. carnegiei).  
 1917 A, 356, pls. xxii, xxiii.  
*Lull, R. S.* 1917 B, 184, 515, pl. iii; text-fig. 157.  
 1919 C, pl. vii; text-figs. 7-10 (D. carnegiei).  
 1926 A, 460 ("Diplodocus").  
*Lydekker, R.* 1905 E, 134.  
*Martin, E. A.* 1905 A, 159.  
*Mook, C. C.* 1916 A, 139.  
*Nopcsa, F.* 1902 B, 113.  
*Osborn, H. F.* 1905 L, 562, fig. 2 (D. carnegiei).  
*Pycraft, W. P.* 1905 A, 128, figs. 1, 2.  
*Schuchert and Levene* 1927 A, 321, fig.  
*Shufeldt, R. W.* 1906 B, 41, fig. 6.  
*Sternberg, C. H.* 1909 E, 125 ("D. carnegiei").  
 1917 A, 20, fig. 6.  
*Sternfeld, R.* 1909 A, 374, figs. 3-6, 10, 11.  
*Thevenin, A.* 1907 B, 126.  
*Tornier, G.* 1909 A, 193.  
 1909 B, 506.  
 1909 C, 284.  
 1913 B, 366, fig. 44.  
*Versluys, J.* 1910 C, 444, fig. K.  
*Woodward, A. S.* 1922 C, 16, pl. iii; text-fig. 11.  
*Wortman, J. L.* 1900 A, 164 ("Diplodocus?", "Barosaurus?").  
*Zittel, Eastman, etc.* 1902 A, 236, fig. 339.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Diplodocus hayi** Holland.  
*Holland, W. J.* 1924 B, 399.  
 1906 A, 231-242, pl. xxvii; pl. xxviii, fig. 1; text-figs. 4-10 ("Diplodocus").  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Diplodocus lacustris** Marsh.  
*Hay, O. P.* 1902 A, 486.  
*Cannon, G. L.* 1894 A, 245.  
*Hatcher, J. B.* 1901 D, 56.  
 1902 B, 356.  
*Mook, C. C.* 1916 A, 138.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Diplodocus longus** Marsh.  
*Hay, O. P.* 1902 A, 486.  
*Abel, O.* 1910 D.  
 1916 A, 494.  
 1919 A, 608, fig. 476.  
 1922 C, 419, fig. 348.  
 1925 A, 252, figs. 193, 199.  
*Boas, J. E. V.* 1914 C, 277, fig. 63.  
*Drevermann, F.* 1910 A, 400.  
 1911 A, 272, pls. and fig.  
*Gadow, H.* 1901 B, 419, fig. 97.



- Gilmore, C. W. 1907 A, 165.  
 1914 A, 25.  
 1919 A, 107, text-fig. 5.  
 1923 C, xii ("Diplodocus").  
 1924 I, 351 ("Diplodocus").  
 Hatcher, J. B. 1901 D, 5, 55, pls. II, XII; text-figs 1-5, 10, 24.  
 1903 E, 75.  
 Holland, W. J. 1906 A, 251, 266, 268, 270, pls. xxiii-xxv.  
 1924 B, 382, 385.  
 Huene, F. 1914 C, pl. ix, figs. 2, 4, 5.  
 1919 A, 182, pl. vii.  
 Lull, R. S. 1919 C, 22, pl. vi, fig. 8; text-fig 6.  
 1926 A, 459 ("Diplodocus").  
 Merrill, G. P. 1907 A, 69, 70.  
 Moodie, R. L. 1923 B, 182, fig. 15.  
 Mook, C. C. 1916 A, 137.  
 Nopcsa, F. 1902 B, 112.  
 Osborn, H. F. 1904 C, 187, figs. 3a, 3b, 5.  
 1904 Q, 682 ("Diplodocus").  
 1912 J, 20, figs. 12, 16.  
 1919 A, 69 ("Diplodocus").  
 Osborn and Mook 1919 A, 388.

- Pompeckj, J. F. 1920 A, 110.  
 Sauvage, H. E. 1902 B, 13.  
 Sternfield, R. 1909 A, 374.  
 Thevenin, A. 1907 B, 126.  
 Tornier, G. 1909 A, 209.  
 1909 C, 540.  
 1913 B, 369, figs. 49, 50.  
 Versluys, J. 1910 C, 442, figs. F-J  
 Williston, S. W. 1915 D, 129, fig. 44 ("Diplodocus").  
 Woodward, H. 1904 A, 147.  
 Zittel and Broili 1911 A, 288, fig. 435.  
 1923 A, 353, fig. 463.

### Diplodocus sp. indet.

- Gilmore, C. W. 1924 J, 12-16, figs. 16-21.  
 Holland, W. J. 1916 C, 3. Upper Jurassic or Lower Cretaceous (Morrison); Utah.  
 Lee, W. T. 1902 A, 37. Upper Jurassic or Lower Cretaceous (Morrison); Colorado.  
 Moodie, R. L. 1927 A, 92, fig. 2.  
 Mook, C. C. 1916 A, 57, 94, 96. Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### BAROSAURUS Marsh. Type *B. lentus* Marsh.

- Hay, O. P. 1902 A, 485.  
 Abel, O. 1921 A, 301, 302.  
 Gilmore, C. W. 1925 A, 368.  
 Holland, W. J. 1915 B, 275.  
 Huene, F. 1909 B, 15.  
 1927 C, 123, 124.  
 Janensch, W. 1922 A, 464.  
 Joleaud, L. 1920 A, 493.  
 Lull, R. S. 1915 C, 333.  
 1917 C, 214.  
 1919 C, 1-42, pls. ii-vi.  
 1924 A, 234, 236.  
 Matthew, W. D. 1914 J, 443.  
 Nopcsa, F. 1923 H, 195.  
 1928 A, 184.  
 Osborn, H. F. 1904 Q, 688.  
 Wieland, G. R. 1920 A, 528.  
 1925 B, 558.  
 Williston, S. W. 1925 B, 294.

- Woodward, A. S. 1920 A, 117.  
 Zittel and Broili 1923 A, 351.

### Barosaurus affinis Marsh.

- Hay, O. P. 1902 A, 485.  
 Lull, R. S. 1919 C, 38, pl. vi, figs. 9, 10.  
 Mook, C. C. 1916 A, 139.  
 Upper Jurassic or Lower Cretaceous (Morrison); South Dakota.

### Barosaurus lentus Marsh.

- Hay, O. P. 1902 A, 485.  
 Joleaud, L. 1920 A, 493.  
 Lull, R. S. 1919 C, 7, pls. i, vii; text-figs. i-vi.  
 Mook, C. C. 1916 A, 139.  
 Wieland, G. R. 1920 A, 528.  
 Upper Jurassic or Lower Cretaceous (Morrison); South Dakota.

### AMPHICELIAS Cope. Type *A. altus* Cope.

- Hay, O. P. 1902 A, 486.  
 Cope, E. D. 1878 KK, 476.  
 1880 U, 146.  
 Gilmore, C. W. 1925 A, 368.  
 Huene, F. 1908 B, 348.  
 1922 A, 87.  
 1927 C, 123, 124.  
 Lydekker, R. 1887 E, 158.  
 Nopcsa, F. 1901 A, 257.  
 1902 B, 111, 112.  
 1923 H, 98.  
 1928 A, 184.  
 Osborn and Mook 1919 A, 390, 391.  
 1920 A, 15.  
 1921 A, 274, 279, 377, text-figs. 119-127.  
 Riggs, E. S. 1903 A, 304, 305.  
 Williston, S. W. 1925 B, 293.  
 Zittel, Eastman, etc. 1902 A, 235.

### Amphicelias altus Cope.

- Hay, O. P. 1902 A, 486.  
 Abel, O. 1925 A, 251, fig. 186.  
 Cope, E. D. 1878 KK, 476.  
 Mook, C. C. 1916 A, 136.  
 Osborn and Mook 1919 A, 388.  
 1921 A, 275, text-figs. 17, 18, 120-127.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

### Amphicelias fragillimus Cope.

- Hay, O. P. 1902 A, 486.  
 Cope, E. D. 1891 N, 43.  
 Mook, C. C. 1916 A, 137.  
 1921 A, 278, text-fig. 21.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.

**Amphicoelias latus** Cope.

- Hay, O. P. 1902 A, 486.  
 Ballou, W. H. 1897 A, 21, fig.  
 Gilmore, C. W. 1922 A, 4 (*Amphicoelus*).  
 Hay, O. P. 1910 C, 25.

**DYSTROPHÆUS** Cope.

- Hay, O. P. 1902 A, 497.  
 Arldt, T. 1907 D, 330.  
 Case, E. C. 1898 C, 641.  
 Hennig, E. 1924 A, 122.  
 Huene, F. 1904 A, 319.  
     1908 B, 347.  
     1908 D, 295.  
     1909 B, 14.  
     1927 C, 122.  
 Lull, R. S. 1910 A, 16.  
     1924 A, 234.  
 Nopcea, F. 1901 A, 267 (*Dystropheus*).  
     1901 B, 213.  
     1906 A, 83.  
     1928 A, 184.  
 Williston, S. W. 1925 B, 293.  
 Zittel and Broili 1911 A, 285 (*Distropheus*).

**APATODON** Marsh.

- Hay, O. P. 1902 A, 506.  
 Hennig, E. 1924 A, 130.  
 Huene, F. 1909 B, 18.  
     A doubtful genus of doubtful position.

**BRACHYRPHUS** Cope.

- Hay, O. P. 1902 A, 506.  
 Hennig, E. 1924 A, 130 (*Brachyrhophus*).  
 Huene, F. 1909 B, 18 (*Brachyrhophus*).  
     A genus of uncertain position.

**ALAMOSAUROUS** Gilmore.

- Gilmore, C. W. 1922 A, 1.  
 Huene, F. 1927 B, 468, 469.  
     1927 C, 126.  
 Lull, R. S. 1924 A, 251, 270.

- Mook, C. C. 1916 A, 136.  
 Osborn and Mook 1919 A, 358.  
     1921 A, 277, text-figs. 19, 20, 119.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Colorado.

**Type D. viæmalæ** Cope.

- Zittel and Broili 1923 A, 350 (*Distropheus*).  
     A sauropod of doubtful family.  
**Dystrophæus viæmalæ** Cope.  
 Hay, O. P. 1902 A, 497.  
 Cross, W. 1907 A, 639.  
 Huene, F. 1904 A, 319, pls. xiv-xvi; text-figs. 4, 5.  
     1922 A, 88.  
     1927 B, 457.  
 Merrill, G. P. 1907 A, 70.  
 Mook, C. C. 1916 A, 135.  
 Nopcea, F. 1901 A, 261 (*Symphyrhophus viæmalæ*); 267 (*D. viæmalæ*).  
     1901 B, 207 (*Symphyrhophus viæmalæ*); 213 (*Dystrophæus viæmalæ*).  
     Upper Jurassic (McElmo); Utah.

**Type A. mirus** Marsh.

- Apatodon mirus** Marsh.  
 Hay, O. P. 1902 A, 506.  
 Mook, C. C. 1916 A, 147.  
     Upper Jurassic or Lower Cretaceous; Locality uncertain.

**Type B. altarkansanus** Cope.

- Brachyrhophus altarkansanus** Cope.  
 Hay, O. P. 1902 A, 506.  
 Mook, C. C. 1916 A, 148.  
 Osborn and Mook 1919 A, 390.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Colorado.

**Type A. sanjuanensis** Gilmore.

- Alamosaurus sanjuanensis** Gilmore.  
 Gilmore, C. W. 1922 A, 1, pls. i, ii.  
     1921 D, 274 ("sauropod dinosaur").  
 Reeside, J. B. 1924 A, 31.  
     Upper Cretaceous (Ojo Alamo); New Mexico.

## Order ORTHOPODA Cope.

- Cope, E. D. 1866 E, 316.  
 Hay, O. P. 1902 A, 495.  
 Abel, O. 1911 A, 161, 171 (*Orthopoda*); 171 (*Ornithischia*).  
     1912 F, 276, 292, 689.  
     1916 A, 495 ("orthopoden"); 471, 495 (*Ornithischia*).  
     1919 A, 614 (*Ornithischia*).  
     1920 A, 386 (*Ornithischia*).  
     1921 A, 251, 264 ("ornithischier").  
     1922 C, 353, 371 ("ornithischier").  
 Altmann, F. 1925 A, 105 ("orthopoden").  
 Arldt, T. 1909 A, 261 ("ornithischier"); 263 ("orthopoden").  
     1912 A, 668 (*Ornithischia*).  
 Bigot, A. 1897 A, 464 ("prédatés").  
 Boas, J. E. V. 1914 B, 568 (*Ornithischia*).

- Boulenger, G. A. 1903 A, 357.  
     1904 C, 480.  
 Broom, R. 1913 J, 364 (*Prendentata*).  
     1914 H, 1076 (*Prendentata*).  
     1924 B, 64, fig. 13 (*Prendentata*).  
 Case, E. C. 1897 D, 88 (*Prendentata*).  
     1898 C, 639 (*Prendentata*).  
 Cope, E. D. 1891 N, 43.  
 Dollo, L. 1905 B, 251 ("prédatariens").  
     1906 A, 445 ("prédatariens").  
 Drevermann, F. 1911 A, 274 (*Ornithischia*).  
 Fraas, E. 1911 B, 33 ("orthopoden").  
 Gadow, H. 1896 C, 204.  
     1901 B, 424.  
 Gilmore, C. W. 1907 A, 164.  
     1924 H, 3 (*Ornithischia*).  
     1927 B, 96 (*Ornithischia*).

- Gregory, W. K. 1919 A, 19 (Ornithischia).  
 Haeckel, E. 1873 A, 531 (Therapsida).  
 Hatcher, J. B. 1901 A, 129 (Pre dentata).  
 1901 D, 54 (Pre dentata).  
 1903 A, 47 (Pre dentata).  
 1904 A, 353 (Pre dentata).  
 1907 A, 10 (Pre dentata).  
 Hay, O. P. 1910 C, 23.  
 1911 B, 410 (Pre dentata).  
 Heilmann, G. 1926 A, 206 ("pre dentates").  
 Hennig, E. 1912 B, 99 ("pre dentaten").  
 1924 A, 129, 130 (Orthopoda); 129, 130 (Ornithischia).  
 Hitzheimer, M. 1913 A, 515 (Pre dentata).  
 Hooley, R. W. 1912 A, 48.  
 Huene, F. 1908 B, 307, 351 (Orthopoda); 406 (Ornithischia).  
 1908 F, 401 (Ornithischia).  
 1909 B, 16 (Ornithischia); 17 (Orthopoda).  
 1910 A, 78 (Ornithischia).  
 1914 A, 145 (Ornithischia).  
 1914 B, 444 (Ornithischia).  
 1914 C, 580 (Ornithischia).  
 1914 D, 154 (Ornithischia).  
 1914 G, 38 (Ornithischia); 41 ("orthopoden").  
 1914 K, 16 (Ornithischia).  
 1922 E, 24 (Ornithischia).  
 1922 F, 409 (Ornithischia).  
 1925 G, 316 ("ornithischier").  
 1927 E, 326 ("ornithischier").  
 Huene and Lull 1908 A, 134 (Ornithischia).  
 Huxley, T. H. 1870 G, 478.  
 Jaekel, O. 1910 C, 339 (Postpubici).  
 1911 A, 159 (Postpubici).  
 Koken, E. 1900 A, 464 (Pre dentata).  
 Lebedinsky, N. G. 1913 A, 768.  
 1913 B, 195 ("pre dentaten").  
 1914 A, 88 ("pre dentaten").  
 Lucas, F. A. 1902 B, 169 (Pre dentata).  
 Lull, R. S. 1904 A, 499.  
 1904 D, 144 ("herbivorous dinosaurs").  
 1910 A, 3, 10, 16, 29.  
 1912 A, 210.  
 1912 B, 771 (Pre dentata).  
 1915 A, 117 (Ornithischia); 207 (Orthopoda).  
 1915 C, 329 (Pre dentata).  
 1915 F, 836 ("pre dentate dinosaurs").  
 1917 A, 473 ("pre dentates").  
 1917 B, 294, 505, 518 (Ornithischia).  
 1924 A, 236 (Orthopoda); 307 (Ornithischia).  
 Lydekker, R. 1912 C, 23.  
 Marsh, O. C. 1881 E, 423 (Ornithopoda).  
 Matthew, W. D. 1915 A, 278 (Pre dentata).  
 1915 C, 28 (Pre dentata); 31, 32, 75 (Ornithischia); 75 (Orthopoda).  
 1915 L, 28, 75 ("pre dentates").  
 1921 D, 211 (Ornithischia).  
 1923 C, 408 (Ornithischia).  
 Mohnert, E. 1887 B, 217 ("orthopoden").  
 Middleton, J. 1844 A, 287 ("iguanodon").  
 Mook, C. C. 1918 A, 467 ("ornithischians").  
 Nopcsa, F. 1901 A, 261.  
 1905 A, 203.  
 1907 A, 231.  
 1911 A, 111.  
 1915 B, 1.  
 1917 A, 204, 209.  
 1917 B, 339, 348.  
 1918 B, 235, 239.  
 1922 A, 115, 116 (Ornithischia).  
 1923 H, 4-187, tab.  
 1926 A, 658 ("orthopodous dinosaurs").  
 1928 A, 184.  
 Osborn, H. F. 1903 H, 456, 466.  
 1904 H, 114.  
 1905 C, 295.  
 1924 B, 16 (Ornithischia).  
 Perrier, E. 1920 A, 312 ("orthopodes").  
 Pompeckj, J. F. 1921 A, 4 ("ornithischier").  
 Reynolds, S. H. 1897 A, 208, 292.  
 Romer, A. S. 1923 A, 141 (Ornithischia).  
 1927 C, 226, 230 (Ornithischia).  
 Seeley, H. G. 1887 F, 562 (Omosauria).  
 1888 B, 698 (Ornithischia).  
 1888 C, 86 (Ornithischia).  
 1888 G, 170 (Ornithischia).  
 1888 I, 240 (Ornithischia).  
 1894 B, 233 (Ornithischia).  
 1894 D, 412 (Ornithischia).  
 1904 A, 339 ("ornithosaurs").  
 Simpson, G. G. 1926 I, 454 (Ornithischia).  
 Steiner, E. 1922 A, 339 (Ornithischia).  
 Steinmann, G. 1907 A, 450.  
 1909 A, 67 (Ornithischia); 87 (Pre dentata).  
 1910 A, 99 (Ornithischia).  
 Stromer, E. 1912 A, 88 (Ornithischia).  
 Tolmachoff, I. 1924 A, 490 ("pre dentate dinosaurs").  
 Tornier, G. 1913 B, 270, 375 (Pre dentata).  
 Van den Broeck, E. 1900 A, 82, 85 ("orthopodes").  
 Van Straelen, V. 1925 A, 1, fig. 1 (Protocera tops?).  
 Versluys, J. 1910 B, 221 ("pre dentaten").  
 1923 A, 9 (Ornithischia).  
 Whitnall, H. O. 1925 A, 15 (Ornithischia).  
 Wieland, G. R. 1925 A, 603.  
 Williston, S. W. 1914 A, 18, 45.  
 1917 C, 412 (Pre dentata); 414 (Ornithischia).  
 1918 A, 79 (Pre dentata).  
 1925 A, 19, 142, 197 (Pre dentata); 118, 149 (Ornithischia).  
 1925 B, 214, 294 (Orthopoda, Ornithischia).  
 Zittel and Broili 1911 A, 288 (Pre dentata); 278 (Ornithischia).  
 1923 A, 353, 366 (Orthopoda); 353 (Ornithischia).  
 Zittel, Eastman, etc. 1902 A, 237 (Pre dentata).  
 Hay, O. P. 1902 A, 500 (Iguanodontoidae).  
 Abel, O. 1912 F, 278 ("ornithopoden").  
 1919 A, 614 (Orthopoda).  
 1922 C, 348 ("iguanodontiden").  
 Arldt, T. 1907 D, 669 (Ornithopoda).  
 Arldt, T. 1909 A, 263 ("ornithopoden").  
 1912 A, 669, 679 (Ornithopoda).  
 Berkey, C. P. 1923 A, 3 (Ornithopoda).  
 Bigot, A. 1897 A, 463 ("ornithopodes").  
 Case, E. C. 1897 D, 88 (Ornithopoda).

*Superfamily IGUANODONTOIDÆ, new form.*

- Dames, W. 1883 C, 272 (Orthopoda).  
 Dollo, L. 1889 H, 679 ("ornithopodes").  
 1905 B, 251 ("prédentariens quadrupèdes").  
 1923 B, 67 ("iguanodonts").  
 Fraas, E. 1911 B, 30 ("ornithopoden").  
 Fürbringer, M. 1888 A, 1620 (Ornithopoda).  
 Gadow, H. 1896 C, 205 (Ornithopoda).  
 1901 B, 426 (Ornithopoda).  
 Gilmore, C. W. 1909 A, 267 (Iguanodontidea).  
 Granger and Gregory 1923 A, 3 (Ornithopoda).  
 Günther, A. 1886 A, 443 (Ornithopoda).  
 Haeckel, E. 1868 A, 455 (Therosauria).  
 Hatcher, J. B. 1901 A, 129 (Ornithopoda).  
 1904 A, 353 (Iguanodontia).  
 1907 A, 157, 298 (Ornithopoda).  
 Heilprin, A. 1887 A, 162 (Ornithopoda).  
 Hennig, E. 1924 A, 128.  
 Hoernes, R. 1886 A, 616 (Ornithopoda).  
 Hoffmann, C. K. 1890 B, 1311 (Ornithopoda).  
 Huene, F. 1908 B, 370, 375 ("ornithopoden").  
 1909 B, 16 (Ornithopoda).  
 1914 A, 145.  
 1914 G, 41 ("ornithopoden").  
 Hulke, J. W. 1875 A, 364, fig. 1 (Iguanodon).  
 Jaekel, O. 1914 A, 197 (Phytophagi).  
 Johnson, A. 1883 A, 408 (Ornithopoda).  
 Koken, E. 1900 A, 464 (Ornithopoda).  
 Lafitte, J. P. 1905 A, 410 ("ornithopodes").  
 Lönnberg, E. 1910 A, 17 (Ornithopoda).  
 Lull, R. S. 1910 A, 3, 31 (Ornithopoda).  
 1912 A, 210 (Ornithopoda, Iguanodontia).  
 1914 D, 357 (Ornithopoda).  
 1915 F, 836 (Ornithopoda).  
 1917 B, 518 (Ornithopoda).  
 1924 A, 307 (Ornithopoda).  
 Lydekker, R. 1912 C, 29, 137 (Ornithopoda).  
 Matthew, W. D. 1915 C, 32, 77, 82 (Ornithopoda, Iguanodontia).  
 Nopcsa, F. 1901 A, 273 (Ornithopodidæ).  
 1901 B, 208 (Ornithopodidæ).  
 1902 C, 149, 168 ("ornithopodiden"); 164 (Kalodontidæ).  
 Nopcsa, F. 1905 A, 204 (Ornithopodidæ).  
 1905 D, 289 (Ornithopodidæ).  
 1911 A, 147 (Ornithopodidæ).  
 1915 B, 17 (Kalodontidæ, Trachodontidæ, Ornithopodidæ).  
 1916 A, 419 ("orthopoden").  
 1917 A, 207 (Kalodontidæ, Trachodontidæ).  
 1918 A, 196 ("ornithopoden").  
 1922 A, 115 (Ornithopoda).  
 1923 D, 112, 113 (Ornithopodidæ).  
 1923 H, 107, —109, 145, 149, 172, 175, tab. (Ornithopoda).  
 1928 A, 184 (Ornithopoidea).  
 Osborn, H. F. 1902 I, 18 (Iguanodontia).  
 1904 N, 308 (Ornithopoda).  
 1922 D, 723, fig.  
 1923 D, 8 (Iguanodontia).  
 1924 L, 143 (Iguanodontia).  
 Palacký, J. 1902 B, 141 (Ornithopoda).  
 Peck, F. B. 1904 A, 31 (Ornithopoda).  
 Pompeckj, J. F. 1921 A, 4 ("ornithopoden").  
 1922 B, 87 ("ornithopoder").  
 Reynolds, S. H. 1897 A, 209 (Ornithopoda).  
 Romer, A. S. 1927 C, 234, 258 (Ornithopoda).  
 Seeley, H. G. 1888 G, 168, 171 (Ornithopoda).  
 1888 J, 698 ("ornithosaurs").  
 Simpson, G. G. 1926 H, 208 (Ornithopoda).  
 1926 I, 454 (Ornithopoda).  
 Steinmann, G. 1908 A, 219 ("ornithopoden").  
 1910 A, 99 ("orthopoden").  
 Stromer, E. 1912 A, 88 (Ornithopoda).  
 Terra, P. 1911 A, 241 ("ornithopoden").  
 Vallois, H. V. 1921 A, 871 ("ornithopodes").  
 Van den Broeck, E. 1900 A, 85 (Ornithopoda).  
 Versluys, J. 1912 B, 687 (Ornithopoda).  
 1923 A, 9 (Ornithopodidæ).  
 Whitnall, H. O. 1925 A, 15 (Ornithopoda).  
 Williston, S. W. 1925 B, 295 (Iguanodontidæ).  
 Woodward, A. S. 1897 C, 380 ("iguanodonts").  
 Zittel and Broili 1911 A, 289 (Ornithopodidæ).  
 1923 A, 354 (Ornithopodidæ).

## NANOSAURIDÆ Marsh.

- Hay, O. P. 1902 A, 505.  
 Abel, O. 1919 A, 617.  
 Arldt, T. 1907 D, 667.  
 1909 A, 263 ("nanosauriden").  
 1912 A, 662, 668.  
 Hennig, E. 1924 A, 129.  
 Huene, F. 1909 B, 16.  
 Huene, F. 1914 G, pl. vii.  
 Koken, E. 1900 A, 464.  
 Matthew, W. D. 1915 C, 32.  
 Nopcsa, F. 1901 A, 262, 274.  
 1928 A, 184 (Kalodontidæ, Nannosaurinæ).  
 Van den Broeck, E. 1900 A, 87.  
 Williston, S. W. 1925 B, 294.

NANOSAURUS Marsh. Type *N. agilis* Marsh.

- Hay, O. P. 1902 A, 505.  
 Abel, O. 1919 A, 617.  
 Anonymous 1878 A, 76.  
 Cannon, G. L. 1894 A, 246.  
 Case, E. C. 1898 C, 640.  
 1908 D, 561, figs. 7-10.  
 Fraas, E. 1911 B, 83.  
 Gilmore, C. W. 1915 A, 614.  
 Gregory, W. K. 1907 B, 36, pl.  
 Hennig, E. 1912 B, 98.  
 Hoernes, R. 1886 A, 617.  
 Huene, F. 1906 B, 152, fig. 92.  
 1908 B, 273, 306, 375.  
 1909 B, 16.  
 Huene, F. 1914 G, 41.  
 Huene and Lull 1908 A, 134.  
 Lull, R. S. 1910 A, 17.  
 1917 B, 518.  
 1924 A, 238, 260.  
 Lydekker, R. 1912 C, 110.  
 Nopcsa, F. 1901 A, 263.  
 1905 C, 292.  
 1917 A, 208.  
 1918 B, 239.  
 1928 A, 184 (Nannosaurus).  
 Perrier, E. 1920 A, 308.  
 Romer, A. S. 1927 C, 226, 234.  
 Schuchert, C. 1918 B, 261.

- Van den Broeck, E. 1900 A, 87.  
 Williston, S. W. 1905 B, 339.  
     1909 E, 194.  
 Zittel and Broili 1911 A, 259.  
     1923 A, 354.

**Nanosaurus agilis Marsh.**

- Hay, O. P. 1902 A, 505.  
 Abel, O. 1912 F, 274.  
 Gilmore, C. W. 1925 B, 404.  
 Heilmann, G. 1926 A, 145, 161, fig. 106.  
 Huene, F. 1908 B, 318, 375, fig. 336.

- Huene and Lull 1908 A, 134, pl. xiii; text-figs. 1-10.  
 Nopcsa, F. 1902 C, 152.  
 Talbot, M. 1911 A, 475.  
     Triassic or Jurassic (Morrison?); Colorado.

**Nanosaurus rex Marsh.**

- Hay, O. P. 1902 A, 505.  
 Gilmore, C. W. 1909 B, 40.  
 Huene and Lull 1908 A, 142.  
 Nopcsa, F. 1902 C, 152.  
     Jurassic (Morrison); Colorado.

**CAMPTOSAURIDÆ Marsh.**

- Hay, O. P. 1902 A, 501.  
 Abel, O. 1919 A, 617 (Camptosaurinæ).  
 Arldt, T. 1907 D, 643.  
     1909 A, 263 ("camptosauriden").  
     1912 A, 668.  
 Dollo, L. 1889 H, 679.  
 Gilmore, C. W. 1924 E, 43.  
     1925 A, 375.  
     1925 B, 400.  
     1927 B, 96.  
 Hennig, E. 1924 A, 129.  
 Hoernes, R. 1886 A, 616 (Camptonotidæ).  
 Hoffmann, C. K. 1890 B, 1313 (Camptonotidæ).  
 Huene, F. 1909 B, 16.

- Koken, E. 1900 A, 464.  
 Lull, R. S. 1924 A, 238.  
 Matthew, W. D. 1915 C, 32.  
 Nopcsa, F. 1901 A, 262, 274, 275.  
     1901 B, 203, 210.  
     1917 A, 208.  
     1918 A, 187 ("camptosaurier").  
     1923 H, 103, 126 (Camptosaurinæ).  
     1928 A, 184 (Camptosaurinæ).  
 Romer, A. S. 1927 C, 226.  
 Williston, S. W. 1925 B, 295.  
 Zittel and Broili 1911 A, 289.  
     1923 A, 354.

**CAMPTOSAURUS Marsh. Type *Camptonotus dispar* Marsh.**

- Hay, O. P. 1902 A, 501.  
 Abel, O. 1910 D, 6.  
     1912 F, 268.  
     1916 A, 471, 496, figs. 3, 8.  
     1919 A, 617, fig. 484.  
     1920 A, 387, fig. 603.  
     1922 A, 145.  
     1922 C, 358, fig. 308.  
 Anonymous 1880 A, 113 (Camptonotus).  
 Arthaber, G. 1910 A, 554.  
 Boas, J. E. V. 1914 B, 568, fig. 19.  
 Boule, M. 1902 B, 908, fig. 14.  
 Brauns, D. 1890 A, 187 (Camptonotus).  
 Case, E. C. 1893 C, 640.  
 Dames, W. 1883 C, 272 (Camptonotus).  
 Darton, N. H. 1908 A, 446.  
 Dollo, L. 1889 H, 679.  
 Eastman, C. R. 1913 B, 678.  
 Gadow, H. 1896 C, 205.  
     1901 B, 426.  
 Gilmore, C. W. 1907 A, 164, fig. 8.  
     1909 A, 199, 204, 266, 268, 301, figs. 2, 3, 7, 8.  
     1912 A, 687, fig. 3.  
     1913 A, 4.  
     1919 A, 111.  
     1924 G, 17, 21, 26.  
     1924 H, 3.  
     1925 A, 363.  
     1925 B, 385, 396.  
 Gregory, W. K. 1901 A, 145.  
     1920 A, 125.  
 Hay, O. P. 1909 A, 96.  
     1910 C, 4.  
 Heilmann, G. 1916 A, 86.  
     1926 A, 203, fig. 105.  
 Heilprin, A. 1887 A, 162 (Camptonotus).  
 Hoernes, R. 1886 A, 616 (Camptonotus).

- Hoffmann, C. K. 1890 B, 1313 (Camptonotus).  
 Hooley, R. W. 1925 A, 4.  
 Huene, F. 1906 B, 151, fig. 94.  
     1908 B, 281, 360, 376.  
     1909 B, 16.  
     1914 C, 582, pl. xi, fig. 3.  
     1914 G, pl. vii.  
 Kingsley, J. S. 1925 A, 268, fig. 292.  
 Lebedinsky, N. G. 1913 A, 768.  
     1913 B, 197.  
 Loomis, F. B. 1901 A, 195.  
 Lull, R. S. 1910 A, 3.  
     1912 C, 674.  
     1917 A, 473.  
     1917 B, 507, 519, figs. 151, 159, 163.  
     1924 A, 238, 261, fig. 28.  
 Lydekker, R. 1913 A, 15 (Camptosaurus).  
 Matthew, W. D. 1910 D, 555.  
     1915 C, 76, 80, figs. 25, 26.  
 Moodie, R. L. 1917 B, 391.  
     1923 B, 245, pl. L, fig. 23.  
 Mook, C. C. 1916 A, 155.  
 Nopcsa, F. 1900 A, 560.  
     1901 A, 263, 275.  
     1902 C, 157, 168.  
     1903 B, 486.  
     1904 A, 234.  
     1905 A, 206.  
     1915 B, 16.  
     1917 A, 208 (Camptosaurus, Camptonotus).  
     1917 B, 341, 349.  
     1918 A, 186, 187.  
     1918 B, 239.  
     1923 D, 105.  
     1923 E, 1046.  
     1923 H, 103, 145.  
     1928 A, 184.

Osborn, H. F. 1917 B, 221, 222, fig.

1924 B, 4, 5, 10, 12, fig. 7.

Parks, W. A. 1926 A.

Peck, F. B. 1904 A, 32.

Pompeckj, J. F. 1920 A, 120.

1922 B, 88.

Rogers, A. F. 1924 A, 546.

Romer, A. S. 1927 C, 226, figs. 2, 7, 11, 20.

Schuchert, C. 1910 A, 582.

Seeley, H. G. 1888 G, 169, fig. (*Camptonotus*).

1892 D, 82.

Simpson, G. G. 1926 H, 205, 211.

Steiner, H. 1922 A, 347.

Steinmann, G. 1909 A, 79.

Tornier, G. 1913 B, 371.

Van den Broeck, E. 1900 A, 90.

Versluys, J. 1910 B, 223, fig. W.

1923 A, 9, fig. b.

Wieland, G. R. 1925 A, 602.

Williston, S. W. 1909 A, 397.

1925 A, 103, 164, 176, figs. 80, 132b.

1925 B, 295.

Zittel and Broili 1911 A, 289.

1923 A, 355.

Zittel, Eastman, etc. 1902 A, 238.

### ***Camptosaurus amplus* Marsh.**

Hay, O. P. 1902 A, 501.

Gilmore, C. W. 1909 A, 276, pls. vii-ix, xvii; text-fig. 38.

Lull, R. S. 1924 A, 269.

Mook, C. C. 1916 A, 146.

Nopcsa, F. 1902 C, 152.

Upper Jurassic (Morrison); Wyoming.

### ***Camptosaurus browni* Gilmore.**

Gilmore, C. W. 1909 A, 201, 230, 295, pl. vi; pl. xiv, fig. 3; text-figs. 14-19, 21, 23-27, 30.

Abel, O. 1919 A, 621, fig. 487.

Gilmore, C. W. 1912 B, 687, 688, pls. lv-lviii.

1914 A, 4.

1925 B, 388.

Heilmann, G. 1926 A, 151, fig. 103.

Lull, R. S. 1924 A, 269.

Moodie, R. L. 1923 B, 266, pl. L.

Mook, C. C. 1916 A, 147.

Nopcsa, F. 1918 A, 187, 190, 196.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### ***Camptosaurus depressus* Gilmore.**

Gilmore, C. W. 1909 A, 292, figs. 45-47.

1914 A, 4, 114.

1915 A, 607.

1925 B, 391.

Mook, C. C. 1916 A, 147.

Nopcsa, F. 1918 A, 187, 196.

Simpson, G. G. 1926 H, 207.

Upper Cretaceous (Lakota); South Dakota, Wyoming.

### ***Camptosaurus dispar* Marsh.**

Hay, O. P. 1902 A, 501.

Abel, O. 1919 A, 620, figs. 485, 486, 488, 489.

Gilmore, C. W. 1909 A, 198, 205, 269, pls. x-xiv, fig. 1; pls. xv, xviii; text-figs. 4, 5, 10-12, 20, 22, 28, 29, 32-37.

1912 B, 688, figs. 1, 4.

1914 A, 4, 88.

1915 A, 600.

1925 B, 388.

Hay, O. P. 1909 F, 94.

Heilmann, G. 1926 A, 153, figs. 109, 110, 116.

Lull, R. S. 1924 A, 269.

Mook, C. C. 1916 A, 145.

Nopcsa, F. 1902 C, 152.

1918 A, 187, 195, fig. 8.

Schuchert, C. 1918 B, 253.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### ***Camptosaurus medius* Marsh.**

Hay, O. P. 1902 A, 501.

Abel, O. 1919 A, 624, fig. 490.

Gilmore, C. W. 1909 A, 213, 258, 278, pl. xvi; text-figs. 6, 9, 31.

1914 A, 4, 25.

1925 B, 385, 406, pl. xviii; text-figs. 1, 2.

Heilmann, G. 1926 A, 45, figs. 106, 107.

Mook, C. C. 1916 A, 146.

Nopcsa, F. 1902 A, 152, fig. 7.

1904 A, 237.

1918 A, 187, fig. 7.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming, Colorado.

### ***Camptosaurus nanus* Marsh.**

Hay, O. P. 1902 A, 501.

Abel, O. 1919 A, 618, fig. 483.

1922 C, 433, fig. 361.

Gilmore, C. W. 1909 A, 198, 227, 280, pl. xiv, fig. 2; pl. xix; text-figs. 39-42.

1912 B, 687, 694, pls. lix-lxi.

1914 A, 4.

1924 G, 33, 36.

1925 B, 390.

Heilmann, G. 1926 A, 176, fig. 127.

Lull, R. S. 1924 A, 269.

Merrill, G. P. 1907 A, 65.

Mook, C. C. 1916 A, 146.

Nopcsa, F. 1902 C, 152.

1918 A, 187.

Osborn, H. F. 1915 A, 298.

Simpson, G. G. 1926 H, 207.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

## **LAOSAURIDÆ Marsh.**

Marsh, O. C. 1885 C, 497.

Hay, O. P. 1902 A, 501 (*Camptosauridæ*, in part).

Abel, O. 1919 A, 617 (*Laosaurinæ*).

Gilmore, C. W. 1909 A, 267.

1915 A, 614.

Gilmore, C. W. 1925 B, 400.

Koken, E. 1900 A, 464.

Osborn, H. F. 1923 D, 9.

Romer, A. S. 1927 C, 226.

Williston, S. W. 1925 B, 295.

LAOSAURUS Marsh. Type *L. celer* Marsh.

- Hay, O. P. 1902 A, 501.  
 Abel, O. 1919 A, 617.  
 Beddard, F. E. 1898 A, 155.  
 Brauns, D. 1890 A, 187.  
 Dames, W. 1883 C, 272.  
 Darton, N. H. 1908 A, 446.  
 Dollo, L. 1889 H, 679.  
 Du Toit, P. J. 1913 A, 248.  
 Gadow, H. 1896 C, 205.  
     1901 B, 427.  
 Gilmore, C. W. 1909 A, 216.  
     1915 A, 614.  
     1924 H, 1.  
     1925 B, 395.  
 Hay, O. P. 1910 C, 4.  
 Heilprin, A. 1887 A, 162.  
 Hoernes, R. 1886 A, 616.  
 Hooley, R. W. 1925 A, 8.  
 Huene, F. 1906 B, 151, fig. 98.  
     1908 B, 273, 361.  
     1909 B, 16.  
     1914 G, 41, pl. vii.  
 Huene and Lull 1908 A, 140.  
 Huxley, T. H. 1879 A, 400, pl. viii, fig. 8.  
 Johnson, A. 1883 A, 408.  
 Lebedinsky, N. G. 1913 A, 768.  
     1913 B, 197.  
 Lull, R. S. 1910 A, 3, 11.  
     1915 C, 330.  
     1917 A, 473.  
     1917 B, 519.  
 Mudge, B. F. 1879 A, 226.  
 Nopcea, F. 1901 A, 263.  
     1902 C, 188.  
     1904 A, 235.  
     1917 A, 208.  
     1917 B, 349.  
     1918 B, 239.  
     1928 A, 184.  
 Peck, F. B. 1904 A, 32.  
 Romer, A. S. 1927 C, 226, 241, figs. 7, 11.  
 Seeley, H. G. 1887 E, 211.  
 Simpson, G. G. 1926 H, 205.

- Tornier, G. 1913 B, 371.  
 Williston, S. W. 1925 B, 295.  
 Zittel and Broili 1911 A, 289.  
     1923 A, 354.

*Laosaurus celer* Marsh.

- Hay, O. P. 1902 A, 501.  
 Gilmore, C. W. 1924 H, 5.  
     1925 B, 403.  
 Mook, C. C. 1916 A, 146.  
 Nopcea, F. 1902 C, 153.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Colorado.

*Laosaurus consors* Marsh.

- Hay, O. P. 1902 A, 501.  
 Gilmore, C. W. 1924 H, 2.  
     1925 B, 396, 403.  
 Gregory, W. K. 1927 C, 175, fig. 5.  
 Huene, F. 1908 B, 273.  
 Huene and Lull 1908 A, 140.  
 Mook, C. C. 1916 A, 146.  
 Nopcea, F. 1902 C, 153, fig. 5.  
 Simpson, G. G. 1926 E, 3 (This genus?).  
 Talbot, M. 1911 A, 475.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Wyoming.

*Laosaurus gracilis* Marsh.

- Hay, O. P. 1902 A, 501.  
 Gilmore, C. W. 1909 B, 39, 40, fig. 2.  
     1914 A, 25.  
     1924 H, 5.  
     1925 B, 396, 403, figs. 7, 8.  
 Mook, C. C. 1916 A, 146.  
 Nopcea, F. 1902 C, 153.  
 Simpson, G. G. 1926 E, 3.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Wyoming.

*Laosaurus minimus* Gilmore.

- Gilmore, C. W. 1924 H, 1, pls. i, ii.  
     Lower Cretaceous (Blairmore); Alberta.

DORYSAURUS Marsh. Type *Laosaurus altus* Marsh.

- Hay, O. P. 1902 A, 501.  
 Clark, Bibbins, and Berry 1911 A, 67.  
 Darton, N. H. 1908 A, 446.  
 Gilmore, C. W. 1909 A, 216.  
     1915 A, 614.  
     1925 B, 394.  
 Huene, F. 1909 B, 16.  
     1914 G, 41.  
 Lebedinsky, N. G. 1913 A, 768.  
     1913 B, 197.  
 Lull, R. S. 1904 A, 471.  
     1910 A, 18, 29.  
     1911 A, 175.  
     1924 A, 239.  
 Mook, C. C. 1916 A, 153.  
 Nopcea, F. 1901 A, 263.  
     1902 C, 163.  
     1928 A, 184.

- Pompeckj, J. F. 1920 A, 126.  
 Romer, A. S. 1927 C, 226, fig. 2.

*Dryosaurus altus* Marsh.

- Hay, O. P. 1902 A, 501.  
 Eisler, P. 1895 A, 53 (Laosaurus).  
 Gilmore, C. W. 1909 A, 193.  
     1914 A, 4.  
     1924 H, 3.  
     1925 B, 394, figs. 3-6.  
 Heilmann, G. 1926 A, 23, fig. 12.  
 Lull, R. S. 1911 B, 176.  
 Mook, C. C. 1916 A, 147.  
 Nopcea, F. 1902 C, 152.  
 Simpson, G. G. 1926 E, 3.  
     Upper Jurassic or Lower Cretaceous (Morrisson); Colorado, Wyoming.

## HYPSILOPHODONTIDÆ.

- Abel, O. 1919 A, 617 (Hypsilophodontinæ).  
 1920 A, 386.  
 1922 C, 376, figs. 321-324 (Hypsilophodon).  
 Gilmore, C. W. 1915 A, 614.  
 1927 B, 96.  
 Günther, A. 1886 A, 443.  
 Hulke, J. W. 1873 A, 522, pl. xviii (Hypsilophodon).  
 1874 A, 18, pl. iii (Hypsilophodon).  
 1883 B, 1035, pls. lxxi-lxxxv (Hypsilophodon).  
 Huxley, T. H. 1870 E, 3, pls. i, ii (Hypsilophodon).  
 Lydekker, R. 1888 B, 193 (Hypsilophodon).
- Marsh, O. C. 1895 C, 498, pl. x, fig. 9.  
 1896 A, 6, figs. 2, 3 (Hypsilophodon).  
 1896 C, 244 (Hypsilophodon).  
 Nicholson and Lydekker 1889 A, 1159 (Hypsilophodon).  
 Nopcsa, F. 1901 A, 262.  
 1901 B, 208, 209.  
 1923 A, 184 (Hypsilophodontinæ).  
 Owen, R. 1873 B, 531 (Iguanodon).  
 Parks, W. A. 1926 A (Hypsilophodontidæ).  
 Pompeckj, J. F. 1920 A, 120 (Hypsilophodon).  
 Romer, A. S. 1927 C, 226.  
 Zittel, K. A. 1890 A, 756 (Hypsilophodon).  
 Zittel and Broili 1911 A, 289.  
 1923 A, 354.

## THESCÉLOSARUS Gilmore.

- Gilmore, C. W. 1913 A.  
 Abel, O. 1916 A, 471, fig. 3.  
 1920 A, 387, fig. 603.  
 1922 C, 358, fig. 308.  
 Gilmore, C. W. 1914 A, 66.  
 1915 A, 591.  
 1915 D, 411, 488.  
 1920 C, 274.  
 1924 G, 33.  
 1924 H, 3.  
 1925 B, 408.  
 Lull, R. S. 1924 A, 238.  
 Matthew, W. D. 1915 C, 81.  
 Nopcsa, F. 1923 E, 1046.  
 1923 H, 108 (Thescelosaurus).  
 1928 A, 184.  
 Osborn, H. F. 1924 B, 4, 5, 10, 12, fig. 7.  
 Parks, W. A. 1928 A, 15.  
 Romer, A. S. 1927 C, 226, figs. 2, 7, 11, 14-18.  
 Steiner, H. 1922 A, 347.  
 Williston, S. W. 1925 A, 175, 191, figs. 141, 156.  
 Zittel and Broili 1923 A, 354.

**Thescelosaurus neglectus** Gilmore.

- Gilmore, C. W. 1913 A, 1, figs. 1-5.  
 Bowen, C. F. 1915 A, 136.

Type *T. neglectus* Gilmore.

- Brown, B. 1914 E, 358.  
 Collier, A. J. 1918 A, 32.  
 Gilmore, C. W. 1915 A, 591, pls. lxxix-lxxxii;  
 text-figs. 1-19.  
 1920 C, 274, pl. iii.  
 1924 A, 68.  
 1924 D, 27.  
 1925 B, 388.  
 1926 I, 230, fig. 1 ("Thescelosaurus").  
 Parks, W. A. 1926 A.  
 Shufeldt, R. W. 1916 B, 42, fig. 7.  
 Sternberg, C. M. 1924 A, 68.  
 Upper Cretaceous (Lance); Wyoming, Montana, Saskatchewan.

**Thescelosaurus warreni** Parks.

- Parks, W. A. 1926 A, 3-42, pls. i, ii; text-figs. 1-18.  
 Huene, F. 1927 G, 281.  
 Upper Cretaceous (Edmonton); Alberta.

**Thescelosaurus** sp. indet.

- Sternberg, C. M. 1926 A, 103. Upper Cretaceous (Edmonton); Alberta.

## TROÖDONTIDÆ Gilmore.

- Gilmore, C. W. 1924 G, 8.  
 Lambe, L. M. 1918 A, 32, 35 (Psalisauridæ).  
 Lull, R. S. 1924 A, 238.

- Nopcsa, F. 1923 A, 185 (Acanthopholidæ).  
 Romer, A. S. 1927 C, 226.

TROÖDON Leidy. Type *T. formosus* Leidy.

- Hay, O. P. 1902 A, 490.  
 Gilmore, C. W. 1923 B, 52.  
 1924 G (Troödon; Stegoceras a syn.).  
 Hatcher, J. B. 1907 A, 97, 299, pl. xxii.  
 Hennig, E. 1924 A, 125, 126, 153 (Stegoceras).  
 Huene, F. 1909 B, 17 (Troödon); 18 (Stegoceras).  
 Lambe, L. M. 1902 A, 68 (Stegoceras, type *S. validus* Lambe).  
 1903 A, 60 (Stegoceras).  
 1904 C, 23 (Stegoceras).  
 1912 A, 9 (Stegoceras).  
 1918 A, 23, 33 (Stegoceras).  
 Lull, R. S. 1924 A, 236, 238, 260, 273.  
 Nopcsa, F. 1901 A, 255.  
 1902 B, 106.

- Nopcsa, F. 1903 D, 266 (Stegoceras).  
 1915 B, 13, 19 (Stegoceras).  
 1917 A, 210 (Troödon); 211 (Stegoceras).  
 1918 C, 326 (Stegoceras).  
 1923 H, 105 (Stegoceras).  
 Osborn, H. F. 1902 H, 675 (Stegoceras).  
 1902 I, 21 (Stegoceras).  
 1923 D, 3 (Stegoceras).  
 1924 B, 5, 10.  
 Romer, A. S. 1927 C, 226, figs. 3, 4, 8.  
 Zittel and Broili 1923 A, 362 (Syn. of *Ankylosaurus*).  
**Troödon brevis** (Lambe).  
 Lambe, L. M. 1918 A, 35 (Stegoceras).  
 Gilmore, C. W. 1924 G, 10, 12 (Syn.? of *T. validus*).



Lambe, L. M. 1902 A, 68, pl. xxi, figs. 3-5  
("Stegoceras validus").  
Upper Cretaceous (Belly River); Alberta.

### **Troödon formosus** Leidy.

Hay, O. P. 1902 A, 490.  
Bowen, C. F. 1915 A, 130, 148-150.  
Brown, B. 1908 B, 192, fig. 8.  
1914 E, 378.  
Gilmore, C. W. 1924 G, 8, 38.  
1927 G, 1.  
Hatcher, J. B. 1905 B, 83.  
Hay, O. P. 1910 B, 299.  
Hennig, E. 1924 A, 115.  
Lambe, L. M. 1904 C, 25, 37, 49.  
1915 B, 120 (This species?).  
Matthew, W. D. 1916 A, 484.  
Osborn, H. F. 1902 H, 674.  
1902 I, 12, 17.  
Peale, A. C. 1912 A, 754.  
Upper Cretaceous (Judith River); Montana:  
(Belly River); Alberta: (Lance?); Wyoming?

### **HADROSAURIDÆ** Cope.

Unless otherwise indicated the authors quoted  
use the family name Trachodontidæ.

Cope, E. D. 1869 M, 91 (Hadrosauridæ).  
Hay, O. P. 1902 A, 503.  
Abel, O. 1919 A, 632 (Trachodontidæ); 636 (Trachodontinæ).  
1924 A, 713 ("trachodonten").  
Arlt, T. 1907 D, 271, 333 (Hadrosauridæ).  
1909 A, 263 ("trachodontiden").  
Brown, B. 1907 A, 841.  
1908 C, 51 ("trachodonts").  
1910 A, 273.  
1912 B, 135.  
1913 B, 395.  
1914 A, 545.  
1914 C, 559, 563, 564.  
1914 E, 377.  
1917 A, 282, 290.  
Cope, E. D. 1891 N, 43.  
Dames, W. 1883 C, 272.  
Douglass, E. 1902 C, 220 (Claosauridæ).  
Gilmore, C. W. 1917 A, 38.  
1920 A, 63.  
1924 C, 18.  
1924 E, 42.  
1927 B, 96.  
Günther, A. 1886 A, 443.  
Hatcher, J. B. 1902 C, 377, 384 (Syn. of Iguanodontidæ).  
1903 D, 374.  
1907 A, 300.  
Heilmann, G. 1926 A, 145.  
Hennig, E. 1924 A, 129.  
Henning, C. L. 1914 A, 771 ("trachodontiden").  
Hoernes, R. 1886 A, 618 (Hadrosauridæ).  
Hoffman, C. K. 1890 B, 1315.  
Huene, F. 1909 B, 16.  
1914 A, 145.  
1914 G, pl. vii.  
Jaekel, O. 1914 A, 197 ("hadrosauriden").  
Koken, E. 1900 A, 464 (Hadrosauridæ, Claosauridæ).  
Lambe, L. M. 1912 A, 9.

### **Troödon validus** (Lambe).

Lambe, L. M. 1902 A, 68, pl. xxi, figs. 1, 2; not  
figs. 3-5 (Stegoceras).  
Bowen, C. F. 1915 A, 140 (Stegoceras).  
Brown, B. 1914 E, 378 (Stegoceras).  
Gilmore, C. W. 1924 G, 1, 11, pls. i-xv; text-  
figs. 1-3.  
Hatcher, J. B. 1905 B, 95 (Stegoceras).  
1907 A, 98, 299, figs. 99, 100 (Stegoceras).  
Lambe, L. M. 1902 A, 47 (Troödon formosus).  
1904 C, 24, 37, 49 (Stegoceras).  
1907 B, 179 (Stegoceras).  
1918 A, 25, 32, 35, pls. i, ii (Stegoceras).  
Lull, R. S. 1907 B, 299, pl. xxii; text-figs. 99,  
100 (Stegoceras).  
Matthew, W. D. 1916 A, 484 (Stegoceras).  
Osborn, H. F. 1902 I, 15 (Stegoceras).  
Upper Cretaceous (Belly River); Alberta.

### **Troödon** sp. indet.

Sternberg, C. M. 1926 A, 104. Upper Cretaceous  
(Edmonton); Alberta.

Lambe, L. M. 1917 C, 67 (Hadrosauridæ).  
1918 C, 135 (Hadrosauridæ).  
1920 A, 1, 67.  
Lull, R. S. 1907 B, 300.  
1912 A, 210.  
1924 A, 240, 262.  
Lydekker, R. 1908 B, 545.  
Matthew, W. D. 1914 B, 387.  
1915 A, 278.  
1915 C, 32, 82.  
1921 D, 211.  
Nopcsa, F. 1900 A, 556 ("hadrosauriden").  
1901 A, 262, 265, 275 (Hadrosauridæ).  
1904 A, 237 (Hadrosauridæ).  
1915 B, 217.  
1917 A, 207.  
1918 A, 187.  
1918 B, 236.  
1922 A, 115.  
1923 D, 105, 112.  
1923 G, 111 ("trachodontiden").  
1923 H, 107-109, 145, 149, 172, 175.  
1928 A, 184.  
Parks, W. A. 1920 B, 9.  
1923 B, 5.  
Pompeckj, J. F. 1922 B, 90 ("trachodontiden").  
Romer, A. S. 1927 C, 226, 235 (Hadrosauridæ,  
Trachodontidæ).  
Sternberg, C. M. 1921 A, 63.  
1925 A, 108.  
1926 B, 74.  
1927 B, 143.  
Van den Broeck, E. 1900 A, 87 (Hadrosauridæ);  
101 (Trachodontidæ).  
Van Straelen, V. 1925 A, 3 ("eggs of duckbilled?  
dinosaur").  
Versluys, J. 1910 B, 233 (Hadrosauridæ).  
1923 A, 10 ("trachodonten").  
Williston, S. W. 1925 A, 95, 100, 176, 189 (Tra-  
chodontia, Trachodontidæ).  
1925 B, 295.  
Zittel and Broili 1911 A, 291.  
1923 A, 357.

## HADROSAURINÆ Lambe.

- Lambe, L. M. 1918 C, 138.  
 Brown, B. 1914 C, 564 (Trachodontinæ).  
 Gilmore, C. W. 1920 A, 64.  
     1924 C, 16, 26.  
     1924 E, 34, 40.  
 Lambe, L. M. 1920 A, 67.  
 Lydekker, R. 1915 C, 630 (Trachodontinæ).

- Nopcea, F. 1917 A, 208 (Trachodontidæ).  
     1922 H, 126 (Trachodontinæ).  
     1928 A, 184 (Trachodontinæ).  
 Parks, W. A. 1920 B, 8 (Trachodontinæ).  
     1923 B, 6.  
 Sternberg, C. M. 1926 B, 77.  
 Tornier, G. 1913 B, 372 (Trachodontinæ).

HADROSAURUS Leidy. Type *H. foulkii* Leidy.

- Leidy, J. 1858 A, 215.  
 Hay, O. P. 1902 A, 503 (Trachodon, part).  
 Anonymous 1868 A, 8.  
 Brauns, D. 1890 A, 187.  
 Dames, W. 1883 C, 272.  
 Gilmore, C. W. 1920 A, 64.  
 Hoffmann, C. K. 1890 B, 1315.  
 Holmes, F. S. 1870 A, 31.  
 Huxley, T. H. 1868 D, 309.  
     1869 K, 146.  
     1870 G, 470, 472.  
     1870 H, 491.  
     1875 E, 81.  
 Lambe, L. M. 1918 C, 135.  
 Lull, R. S. 1918 B, 205.  
     1924 A, 241.  
 Matthew, W. D. 1915 C, 100.  
 Nat. Sci. 1898 A, 230.  
 Newberry, J. S. 1878 C, 647.  
 Nopcea, F. 1917 A, 208.  
     1918 A, 187.  
     1923 A, 184.  
 Parks, W. A. 1920 B.  
 Reynolds, S. H. 1897 A, 284.  
 Romer, A. S. 1927 C, 226.  
 Seeley, H. G. 1887 E, 210.  
 Sternberg, C. M. 1921 B, 97.  
 Wieland, G. R. 1925 A, 603 ("hadrosaurs").  
 Williston, S. W. 1925 B, 295.  
 See also citations under *Trachodon*.

**Hadrosaurus cavatus** Cope.

- Hay, O. P. 1902 A, 503 (Trachodon).  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 380, 385 (Trachodon).  
 Nopcea, F. 1900 A, 557.  
 Upper Cretaceous (Hornertown); New Jersey.

**Hadrosaurus foulkii** Leidy.

- Hay, O. P. 1902 A, 503 (Trachodon).  
 Abel, O. 1922 A, 134 (*H. foulkii*).

- Anonymous 1868 A, 7.  
     1922 C, 332, fig. ("Hadrosaurus").  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 378.  
 Hawkins, B. W. 1871 A, 182 ("Hadrosaurus").  
 Lucas, F. A. 1904 C, 319.  
 Nopcea, F. 1900 A, 556.  
     1904 A, 237.  
 Osborn, H. F. 1902 I, 19.  
 Ruschenberger and Tryon 1879 A. 90, 92 (Trachodon).  
 Scott, W. B. 1924 A, 438 ("dinosaur").  
 Versluys, J. 1923 A, 9 (*H. foulkii*).  
 Zittel and Broili 1911 A, 292, fig. 440 (Trachodon).  
     1923 A, 358, fig. 468 (*H. fulkei*).  
 Zittel, Eastman, etc. 1902 A, 240, fig. 344 (Trachodon).  
 Upper Cretaceous; New Jersey.

**Hadrosaurus minor** Marsh.

- Hay, O. P. 1902 A, 504 (Trachodon).  
 Cope, E. D. 1872 QQ, 2.  
     1873 FF, 8.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 380, 385.  
 Nopcea, F. 1900 A, 557.  
 Upper Cretaceous (Hornertown); New Jersey.

**Hadrosaurus tripos** Cope.

- Hay, O. P. 1902 A, 504 (Trachodon).  
 Dall and Harris 1892 A, 85.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 380, 385.  
 Nopcea, F. 1900 A, 557.  
 Stephenson, L. W. 1912 A, 120 (Trachodon. This species?).  
 Upper Cretaceous (Black Creek); North Carolina.

TRACHODON Leidy. Type *T. mirabilis* Leidy.

- Hay, O. P. 1902 A, 503.  
 Abel, O. 1912 F, 494, 705.  
     1916 A, 470, 496, figs. 1-3, 8.  
     1919 A, 636, fig. 503.  
     1920 A, 387, 393, fig. 603.  
 Bach, R. 1914 A, 347.  
 Beecher, C. E. 1902 A, 313, fig. 2 (Hadrosaurus).  
 Broili, F. 1922 A, 465, figs. 1-5.  
 Brown, B. 1908 C, 51, 4 figs.  
     1910 A, 273.  
     1912 A, 106, fig. 1.  
     1912 B, 131.  
     1913 B, 396.

- Brown, B. 1913 E, 926.  
     1914 A, 548, pls. xxxvi, xxxvii.  
     1914 C, 559, 564.  
     1914 E, 374, 377.  
     1916 B, 712, pl. xxii, fig. 2.  
 Campbell, M. R. 1915 A, 74.  
 Case, E. C. 1898 C, 643 (Hadrosaurus).  
 Cope, E. D. 1880 U, 147 (Hadrosaurus, *Diclonius*).  
 Cross, M. 1896 A, 218 (Diclonius).  
 Dollo, L. 1889 G, 675 (Hadrosaurus).  
     1909 A, 106.  
 Drevermann, F. 1922 B, 91.

- Eastman, C. R. 1913 B, 678 (Trachydont).
- Gadow, H. 1896 C, 205 (Hadrosaurus).  
1901 B, 429 (Hadrosaurus).
- Gill, T. 1901 B, 788 (Hadrosaurus).
- Gilmore, C. W. 1909 A, 246.  
1914 A, 66.  
1915 C, 58.  
1915 F, 653.  
1917 A.  
1919 A, 111.  
1920 C, 272.  
1924 C, 13.  
1927 A, 35, fig.
- Gregory, W. K. 1901 A, 143 (Hadrosaurus).  
1920 A, 127.
- Gregory and Camp 1918 A, 530.
- Hatcher, J. B. 1902 C, 377, 386 (Hadrosaurus, Trachodon).  
1905 B, 96 (Trachodon); 99 (Diclonius).  
1907 A, 91, 300, pl. 1; text-figs. 94, 95.
- Hay, O. P. 1908 E, 357.  
1910 C, 4.
- Heilmann, G. 1913 B, 41, fig. 86.  
1916 A, 85.  
1926 A, 207, figs. 107, 116.
- Heilprin, A. 1887 A, 169 (Hadrosaurus).
- Hennig, E. 1912 B, 99.
- Henning, C. L. 1914 A, 771.
- Hoernes, R. 1886 A, 618 (Hadrosaurus).
- Huene, F. 1909 B, 16 (Trachodon, Diclonius).  
1912 G, 143.  
1914 C, 583, pl. xii, fig. 2.
- Jaekel, O. 1922 A, 91.
- Janensch, W. 1925 B, 272.
- Knowlton, F. H. 1909 A, 232.
- Kräusel, R. 1922 A, 80.
- Lambe, L. M. 1899 B, 186.  
1903 B, 137.  
1913 A, 21, pls. i-iii.  
1914 B, pl. xvii.  
1914 G, 384.  
1917 B, 31.  
1918 C, 135.  
1920 A, 68, fig. 37 (Diclonius).
- Lee, W. T. 1913 A, 532.
- Lucas, F. A. 1904 C, 317.
- Lull, R. S. 1903 A, 664.  
1907 B, 300.  
1910 A, 311.  
1912 C, 675.  
1914 D, 357.  
1915 F, 836, 905.  
1917 B, 297, 521.  
1924 A, 240, 273, figs. 29, 34.
- Lydekker, R. 1910 D, 459 (Hadrosaurus).  
1913 A, 15.  
1914 A, 640.
- Matthew, W. D. 1907 D, 6 (Claosaurus).  
1908 F, 89.  
1909 F, 68.  
1910 D, 550.  
1910 F, 8.  
1915 C, 28, 31, 80, figs. 27-30, 32.  
1917 F, 419.  
1920 D, 542.
- Matthew and Brown 1915 A, 428.
- Moodie, R. L. 1923 C, 1.
- Nopce, F. 1900 A, 563 (Hadrosaurus).  
1901 A, 266 (Hadrosaurus).  
1901 B, 213 (Syn. of Hadrosaurus).  
1902 C, 161, 168 (Hadrosaurus).  
1904 A, 236, 237.  
1905 A, 206.  
1905 C, 292.  
1917 A, 208.  
1917 B, 344, 349.  
1918 A, 186, 190.  
1918 B, 236, 239.  
1923 H, 106, 107.  
1925 B, 11.  
1928 A, 184.
- Osborn, H. F. 1902 I, 9.  
1909 A, 197.  
1909 C, 160.  
1912 G, 233, fig. 1.  
1912 J, 18, fig. 13.  
1912 K.  
1917 B, 322, figs.  
1924 B, 4, 5, 12, fig. 7.
- Parks, W. A. 1920 B.
- Pompeckj, J. F. 1921 A, 7.  
1922 B, 87.
- Rogers, A. F. 1924 A, 546.
- Romer, A. S. 1927 C, 226, figs. 2, 7, 11, 20.
- Schuchert, C. 1910 A, 596.
- Schwarz, E. 1922 C, 91.
- Seeley, H. G. 1888 G, 170 (Diclonius).
- Seitz, A. L. L. 1907 A, 347.
- Stanton, T. W. 1909 A.  
1910 A, 64.
- Stanton and Hatcher 1905 A, 38, 51, 54, 57, 59.
- Steinmann, G. 1909 A, 79.
- Sternberg, C. H. 1903 C, 871 (Diclonius).  
1909 A, 116.  
1909 C, 77 (Diclonius).  
1911 A, 72.  
1911 B, 219, 221, 222.  
1917 A.
- Sternberg, C. M. 1926 A, 104.
- Tornier, G. 1913 B, 372.
- Vallois, H. V. 1921 A, 973.
- Van den Broeck, E. 1900 A, 102 (Hadrosaurus).
- Versluys, J. 1910 B, 222 (Diclonius).  
1922 A, 80, figs. 1-6.  
1923 A, 1, fig. a.
- Wegemann, C. H. 1918 A, 57.
- Wegner, R. N. 1922 A, 480.
- Whiteaves, J. F. 1901 A, 186.
- Whitnall, H. O. 1925 A, 17, pl. iii.
- Wieland, G. R. 1925 A, 602.
- Williston, S. W. 1909 E, 194 (Hadrosaurus).  
1925 A, 149, 175, 191, 197, figs. 122, 141, 156  
1925 B, 295.
- Zittel and Broili 1911 A, 291.  
1923 A, 358, fig. 470.
- Zittel, Eastman, etc. 1902 A, 240.

### Trachodon altidens Lambe.

Lambe, L. M. 1902 A, 76, pl. iv, figs. 2-4 [T. (Pteropelyx)].

Bowen, C. F. 1915 A, 142.

Brown, B. 1914 E, 379.

Gilmore, C. W. 1924 C, 26.

Hatcher, J. B. 1905 B, 98.

- Lambe, L. M. 1904 C, 24, 37, 49.  
1912 A, 10.  
1917 A, 121.
- Matthew, W. D. 1916 A, 484.
- Osborn, H. F. 1902 H, 675 [Pteropelyx (Didanodon)].  
1902 I, 15 (Trachodon); 19 [Pteropelyx (Didanodon, new subg.)].  
Upper Cretaceous (Belly River); Alberta.
- Trachodon breviceps** Marsh.  
Hay, O. P. 1902 A, 503.  
Bowen, C. F. 1915 A, 140, 151.  
Gilmore, C. W. 1924 C, 26 (Hadrosaurus).  
Hatcher, J. B. 1902 C, 382, 385 [T. (Hadrosaurus)].  
1905 B, 97, 98.  
Nopcsa, F. 1900 A, 557 (Hadrosaurus).  
1901 A, 266 (Hadrosaurus).  
1901 B, 212 (Hadrosaurus).  
Osborn, H. F. 1902 I, 15.  
Zittel and Broili 1911 A, 292, fig. 441.  
1923 A, 358.  
Zittel, Eastman, etc. 1902 A, 241, fig. 345.  
Upper Cretaceous (Judith River); Montana.
- Trachodon calamarius** (Cope).  
Hay, O. P. 1902 A, 503.  
Bowen, C. F. 1915 A, 142, 150 (Diclonius).  
Gilmore, C. W. 1924 C, 26 (Diclonius).  
Hatcher, J. B. 1902 C, 381, 385 (Diclonius).  
1905 B, 99 (Diclonius).  
Lambe, L. M. 1918 C, 138 (Diclonius).  
Nopcsa, F. 1901 B, 212 (Hadrosaurus calamarius).  
Osborn, H. F. 1902 I, 15 (Diclonius).  
Sternberg, C. H. 1914 A, 134 (Diclonius).  
Upper Cretaceous (Judith River); Montana.
- Trachodon longiceps** Marsh.  
Hay, O. P. 1902 A, 504.  
Bowen, C. F. 1915 A, 142.  
Gilmore, C. W. 1924 C, 26.  
Hatcher, J. B. 1902 C, 378, 383, 385.  
1907 A, 117.  
Nopcsa, F. 1900 A, 557 (Hadrosaurus).  
1901 B, 212 (Hadrosaurus).  
Osborn, H. F. 1902 I, 15.  
Upper Cretaceous (Lance); Wyoming.
- Trachodon mirabilis** Leidy.  
Hay, O. P. 1902 A, 504.  
Abel, O. 1912 F, 494, fig. 395.  
1919 A, 636, fig. 502.  
1922 A, 135 (Hadrosaurus).  
Ballou, W. H. 1897 A, 19, fig. (Hadrosaurus).  
Boule, M. 1891 A, 15, fig. 2 (Hadrosaurus).  
Bowen, C. F. 1915 A, 140, 148, 150.  
Brown, B. 1913 B, 404, figs. 7a, 8a.  
1914 E, 358.  
1916 B, 713.  
1919 A, 408, 411 ("Trachodon").  
Cope, E. D. 1891 N, 44, fig. 22 (Diclonius).  
Gadow, H. 1901 B, 429 (Hadrosaurus).  
Gilmore, C. W. 1915 F, 658.  
1917 A.  
1924 C, 19, 25 (Diclonius); 26 (Trachodon).  
1924 E, 30 (This species?).
- Hatcher, J. B. 1902 C, 377, 384, 386.  
1905 B, 96, 98.  
1907 A, 4, fig. 1.
- Hay, O. P. 1910 C, 15 (Hadrosaurus).  
Heilmann, G. 1913 B, 42, figs. 83-85.  
Hookey, R. W. 1925 A, 4.  
Huene, F. 1914 C, pl. xi, fig. 4; pl. xii, fig. 1.  
Lambe, L. M. 1899 B, 184, 186.  
1902 A, 77.  
1917 C, 66 (Diclonius).  
1918 C, 135.  
1920 A, 66 (Diclonius).  
Lull, R. S. 1908 B, 397, fig. 9.  
Matthew, W. D. 1903 F, 4 (Diclonius).  
1921 B, 137 ("Trachodon").  
Nopcsa, F. 1900 A, 556, 563 (Hadrosaurus).  
1901 B, 212 (Hadrosaurus).  
1902 C, 168, fig. 9 (Hadrosaurus).  
1904 A, 237.  
1918 A, 188, figs. 5, 11.  
Osborn, H. F. 1902 I, 15, 19.  
1904 F, 19, 46 (Hadrosaurus).  
1909 C, 160, figs. 1, 2.  
1912 K, 34, pl. x.  
Parks, W. A. 1922 B, 20, 25, 27.  
Peale, A. C. 1912 A, 754.  
Seeley, H. G. 1888 I, 239 (Diclonius).  
Stanton and Hatcher 1905 A, 43, 50.  
Sternberg, C. H. 1909 C, 275, fig. 46.  
1914 A, 134.  
1915 A, 133.  
1917 A, 118.  
Sternberg, C. M. 1926 B, 73.  
1927 A, 67.  
Tornier, G. 1913 B, 372.  
Versluys, J. 1923 A, 6 (Diclonius).  
Whiteaves, J. F. 1901 A, 184, 186.  
Zittel and Broili 1911 A, 292, fig. 439.  
1923 A, 357, fig. 467.  
Zittel, Eastman, etc. 1902 A, 240, fig. 343.  
Upper Cretaceous (Judith River); Montana:  
(Belly River); Alberta: (Lance); Wyoming.
- Trachodon pentagonus** (Cope).  
Hay, O. P. 1902 A, 504.  
Bowen, C. F. 1915 A, 142, 150 (Diclonius).  
Gilmore, C. W. 1924 C, 26 (Diclonius).  
Hatcher, J. B. 1902 C, 381, 385 (Diclonius).  
1905 B, 99 (Diclonius).  
Lambe, L. M. 1918 C, 138 (Diclonius).  
Nopcsa, F. 1900 A, 557 (Diclonius. Syn. of Hadrosaurus breviceps).  
Osborn, H. F. 1902 I, 15 (Diclonius).  
Sternberg, C. H. 1914 A, 134 (Diclonius).  
Upper Cretaceous (Judith River); Montana.
- Trachodon perangulatus** (Cope).  
Hay, O. P. 1902 A, 504.  
Bowen, C. F. 1915 A, 142, 150 (Diclonius).  
Gilmore, C. W. 1924 C, 26 (Diclonius).  
Hatcher, J. B. 1902 C, 381-385 (Diclonius).  
1905 B, 99.  
Lambe, L. M. 1908 C, 138 (Diclonius).  
Nopcsa, F. 1901 B, 212 (Hadrosaurus).  
Osborn, H. F. 1902 I, 15 (Diclonius).  
Sternberg, C. H. 1914 A, 134 (Diclonius).  
Upper Cretaceous (Judith River); Montana.

**Trachodon selwyni** Lambe.

- Lambe, L. M. 1902 A, 69, pl. iii, figs. 2, 3 [T. (Pteropelyx)].  
 Abel, O. 1912 F, 493, fig. 376.  
 Bowen, C. F. 1915 A, 142, 151.  
 Brown, B. 1914 E, 379.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1905 B, 97, 98.  
 Lambe, L. M. 1904 C, 24, 37, 49.  
     1912 A, 9.  
     1914 C, 148 (Gryposaurus?).  
 Matthew, W. D. 1916 A, 484.  
 Osborn, H. F. 1902 H, 675.  
     1902 I, 15, 19.  
 Upper Cretaceous (Belly River); Alberta.

**Trachodon sp. indet.**

- Anonymous 1914 A, 384.  
 Bowen, C. F. 1915 A, 142.  
 Brown, B. 1907 A, 842.  
 Gilmore, C. W. 1922 E, 360 ("Trachodon." This genus?).  
     1926 J, 28. Upper Cretaceous (Lance); Wyoming.  
 Stanton, T. W. 1910 B, 183. Upper Cretaceous (Hell Creek); Montana.  
 Williston, S. W. 1907 B, 53 (Claosaurus). Cretaceous (Rattlesnake); Texas.  
 Wrather, W. E. 1922 A, 354, figs. 1-5 ("dinosaur"). Lower Cretaceous (Glenrose); Texas.

**Thespesius** Leidy. Type *T. occidentalis* Leidy.

- Hay, O. P. 1902 A, 502.  
 Abel, O. 1919 A, 637 (Claosaurus).  
     1922 A, 135 (Trachodon).  
     1922 C, 339.  
 Beecher, C. E. 1902 A, 313.  
 Gilmore, C. W. 1909 A, 267.  
     1915 F, 659.  
     1920 C, 272 (Trachodon).  
     1924 C, 13.  
     1924 F, 53.  
     1925 B, 408.  
 Hatcher, J. B. 1901 A, 129 (Claosaurus).  
 Lambe, L. M. 1920 A, 67, 68 (Claosaurus).  
 Lucas, F. A. 1901 F, 490, pl. vii.  
     1901 J, 44, 132, fig. 18.  
     1902 B, 149, fig. 204, fig.  
     1902 C, 642, 646, pl. ii.  
 Nopcsa, F. 1901 A, 267 (Syn. of Hadrosaurus).  
     1901 B, 213 (Syn. of Hadrosaurus).  
     1928 A, 184.  
 Parks, W. A. 1920 B (Claosaurus).  
 Sternberg, C. M. 1926 A, 104.  
     1926 B, 74.  
 Whiteaves, J. F. 1901 A, 186.

**Thespesius edmontoni** Gilmore.

- Gilmore, C. W. 1924 C, 14, pls. ii-v; text-figs. 6, 7.  
     1924 E, 34.  
 Lambe, L. M. 1913 A, 21-25, pls. ii, iii (Trachodon marginatus).  
     1914 B, 135, pl. xvii (Trachodon marginatus?).  
 Sternberg, C. H. 1918 A, 205 ("Trachodon").  
 Sternberg, C. M. 1926 A, 104.  
     1926 B, 78, 82.  
 Upper Cretaceous (Edmonton); Alberta.

**Thespesius occidentalis** Leidy.

- In order to save space, names are contracted below, *Cla. ann.* for *Claosaurus annectens*, *Thes. occ.* for *Thespesius occidentalis*, and *Trach. ann.* for *Trachodon annectens*.  
 Hay, O. P. 1902 A, 502.  
 Abel, O. 1912 F, 279, fig. 202 (Cla. ann.).  
     1919 A, 638, figs. 504, 505, 507 (Trach. ann.).  
     1922 A, 135, fig. (Trach. ann.).  
     1922 C, 342, figs. 299a, b (Trach. ann.); 365, fig. 313 (Claosaurus); 342 (Trachodon).

- Abel, O. 1925 A, 71, figs. 45, 46 (Trach. ann.).  
 Beecher, C. E. 1902 A, 311, pls. xli-xlv; text-figs. 4, 5 (Cla. ann.); 313 (Thes. occ.).  
 Bigot, A. 1897 A, 467, fig. 10 (Cla. ann.).  
 Bowen, C. F. 1915 A, 142 (Trach. ann.); 151 (Agathaumas milo).  
 Brown, B. 1912 A, 105, figs. 1, 2 (Trach. ann.).  
     1913 B, 403, fig. 6a (Trach. ann.).  
     1913 E, 926 (Trach. ann.).  
     1914 E, 358 (Trach. ann.).  
     1915 A, 142, 151.  
     1916 B, 713 (Trach. ann.).  
 Collier, A. J. 1918 A, 31 (Trach. ann.).  
 Cope, E. D. 1872 QQ, 2.  
 Cross, W. 1896 A, 227, 241 (Cla. ann.).  
 Dollo, L. 1906 C, 11, fig. 4 (Cla. ann.).  
 Gilmore, C. W. 1914 A, 66, fig. 34 (Trach. ann.).  
     1915 A, 600 (Trach. ann.).  
     1915 F, 658, 659 (Trach. ann. syn. of Thes. occ.).  
     1920 C, 271, pl. i, figs. 1, 2 (Trach. ann.).  
     1924 A, 68 (Thes. ann.).  
     1924 C, 13, 25 (Thes. ann.); 14, 26 (Cla. ann.).  
     1924 E, 37, 47 (Thes. ann.).  
 Hanson, F. B. 1920 C, 4 (Trach. ann.).  
 Hatcher, J. B. 1901 A, 130, pl. i, fig. 8; text-fig. 1 (Cla. ann.).  
     1902 C, 378, 384 (Thes. occ.); 383 (Cla. ann.); 384 (Trach. ann.).  
     1907 A, 67, 111, 112, 295 (Agathaumas milo).  
 Heilmann, G. 1913 B, 26, fig. 69 (Cla. ann.).  
 Hooley, R. W. 1917 A, 149 (Trach. ann.).  
     1925 A, 51 (Trach. ann.).  
 Hutchinson, H. N. 1910 A, 169, fig. 58 (Cla. ann.).  
 Joleaud, L. 1920 A, 492 (Trach. ann.).  
 Lambe, L. M. 1899 B, 188 (Cla. ann.).  
     1913 A, 22 (Trach. ann.).  
     1918 C, 139 (Cla. ? ann.).  
     1920 A, 70 ("Claosaurus" ann.).  
 Lucas, F. A. 1904 C, 317, pls. lxxii, lxxiii; text-figs. 40-43 (Trach. ann.).  
 Lull, R. S. 1907 B, 168 (Hadrosaurus ann.).  
     1917 B, 521, pl. xii; text-fig. 162 (Trach. ann.).  
 Lydekker, R. 1913 A, 14 (Trach. ann.).  
 Matthew, W. D. 1909 F, 68 ("mummied dinosaur").  
     1915 C, 93, figs. 30-32 (Trach. ann.).

- Merrill, G. P. 1907 A, 65, 66 (Cla. ann.); 78 (Thes. occ.); 79 (Trach. ann.).
- Moodie, R. L. 1913 A, 252 (Trach. ann.).  
 1923 B, 192, 254, pl. xxix (Cla. ann.).  
 1927 A, 99, fig. 9 (Trach. ann.).  
 1928 C, 1, pls. i, ii, iv-vi (Trach. ann.).
- Nopcsa, F. 1900 A, 557 (Cla. ann.).  
 1901 B, 211 (Cla. ann.); 212 (Hadrosaurus).
- Osborn, H. F. 1902 I, 15, 19 (Thes. occ.); 15 (Cla. ann.).  
 1909 B, 793 (Trach. ann.).  
 1911 B, 7, figs. 1-4 (Trach. ann.).  
 1912 K, 34, pls. v-ix; text-figs. 1-9 (Trach. ann.).
- Parks, W. A. 1920 B (Cla. ann.).  
 1922 B, 20, 25, 27, 29 (Cla. ann.).
- Sauvage, H. E. 1901 B, 10 (Cla. ann.).
- Shimer, H. W. 1914 A, 108, fig. 2 (Trach. ann.).
- Sternberg, C. H. 1909 D, 753 (Trach. ann.).  
 1909 E, 128, fig. ("Trachodon").  
 1914 A, 135 (Trach. ann.).  
 1917 A, 3, 25, 40, 119, 149, figs. 1, 2, 8 (Trach. ann.).
- Sternberg, C. M. 1925 A, 103 (T. ann.).  
 1926 B, 74.
- Versluys, J. 1910 B, 222, fig. U (Cla. ann.); 229 (Thes. occ.).  
 1922 A, 85 ("Trachodon").  
 1923 A, 1-19, pls. i-iv (Trach. ann.).
- Zittel, Eastman, etc. 1902 A, 241 (Cla. ann.).  
 Upper Cretaceous (Grand River); North Dakota: (Lance); Wyoming, Montana, South Dakota: (Denver or Arapahoe); Colorado.

### *Thespesius saskatchewanensis* Sternberg.

Sternberg, C. M. 1926 B, 73, pls. xv-xvii; text-fig. 3.

Upper Cretaceous (Lance); Saskatchewan.

### *Thespesius* sp. indet.

Gilmore, C. W. 1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.

Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

## EDMONTOSAURUS Lambe. Type *E. regalis* Lambe.

- Lambe, L. M. 1917 C, 66.  
 Gilmore, C. W. 1924 E, 37, 46.  
 1924 F, 53.  
 Lambe, L. M. 1918 C, 137, 138.  
 1920 A, 1, fig. 37.  
 Nopcsa, F. 1923 H, 105, 106.  
 1928 A, 184.  
 Shaner, R. F. 1926 A, 362.

### *Edmontosaurus regalis* Lambe.

- Lambe, L. M. 1917 C, 66, pls. ii, iii.  
 Gilmore, C. W. 1924 C, 26.  
 1924 E, 34.  
 Lambe, L. M. 1920 A, 1, figs. 1-35.  
 Sternberg, C. M. 1926 A, 104.  
 1926 B, 78.  
 Upper Cretaceous (Edmonton); Alberta.

## KRITOSAURUS Brown. Type *K. navajovius* Brown.

- Brown, B. 1910 A, 269.  
 Abel, O. 1922 A, 137.  
 Anonymous 1922 A, 92.  
 Brown, B. 1914 C, 561, 564 (Corythosaurus a syn.).  
 1914 E, 377.  
 1916 A, 708.  
 1916 B, 716, pl. xxii, fig. 3 (Kritosaurus); 710 (Stephanosaurus).  
 Gilmore, C. W. 1916 D, 284.  
 1917 A (Corythosaurus a syn.).  
 Gregory, W. K. 1914 C, 145 (Gryposaurus; type *G. notabilis*).  
 1915 B, 118 (Gryposaurus).  
 1917 A, 118 (Gryposaurus).  
 1920 A, 127, fig. 45 (Kritosaurus, Stephanosaurus).  
 Lambe, L. M. 1914 D, 17 (Stephanosaurus).  
 1915 B, 118 (Trachodon).  
 1918 C, 136, 138 (Gryposaurus, Kritosaurus, Stephanosaurus).  
 1920 A, 68, fig. 36 (Gryposaurus, Kritosaurus); 68, 74, fig. 39 (Stephanosaurus).  
 1920 B, 40 (Gryposaurus); 40, 43 (Stephanosaurus).  
 Lull, R. S. 1917 B, 523, fig. 163 (Gryposaurus).  
 1924 A, 272 (Kritosaurus); 272, fig. 34 (Gryposaurus).  
 Matthew, W. D. 1915 C, 76.  
 1920 D, 542 (Kritosaurus, Stephanosaurus).
- Nopcsa, F. 1917 A, 208.  
 1918 A, 187, 194.  
 1923 D, 105.  
 1923 E, 1046.  
 1923 H, 105 (Stephanosaurus); 106 (Gryposaurus, Kritosaurus).  
 1928 A, 184.
- Osborn, H. F. 1917 B, 223, fig.
- Parks, W. A. 1920 A, 51 (Gryposaurus, Kritosaurus).  
 1920 B, 9 (Gryposaurus, Kritosaurus).  
 1922 B, 8 (Stephanosaurus).  
 1923 A, 130 (Stephanosaurus).  
 1923 B, 6 (Stephanosaurus).
- Romer, A. S. 1927 C, 226.
- Sinclair and Granger 1914 A, 303.
- Sternberg, C. H. 1917 A, 68, 72, fig. 24 (Gryposaurus).  
 Williston, S. W. 1925 A, 87, fig. 70.  
 1925 B, 295 (Kritosaurus, Gryposaurus, Stephanosaurus).  
 Zittel and Broili 1923 A, 357, 359 (Kritosaurus, Gryposaurus).

### *Kritosaurus incurvimanus* Parks.

- Parks, W. A. 1920 A, 51, figs. 1-13.  
 Gilmore, C. W. 1924 C, 22, 26.  
 1924 E, 30.  
 1924 F, 55.

- Parks, W. A. 1920 B, 9, pls. i-vii; text-figs. 1-22.  
 1922 B, 20-30.  
 Upper Cretaceous (Belly River); Alberta.
- Kritosaurus marginatus** Lambe.  
*Lambe, L. M.* 1902 A, 71, pl. iii, fig. 1; pl. iv, figs. 1, 5, 6; pls. v-x; text-fig. 23 [Trachodon (Pteropelyx)].  
*Abel, O.* 1912 F, 493, fig. 375 (Trachodon).  
*Bach, R.* 1914 A, 347, fig. (Trachodon).  
*Bowen, C. F.* 1915 A, 142, 150 (Trachodon).  
*Brown, B.* 1914 C, 559 (Trachodon; in part).  
 1914 E, 379 (Trachodon).  
 1918 B, 710 (Trachodon).  
*Gilmore, C. W.* 1917 A, 4, 38, 41, fig. 54 (Stephanosaurus; this species?).  
 1924 C, 26 (Trachodon, Stephanosaurus).  
 1924 E, 30 (Stephanosaurus); 34 (Kritosaurus).  
*Hatcher, J. B.* 1905 B, 97, 98 (Trachodon).  
*Lambe, L. M.* 1904 C, 24, 37, 49 (Trachodon).  
 1912 A, 10 (Trachodon).  
 1914 B, 133, pls. xv, xvi (Trachodon).  
 1914 D, 19, pl. i (Stephanosaurus).  
 1914 F, 293, 297 (Stephanosaurus).  
 1916 A, 193 (Stephanosaurus).  
 1920 A, 67-76 (Stephanosaurus, in part).  
*Matthew, W. D.* 1916 A, 484 (Trachodon).  
*Osborn, H. F.* 1902 I, 15 (Trachodon); 19 (Pteropelyx).  
*Parks, W. A.* 1920 B (Stephanosaurus).  
 1923 B, 6 (Trachodon).  
*Shimer, H. W.* 1914 A, 108, fig. 1 (Stephanosaurus).  
*Sternberg, C. H.* 1909 C, 77, fig. 13 (Trachodon).  
 1915 A, 132, 133 (Stephanosaurus).  
 1917 A, 61, figs. 16, 17 (Stephanosaurus).  
 Upper Cretaceous (Belly River); Alberta:  
 (Two Medicine); Montana.
- Kritosaurus navajovius** Brown.  
*Brown, B.* 1910 A, 269, pls. xxviii-xxix; text-figs. 2-7.
- CIONODON** Cope. Type *C. arctatus* Cope.
- Hay, O. P.* 1902 A, 504.  
*Cope, E. D.* 1880 U, 147.  
*Hatcher, J. B.* 1902 C, 381, 385.  
 1905 B, 99.  
 1907 A, 296.  
*Hoernes, R.* 1886 A, 619.  
*Hoffmann, C. K.* 1890 B, 1315.  
*Huene, F.* 1909 B, 17.  
*Nopcsa, F.* 1901 A, 265.  
*Osborn, H. F.* 1902 I, 19.  
*Peale, A. C.* 1876 A, 153.  
*Whiteaves, J. F.* 1901 A, 187 (Cinodon).
- Cionodon arctatus** Cope.  
*Hay, O. P.* 1902 A, 504.  
*Bowen, C. F.* 1915 A, 142.  
*Cope, E. D.* 1874 B, 433, 448, 449.  
*Cross, W.* 1896 A, 244.  
*Gilmore, C. W.* 1924 C, 26.
- Abel, O.* 1916 A, 469, 496, fig. 8.  
*Brown, B.* 1914 E, 380.  
*Gilmore, C. W.* 1916 D, 281, pl. lxxii, fig. A; pl. lxxiii, figs. 3, 5.  
 1920 A, 8.  
 1922 A, 6.  
 1924 C, 26.  
 1924 F, 53.  
*Knowlton, F. H.* 1922 A, 71 (K. navajovius).  
*Reeside, J. B.* 1924 A, 31.  
*Sinclair and Granger* 1914 A, 303.  
*Versluys, J.* 1910 B, 224 (Nectosaurus, *errore*).  
 Upper Cretaceous (Kirtland, Ojo Alamo); New Mexico.
- Kritosaurus notabilis** (Lambe).  
*Lambe, L. M.* 1914 C, 145, pl. xviii (Gryposaurus).  
 Anonymous 1914 A, 386 (Gryposaurus).  
*Brown, B.* 1914 E, 379.  
*Gilmore, C. W.* 1916 D, 283, pl. lxxii, fig. B (Gryposaurus).  
 1924 C, 26 (Gryposaurus).  
 1924 E, 31, 34.  
*Henning, C. L.* 1914 A, 774, figs. 7, 9 (Gryposaurus).  
*Lambe, L. M.* 1914 F, 294, 296, 297 (Gryposaurus).  
 1914 G, 386 (Gryposaurus).  
 1915 B, 117 (Gryposaurus).  
*Lydekker, R.* 1915 C, 630 (G. mirabilis).  
*Matthew, W. D.* 1916 A, 484.  
*Parks, W. A.* 1920 A, 52.  
 1920 B.  
*Sternberg, C. H.* 1914 A, 134 (Gryposaurus).  
 1915 A, 133 (Gryposaurus).  
 1918 A, 209 ("Gryposaurus").  
*Sternberg, C. M.* 1926 B, 78.  
 Upper Cretaceous (Belly River); Alberta.
- Kritosaurus sp. indet.**  
*Reeside, J. B.* 1924 A, 23. Upper Cretaceous (Fruitland); New Mexico.
- Hatcher, J. B.* 1902 C, 381, 385.  
*Nopcsa, F.* 1900 A, 557, 572.  
*Osborn, H. F.* 1902 I, 15.  
 Upper Cretaceous (Denver or Arapahoe); Colorado.
- Cionodon stenopsis** Cope.  
*Hay, O. P.* 1902 A, 504.  
*Bowen, C. F.* 1915 A, 142.  
*Dawson, G. M.* 1884 A, 38.  
*Gilmore, C. W.* 1924 C, 26.  
*Hatcher, J. B.* 1905 B, 99.  
 1902 C, 381, 385.  
*Lambe, L. M.* 1904 C, 24, 37, 49.  
*Nopcsa, F.* 1900 A, 557.  
*Osborn, H. F.* 1902 I, 15.  
 Upper Cretaceous (Two Medicine); Montana.

CLAOSAURUS Marsh. Type *Hadrosaurus agilis* Marsh.

- Marsh, O. C. 1890 C, 423.  
 Hay, O. P. 1902 A, 502 (Thespesius, in part).  
 Abel, O. 1909 F, 461.  
     1911 A, 161.  
 Beddard, F. E. 1898 A, 156.  
 Boule, M. 1902 B, 908, fig. 14.  
 Brown, B. 1907 A, 392.  
     1914 C, 565.  
 Case, E. C. 1898 C, 642.  
 Darton, N. H. 1908 A, 462 (Cleosaurus).  
 Douglass, E. 1902 A, 31.  
     1902 C, 211, 212.  
 Du Toit, P. J. 1913 A, 248.  
 Gadow, H. 1901 B, 429.  
 Gilmore, C. W. 1915 F, 658.  
     1917 A.  
 Gregory, W. K. 1901 A, 142.  
 Heilmann, G. 1913 A, 57, fig. 46.  
 Hennig, E. 1912 B, 99.  
     1924 A, 146.  
 Hooley, R. W. 1925 A, 4.  
 Huene, F. 1904 A, 323.  
     1906 B, 152, fig. 95.  
     1906 C, 337.  
     1908 B, 289, 359.  
     1909 B, 16.  
 Hutchinson, H. N. 1910 A, 168, pl. xxiv.  
 Lambe, L. M. 1918 C, 136, 139.  
     1920 A, 68.  
 Lebedinsky, N. G. 1913 A, 768.  
     1913 B, 197.  
 Lull, R. S. 1910 A, 11.  
     1924 A, 241.  
 Lydekker, R. 1910 D, 459.  
 Nopcsa, F. 1900 A, 560.  
     1902 C, 161.  
     1904 A, 237.  
     1905 C, 291.  
     1911 B, 8.  
     1917 A, 206.

- Nopcsa, F. 1917 B, 343.  
     1918 A, 187, 190, 196.  
     1918 B, 239.  
     1928 A, 184.  
 Phénninger, F. 1906 A, 408.  
 Schuchert, C. 1905 B, 133.  
     1915 A, 905.  
 Steinmann, G. 1909 A, 79.  
 Sternberg, C. H. 1917 A, 96.  
 Van den Broeck, E. 1900 A, 92.  
 Versluys, J. 1910 B, 223.  
     1912 A, 494.  
 Whiteaves, J. F. 1901 A, 186.  
 Williston, S. W. 1909 A, 398.  
 Zittel and Broili 1911 A, 291.  
     1923 A, 358.  
 Zittel, Eastman, etc. 1902 A, 241.  
**Claosaurus? affinis** Wieland.  
 Wieland, G. R. 1903 A, 216 (Name only).  
     Upper Cretaceous (Pierre); South Dakota.  
**Claosaurus agilis** Marsh.  
 Hay, O. P. 1902 A, 502 (Thespesius).  
 Beecher, C. E. 1902 A, 313.  
 Brown, B. 1910 A, 373.  
 Eisler, P. 1895 A, 53.  
 Gilmore, C. W. 1915 F, 658.  
     1924 C, 26 (Hadrosaurus).  
 Hatcher, J. B. 1901 C, 341.  
     1902 C, 383, 385.  
 Lambe, L. M. 1918 C, 136, 139.  
 Lull, R. S. 1910 A, 18.  
 Nopcsa, F. 1900 A, 557.  
 Osborn, H. F. 1902 I, 15, 19.  
 Sternberg, C. M. 1926 B, 74.  
 Wieland, G. R. 1909 B, 250 (Hadrosaurus).  
 Williston, S. W. 1902 E, 253 (Hadrosaurus).  
     Upper Cretaceous (Niobrara); Kansas.

HYPSIBEMA Cope. Type *H. crassicauda* Cope.

- Hay, O. P. 1902 A, 497.  
 Hatcher, J. B. 1902 C, 381.  
 Huene, F. 1909 B, 17 (Hypsibæma).  
 Nopcsa, F. 1901 A, 266.  
 Zittel and Broili 1911 A, 293 (Hypsibæma).

**Hypsibema crassicauda** Cope.

- Hay, O. P. 1902 A, 497.  
 Hatcher, J. B. 1902 C, 381.  
 Nopcsa, F. 1900 A, 557.  
 Stephenson, L. W. 1912 A, 120.  
     Upper Cretaceous (Black Creek); North Carolina.

DYSGANUS Cope. Type *D. encaustus* Cope.

- Hay, O. P. 1902 A, 504.  
 Bowen, C. F. 1915 A, 149, 150.  
 Cope, E. D. 1880 U, 147.  
 Cross, W. 1896 A, 218, 238.  
 Hatcher, J. B. 1902 C, 377.  
     1905 B, 90.  
     1907 A, 67, 296.  
 Huene, F. 1909 B, 18.  
 Lull, R. S. 1907 B, 166, 296.  
 Nopcsa, F. 1901 A, 270.  
 Sternberg, C. H. 1903 C, 871.

**Dysganus bicarinatus** Cope.

- Hay, O. P. 1902 A, 504.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1907 A, 68, 296.  
 Lull, R. S. 1907 B, 296.  
 Osborn, H. F. 1902 I, 14.  
 Sternberg, C. H. 1914 A, 134.  
     Upper Cretaceous (Judith River); Montana.



**Dysganus encaustus** Cope.

- Hay, O. P. 1902 A, 505.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1907 A, 67, 296.  
 Lull, R. S. 1907 B, 296.  
 Osborn, H. F. 1902 I, 14.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana.

**Dysganus haydenianus** Cope.

- Hay, O. P. 1902 A, 505.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1907 A, 63, 296.

- Lull, R. S. 1907 B, 296.  
 Osborn, H. F. 1902 I, 14.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana.

**Dysganus peiganus** Cope.

- Hay, O. P. 1902 A, 505.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1907 A, 69, 296.  
 Lull, R. S. 1907 B, 296.  
 Osborn, H. F. 1902 I, 14.  
 Sternberg, C. H. 1914 A, 134.  
 Upper Cretaceous (Judith River); Montana.

**PTEROPELYX** Cope. Type *P. grallipes* Cope.

- Hay, O. P. 1902 A, 503.  
 Gilmore, C. W. 1917 A, 6.  
 Henning, C. L. 1914 A, 771.  
 Nopcsa, F. 1901 A, 265 (Syn. of *Claosaurus*).  
 1901 B, 211 (Syn. of *Claosaurus*).  
 Osborn, H. F. 1902 I, 19.

**Pteropelyx grallipes** Cope.

- Hay, O. P. 1902 A, 503.  
 Bowen, C. F. 1915 A, 142.

- Gilmore, C. W. 1917 A, 42.  
 1924 C, 26.  
 Hatcher, J. B. 1902 C, 382, 385.  
 1905 B, 98.  
 Lambe, L. M. 1902 A, 77.  
 Nopcsa, F. 1901 B, 211 (Syn. of *Claosaurus*  
*annectens*).  
 Osborn, H. F. 1902 H, 675.  
 1902 I, 15, 19.  
 Upper Cretaceous (Judith River); Montana.

**ORNITHOTARSUS** Cope. Type *O. immanis* Cope.

- Hay, O. P. 1902 A, 505.  
 Huene, F. 1909 B, 16.  
 Nopcsa, F. 1901 A, 266.  
 Seeley, H. G. 1894 D, 417.

**Ornithotarsus immanis** Cope.

- Hay, O. P. 1902 A, 505.

- Cope, E. D. 1869 P, 121.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 385.  
 Huxley, T. H. 1870 G, 480.  
 Nopcsa, F. 1900 A, 557.  
 Woolman, L. 1897 C, 249, pl. xv.  
 Upper Cretaceous (Matawan); New Jersey.

**CLAORHYNCHUS** Cope. Type *C. trihedrus* Cope.

- Hay, O. P. 1902 A, 500.  
 Hatcher, J. B. 1907 A, 114, 296, 298.  
 Hay, O. P. 1903 D, 117.  
 Huene, F. 1909 B, 16.  
 Lull, R. S. 1907 B, 166, 296.  
 Osborn, H. F. 1902 I, 19.  
 A genus of uncertain position.

**Claorhynchus trihedrus** Cope.

- Hay, O. P. 1902 A, 500.

- Bowen, C. F. 1915 A, 140.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 382, 385.  
 1905 B, 96.  
 1907 A, 114, 296.  
 Lull, R. S. 1907 B, 166, 296.  
 Osborn, H. F. 1902 I, 15.  
 Upper Cretaceous (Laramie); South Dakota?: (Judith?); Montana?

**PNEUMATOARTHERUS** Cope. Type *P. peloreus* Cope.

- Hay, O. P. 1902 A, 505.  
 Nopcsa, F. 1901 B, 213 (Syn. of *Ornithotarsus*).

**Pneumatoarthrus peloreus** Cope.

- Hay, O. P. 1902 A, 505.  
 Gilmore, C. W. 1924 C, 26.  
 Upper Cretaceous (Navesink?); New Jersey.

**SAUROLOPHINÆ** Brown.

- Brown, B. 1914 C, 565.  
 1916 B, 712.  
 Gilmore, C. W. 1920 A, 64.  
 1924 E, 34.  
 Lambe, L. M. 1918 C, 138.  
 1920 A, 67.

- Lydekker, R. 1915 C, 630.  
 Nopcsa, F. 1917 A, 208 (Saurolophidæ).  
 1928 A, 185.  
 Parks, W. A. 1922 B, 6.  
 1923 B, 6.

**PROSAUROLOPHUS** Brown. Type *P. maximus* Brown.

- Brown, B. 1916 A, 701.  
 Gilmore, C. W. 1924 F, 53.  
 Lambe, L. M. 1917 C, 66.

- Lambe, L. M. 1918 C, 136, 138.  
 1920 A, 68, fig. 38.  
 1920 B, 40.

Matthew, W. D. 1920 D, 542.

Nopcsa, F. 1923 H, 106.

1928 A, 185.

Sternberg, C. H. 1917 A, 66, 86.

Williston, S. W. 1925 B, 295.

**Prosaurolophus maximus** Brown.

Brown, B. 1916 A, 701, figs. 1, 3, 5.

Gilmore, C. W. 1924 C, 26.

1924 E, 34.

Lambe, L. M. 1920 A, 71.

Parks, W. A. 1924 C, 26, pl. v.

Sternberg, C. H. 1917 A, 66, 68 ("Prosaurolophus").

1918 A, 209 ("Prosaurolophus").

Upper Cretaceous (Belly River); Alberta.

**PROCHENEOSAURUS** Matthew.

Matthew, W. D. 1920 D, 542 (Not well defined).

**Procheneosaurus** sp. indet.

Matthew, W. D. 1920 D, 542. (No specific name.) Upper Cretaceous (Belly River or Edmonton); Alberta.

**SAUROLOPHUS** Brown. Type *S. osborni* Brown.

Brown, B. 1912 B, 131.

Abel, O. 1916 A, 496, fig. 8.

1919 A, 634.

1922 A, 143.

Brown, B. 1913 A, 387.

1913 B, 395, 396.

1913 D, 140, pl.

1914 A, 543.

1914 C, 561, 565.

1914 E, 374, 377.

1916 A, 701.

Eastman, C. R. 1914 B, 638.

1917 B, 656.

Eastman, Gregory and Matthew 1917 A, 119.

Gilmore, C. W. 1915 D, 411, 438.

1917 A.

Lambe, L. M. 1918 C, 138.

1920 A, 68, fig. 38.

Lull, R. S. 1917 B, 522, fig. 163.

1924 A, 271, fig. 34.

Matthew, W. D. 1914 E, 58.

1915 C, 76, 83, 98, figs. 25, 34.

1920 D, 542.

Nopcsa, F. 1915 A, 388.

1917 A, 208.

1917 B, 350.

1918 A, 186.

1918 B, 239.

1923 H, 105, 106, pl. v, fig. 12.

Nopcsa, F. 1926 A, 636.

1928 A, 185.

Parks, W. A. 1922 B.

Romer, A. S. 1927 C, 226, 233, fig. 2.

Williston, S. W. 1925 B, 295.

Zittel and Broili 1923 A, 359.

**Saurolophus osborni** Brown.

Brown, B. 1912 B, 131, pls. x, xi; text-figs. 1-4.

Abel, O. 1919 A, 632, figs. 498, 499.

Brown, B. 1913 A, 388, pls. lxii, lxiii; text-fig. 1.

1916 A, 703, figs. 2, 4.

1919 A, 411, 423, fig. ("Saurolophus").

Gilmore, C. W. 1917 A.

1924 C, 26.

1924 E, 30, 34.

1924 F, 60.

Gregory, W. K. 1913 E, 13, fig. 10.

Heilmann, G. 1926 A, 144, 147, figs. 105, 107.

Lydekker, R. 1913 A, 15.

1914 A, 639.

Matthew, W. D. 1912 D, 219 ("Saurolophus").

1915 C, 98, fig. 34 ("Saurolophus").

Nopcsa, F. 1918 A, 188, figs. 4, 12.

Parks, W. A. 1922 A, 6, 7, 20-30.

Sternberg, C. M. 1926 A, 104.

Versluys, J. 1923 A, 4.

Upper Cretaceous (Edmonton); Alberta.

**CHENEOSAURUS** Lambe. Type *C. tolmanensis* Lambe.

Lambe, L. M. 1917 A, 117.

Gilmore, C. W. 1924 E, 36, 41, 47.

1924 F, 52, 57, 64.

Lambe, L. M. 1918 C, 137, 138.

1920 A, 68, fig. 39.

Nopcsa, F. 1923 H, 106.

1928 A, 185.

Williston, S. W. 1925 B, 295.

**Cheneosaurus tolmanensis** Lambe.

Lambe, L. M. 1917 A, 117, pls. vi, vii.

Abel, O. 1924 A, 715, fig. 11.

Gilmore, C. W. 1924 C, 26.

1924 E, 34.

Sternberg, C. M. 1926 A, 104.

Upper Cretaceous (Edmonton); Alberta.

**LAMBEOSAURINÆ** Parks.

Parks, W. A. 1923 B, 6.

Gilmore, C. W. 1924 E, 34, 42, 47.

1924 F, 57.

Lambe, L. M. 1920 A, 67 (Stephanosaurinæ).

Nopcsa, F. 1928 A, 185.

**HYPACROSAURUS** Brown. Type *H. altispinus* Brown.

Brown, B. 1913 B, 395.

Abel, O. 1919 A, 635.

Brown, B. 1914 C, 565.

1914 E, 374, 377.

Brown, B. 1916 B, 710.

Eastman, C. R. 1914 B, 688 ("Hypacrosaurus," misprint).

Gilmore, C. W. 1914 B, 10.

Gilmore, C. W. 1916 D, 284.

1917 A.

1924 E, 47.

1924 F, 49.

Lambe, L. M. 1917 C, 66.

1918 C, 138.

1920 A, 68.

Lydekker, R. 1914 A, 640.

Moodie, R. L. 1923 B, 123.

Nopcsa, F. 1917 A, 208.

1918 A, 187, 190.

1923 H, 105.

1928 A, 185.

Romer, A. S. 1927 C, 233, 241, figs. 2, 7.

Shaner, R. F. 1926 A, 365.

Sternberg, C. M. 1926 A, 103.

Stromer, E. 1915 B, 19.

Williston, S. W. 1925 B, 295.

Zittel and Broili 1923 A, 359.

#### CORYTHOSAURUS BROWN.

Brown, B. 1914 C, 560, 565.

Abel, O. 1916 A, 496.

1919 A, 635.

1926 F, (39).

Anonymous 1922 A, 92.

Brown, B. 1916 B, 710.

Gilmore, C. W. 1915 D, 411, 488.

1923 B, 46.

1924 C, 23.

1924 E, 30.

1924 F, 49.

1927 B, 95, fig. 1.

Gregory, W. K. 1920 A, 127.

Heilmann, G. 1926 A, 22.

Lambe, L. M. 1918 C, 138.

1920 A, 68, fig. 39.

1920 B, 40.

Lull, R. S. 1917 B, 522, fig. 163.

1924 A, 271, fig. 34.

Matthew, W. D. 1915 C, 76, 83, 98, 118.

1920 D, 542.

Matthew and Brown 1915 A, 427.

Nopcsa, F. 1917 A, 208.

1918 A, 190.

1923 E, 1046.

1923 H, 12, 13, 105, 106, 108.

1926 A, 636.

1928 A, 185.

Osborn, H. F. 1917 B, 223, fig.

Parks, W. A. 1922 B, 6.

1923 A, 130.

Romer, A. S. 1923 A, 143, fig. 2.

1927 C, 226.

Shaner, R. F. 1926 A, 362.

Sternberg, C. H. 1917 A, 86.

Williston, S. W. 1925 B, 295.

Zittel and Broili 1923 A, 359.

#### Corythosaurus casuarius Brown.

Brown, B. 1914 C, 559, 560, pl. xli.

Abel, O. 1919 A, 634, fig. 500.

1922 A, 137.

#### LAMBOSAURUS Parks.

Parks, W. A. 1923 B, 7.

Abel, O. 1926 F, (39).

Gilmore, C. W. 1924 E, 29.

#### Hypacrosaurus altispinus Brown.

Brown, B. 1913 B, 395, figs. 1-5, 6b, 7b, 8b.

1914 E, 379.

1919 A, 421 ("Hypacrosaurus").

Gilmore, C. W. 1914 B, 10.

1914 D, 19 ("duck-billed dinosaur").

1916 D, 284 ("Hypacrosaurus").

1917 A, 3, 38, figs. 48-53 (This species?).

1924 C, 26.

1924 E, 34, 43.

1924 F, 49, pls. xi, xii; text-figs. 13-17.

Lydekker, R. 1914 A, 639, figs. 2, 3.

Matthew, W. D. 1916 A, 484.

Nopcsa, F. 1918 A, 195.

Parks, W. A. 1922 B, 25, 27, 30.

Sternberg, C. M. 1926 A, 104.

Upper Cretaceous (Edmonton); Alberta;

(Two Medicine); Montana.

#### Type *C. casuarius* Brown.

Abel, O. 1922 C, 338, 344, fig. 295.

1924 A, 714, fig.

Brown, B. 1916 B, 710, pls. xiii-xxii.

1919 A, 419, fig. ("Corythosaurus").

Gilmore, C. W. 1923 B, 46.

1924 C, 26.

1924 E, 29, 30, 36.

Lambe, L. M. 1915 B, 117 (Syn. of *Stephanosaurus marginatus*).

Lydekker, R. 1915 C, 630, fig. 5 (*Stephanosaurus*).

Matthew, W. D. 1916 A, 484.

1920 D, 543, fig.

Moodie, R. L. 1927 A, 91, fig. 1.

Nopcsa, F. 1918 A, 188, 195, fig. 6.

Parks, W. A. 1922 B, 20.

1923 B, 7, pl. ii, fig. 3.

Sternberg, C. H. 1917 A, 61, 202, frontispiece, fig. 45.

1918 A, 208, 211.

Vallois, H. V. 1921 A, 972.

Zittel and Broili 1923 A, 359, fig. 471.

Upper Cretaceous (Belly River); Alberta.

#### Corythosaurus excavatus Gilmore.

Gilmore, C. W. 1923 B, 46, pl. i, fig. 1; text-fig. 1.

1924 C, 26.

1924 E, 34, 36.

1924 F, 51.

Upper Cretaceous (Belly River); Alberta.

#### Corythosaurus intermedius Parks.

Parks, W. A. 1923 B, 1-57, pls. i-v; 13 text-figs.

Abel, O. 1924 A, 714, fig.

Gilmore, C. W. 1924 C, 26.

1924 E, 34.

Parks, W. A. 1923 A, 130 (*Stephanosaurus*; inadequate description).

Upper Cretaceous (Belly River); Alberta.

Possibly the same as *C. excavatus*.

#### Type *L. lambei* Parks.

Nopcsa, F. 1928 A, 185.

Shaner, R. F. 1926 A, 362 (*Lambiosaurus*).

**Lambeosaurus lambei Parks.**

- Parks, W. A. 1923 B, 7, pl. ii, fig. 2.  
 Abel, O. 1924 A, 713, fig. 11.  
 Brown, B. 1914 C, 559 (Corythosaurus? sp. indet., in part).  
 Gilmore, C. W. 1924 C, 26  
 1924 E, 29-48, pls. vi-ix; text-figs. 9-12.  
 1924 F, 51.

Lambe, L. M. 1914 D, 17-20, pl. 1 (Stephanosaurus marginatus, in part).  
 1920 A, 65, 74-76, fig. 39, H. (Stephanosaurus marginatus).

Sternberg, C. M. 1926 B, 80.  
 Upper Cretaceous (Belly River); Alberta.

**Lambeosaurus sp. indet.**

Gilmore, C. W. 1924 E, 37, fig. 8. Upper Cretaceous (Belly River); Alberta.

**PARASAUROLOPHUS Parks. Type *P. walkeri* Parks.**

- Parks, W. A. 1922 B, 5.  
 Abel, Q. 1926 F, (39).  
 Gilmore, C. W. 1924 E, 41.  
 1924 F, 57.  
 Lull, R. S. 1924 A, 272, fig. 34.  
 Nopcsa, F. 1926 A, 636.  
 1928 A, 185.  
 Parks, W. A. 1923 B, 6.  
 Romer, A. S. 1927 C, 226.  
 Shaner, R. F. 1926 A, 365.

**Parasaurolophus walkeri Parks.**

- Parks, W. A. 1922 B, 5, pls. i-ix; text-figs. 1-9.  
 Abel, O. 1924 A, 712, figs. 10-12.  
 Gilmore, C. W. 1924 C, 22, 26.  
 1924 E, 30, 41.  
 Upper Cretaceous (Belly River); Alberta.

**IGUANODONTIDÆ.**

- Hay, O. P. 1902 A, 502 (Iguanodontidæ).  
 Abel, O. 1919 A, 623 (Iguanodontinæ).  
 Arldt, T. 1907 D, 271, 333 (Iguanodontidæ).  
 1909 A, 263 ("iguanodontiden").  
 Ballerstedt, M. 1914 A, 43 (Iguanodon).  
 Bertrand, C. E. 1903 A, 9 ("iguanodons").  
 1904 A, 121 ("iguanodons").  
 Brown, B. 1914 B, 545 (Iguanodontidæ).  
 Darnes, W. 1883 C, 272, 399 (Iguanodontidæ).  
 De Pauw, L. F. 1902 A, 87, pls. i-vi (Iguanodon).  
 Dollo, L. 1906 C, 1 ("iguanodons").  
 1919 A, 23 ("iguanodons").  
 1923 B, 67 ("iguanodons").  
 Drevermann, F. 1911 C, 97, pl. (Iguanodon).  
 Gervais, P. 1859 A, 466 ("iguanodontidés").  
 Günther, A. 1886 A, 143 (Iguanodontidæ).  
 Huene, F. 1909 B, 16 (Iguanodontidæ).  
 Huxley, T. H. 1869 K, 146 (Iguanodontidæ).  
 1870 G, 470 (Iguanodon).  
 1870 H, 489, 490 (Iguanodontidæ).  
 Jaekel, O. 1914 A, 197 ("iguanodontiden").  
 Lucas, F. A. 1904 C, 318 (Iguanodontidæ).

- Mantell, G. A. 1834 A, 63 (Iguanodon).  
 1844 A, 739 (Iguanodon).  
 1848 D, 51 (Iguanodon).  
 Matthew, W. D. 1914 B, 387 (Iguanodontidæ).  
 1921 D, 211 (Iguanodontidæ).  
 Nopcsa, F. 1901 A, 262 (Iguanodontidæ).  
 1901 B, 208 (Iguanodontidæ).  
 1902 C, 149 ("kalodontiden").  
 1923 H, 108, 175 (Kalodontidæ).  
 Owen, R. 1842 F, 81 ("iguanodonts").  
 Reis, O. M. 1922 A, 85-90, fig. (Iguanodon).  
 Romer, A. S. 1927 C, 226.  
 Seeley, H. G. 1888 J, 698 (Iguanodon).  
 1899 B, 68 ("iguanodont reptiles").  
 Steinmann, G. 1907 A, 451 (Iguanodontidæ).  
 Tornier, G. 1913 B, 370 (Iguanodontidæ).  
 Vallois, H. V. 1921 A, 972 ("iguanodonts").  
 Zittel and Broili 1911 A, 289 (Iguanodontidæ).  
 Zittel, Eastman, etc. 1902 A, 237 (Iguanodontidæ).  
 At present no North American species are referred to this family.

**Superfamily CERATOPSIDÆ, new form.**

Unless otherwise indicated the writers, as quoted, employ the name Ceratopsia.

- Hay, O. P. 1902 A, 497 (Ceratopsioidea).  
 Abel, O. 1924 A, 712 ("ceratopsiden").  
 Arldt, T. 1907 D, 644.  
 1909 A, 263 ("ceratopsier").  
 Berkeley, C. P. 1923 A, 4.  
 Brown, B. 1908 A, 287.  
 1907 A, 841.  
 1917 A, 234.  
 1917 B, 135.  
 Case, E. C. 1897 D, 88.  
 Cross, W. 1909 A, 44.  
 Depéret, C. 1907 B ("cératopsidés").  
 1912 A, 705.  
 Du Toit, P. J. 1913 A, 247 ("ceratopsiden").  
 Eimer, G. H. T. 1901 A, 131.  
 Gadow, H. 1896 C, 205.  
 1901 B, 430.

- Gilmore, C. W. 1914 B.  
 1915 F, 659 ("ceratopsians").  
 1917 A, 37.  
 1922 C, 381, 384.  
 Granger and Gregory 1923 A, 4.  
 Gregory, W. K. 1920 A, 127.  
 Gregory and Mook 1925 A.  
 Hatcher, J. B. 1905 A, 413.  
 1905 B, 89 (Ceratopsioidea).  
 1907 A.  
 Hay, O. P. 1909 A, 95.  
 1910 B, 300.  
 Hellmann, G. 1926 A, 203.  
 Hennig, E. 1912 B, 100 ("ceratopsiden").  
 1924 A, 128.  
 Hooley, R. W. 1912 A, 445.  
 Huene, F. 1908 B, 361, 370, 372.  
 1910 A, 78.  
 1914 A, 145.

- Huene, F. 1914 G, pl. vii.  
 Jaekel, O. 1909 C, 708.  
 Knowlton, F. H. 1909 A, 204.  
 Koken, E. 1893 B, 432 ("ceratopsiden").  
 1900 A, 464.  
 Lambe, L. M. 1915 A, 2.  
 Lee, W. T. 1913 A, 532 ("ceratopsian").  
 Lull, R. S. 1907 B, 161, 295, 296.  
 1908 B, 392.  
 1910 A, 3, 19.  
 1912 A, 211.  
 1912 B, 771.  
 1912 C, 674.  
 1914 D, 359 ("ceratopsians").  
 1915 F, 838.  
 1917 B, 505, 527.  
 1918 C, 132.  
 1924 A, 236, 243, 266.  
 Lydekker, R. 1908 B, 544.  
 1909 C, 460.  
 Marsh, O. C. 1891 D, 181.  
 Matthew, W. D. 1914 B, 387.  
 1915 C, 32, 107.  
 Nopcsa, F. 1917 B, 340 ("ceratopsiden").  
 1918 C, 326 ("ceratopsiden").

- Nopcsa, F. 1926 A, 645 ("ceratopsians").  
 Osborn, H. F. 1903 G, 836.  
 Peale, A. C. 1912 A, 742.  
 Pompeckj, J. F. 1921 A, 7 ("ceratopsiden").  
 Reynolds, S. H. 1897 A, 209, 284.  
 Richardson, G. B. 1912 A, 275.  
 Romer, A. S. 1927 C, 226, 239, 252, 259 (Ceratopsia).  
 Stanton, T. W. 1909 A.  
 Steiner, H. 1922 A, 347.  
 Steinmann, G. 1907 A, 452 (Homœopoda).  
 1908 A, 220 (Ceratopsida).  
 1909 A, 79.  
 1912 B, 727 ("ceratopsiden").  
 Sternberg, C. H. 1915 A, 133.  
 Sternberg, C. M. 1927 A, 69.  
 Tornier, G. 1913 B, 373, 374.  
 Van den Broeck, E. 1900 A, 85.  
 Wieland, G. R. 1925 B, 560 ("ceratopsians").  
 Williston, S. W. 1909 E, 194.  
 1918 A, 81.  
 1925 A, 9, 17, 95, 100, 118, 150, 154.  
 1925 B, 214 (Ceratopsia).  
 Zittel and Broili 1911 A, 295 (Ceratopsidæ).  
 1923 A, 362 (Ceratopsidæ).

## CERATOPSIDÆ Marsh.

- Hay, O. P. 1902 A, 498.  
 Abel, O. 1912 F, 564 ("ceratopsiden").  
 1916 A, 494 ("ceratopsiden").  
 1919 A, 646 (Ceratopsidæ, Ceratopsinæ).  
 1922 C, 340 ("ceratopsiden").  
 Arldt, T. 1907 D, 271, 332.  
 Bowen, C. F. 1915 A, 151.  
 Brown, B. 1914 A, 543, 545.  
 1914 D, 567.  
 1914 E, 377.  
 Cannon, G. L. 1906 B, 197.  
 Cope, E. D. 1891 N, 43 (Agathaumidæ).  
 Cross, W. 1896 A, 228.  
 Darton, N. H. 1901 A, 536.  
 Depéret, C. 1896 A, 185 ("ceratopsides").  
 1900 A, 530 ("ceratopsides").  
 Douglass, E. 1902 C, 220.  
 Gilmore, C. W. 1917 A, 37 (Eoceratopsinæ, Centrosaurinæ, Chasmosaurinæ).  
 1924 E, 43.  
 Gregory, W. K. 1923 B, 192 ("horned dinosaurs").  
 Gregory and Mook 1925 A.  
 Hatcher, J. B. 1902 C, 332 (Agathaumidæ).  
 1903 D, 374.  
 1905 B, 89, 102.  
 1907 A, 14, 296.  
 Heilmann, G. 1915 A, 116.  
 Hennig, E. 1924 A, 128.  
 Henning, C. L. 1914 A, 771 ("ceratopsiden").  
 Huene, F. 1911 C, 146 ("ceratopsiden").  
 Jaekel, O. 1914 A, 197 ("ceratopsiden").  
 Knowlton, F. H. 1911 A, 319.

- Knowlton, F. H. 1922 A, 16.  
 Koken, E. 1900 A, 464.  
 Lambe, L. M. 1915 A (with subfamilies Eoceratopsinæ, Centrosaurinæ, Chasmosaurinæ).  
 Matthew, W. D. 1915 C, 32.  
 1921 D, 211.  
 Nopcsa, F. 1901 A, 262, 276.  
 1902 B, 101 ("ceratopsiden").  
 1903 D, 267 ("ceratopsiden").  
 1904 A, 257 ("ceratopsiden").  
 1915 B, 13, 18 (Ceratopsidæ, Torosauridæ).  
 1918 C, 328.  
 1922 A, 115.  
 1923 A, 199.  
 1923 H, 99, 100, 102, 104, 106, 126, 177, 179, 197.  
 1928 A, 185 (Ceratopsidæ, Ceratopsinæ, Leptoceratopsinæ, Monocloniinae).  
 Osborn, H. F. 1902 I, 20 (Better Agathaumidæ).  
 Peale, A. C. 1912 A, 750.  
 Perrier, E. 1920 A, 312 ("ceratopsides").  
 Romer, A. S. 1927 C, 226.  
 Steinmann, G. 1907 A, 452.  
 Van Straelen, V. 1925 A, 1, figs. 1, 2 ("eggs of Protoceratops").  
 Wieland, G. R. 1911 A, 119, figs. 4-7.  
 1912 A, 237.  
 1912 B, 299.  
 Woodward, H. 1904 A, 143.  
 Zittel and Broili 1911 A, 295.  
 1923 A, 336, 362, 366.  
 Zittel, Eastman, etc. 1902 A, 243.

BRACHYCERATOPS Gilmore. Type *B. montanensis* Gilmore.

- Gilmore, C. W. 1914 B, 1.  
 Brown, B. 1914 D, 567.  
 1917 A, 232.  
 Gilmore, C. W. 1915 D, 411, 488.  
 1917 A.

- Gilmore, C. W. 1919 A, 104.  
 1922 B, 1.  
 1922 C, 384, pl. viii.  
 1923 B, 52.  
 1924 G, 17.

- Gregory and Mook 1925 A.  
 Joleaud, L. 1920 A, 495 (Trachyceratops).  
 Lambe, L. M. 1915 A, 17.  
 Lull, R. S. 1914 D, 342.  
 1924 A, 245.  
 Nopcsa, F. 1923 D, 106.  
 1923 H, 101-104.  
 1926 A, 645.  
 1928 A, 185.  
 Osborn, H. F. 1923 C, 2.  
 Parks, W. A. 1925 D, 6.  
 Romer, A. S. 1927 C, 226, 235, figs. 3, 4, 8, 12.  
 Scott, W. B. 1917 A, 119, fig. 19.  
 Shufeldt, R. W. 1916 B, 41.  
 Sternberg, C. M. 1927 A, 72 (Brachyceratops).  
 1927 B, 137.  
 Williston, S. W. 1925 B, 296.  
 Zittel and Broili 1923 A, 366.

### EOCERATOPS Lambe. Type *Monoclonius canadensis* Lambe.

- Lambe, L. M. 1915 A, 1, 16.  
 Gilmore, C. W. 1917 A, 4.  
 Lambe, L. M. 1920 B, 40.  
 Nopcsa, F. 1923 H, 101.  
 1928 A, 185.  
 Parks, W. A. 1925 D, 6.  
 Sternberg, C. M. 1927 B, 139.  
 Williston, S. W. 1925 B, 296.  
 Zittel and Broili 1923 A, 364.  
**Eoceratops canadensis** Lambe.  
 Lambe, L. M. 1902 A, 63, pl. xvii, figs. 3, 4;  
 pl. xviii, figs. 1-7; text-figs. 18, 19 (Monoclonius).  
 Bowen, C. F. 1915 A, 136 (Monoclonius).  
 Brown, B. 1914 B, 550 (Monoclonius).  
 1914 E, 373 (Ceratops).  
 Gilmore, C. W. 1917 A.  
 Hatcher, J. B. 1905 B, 94 (Ceratops).  
 1907 A, 93, 295, pl. iii, fig. 8; pl. v, fig. 3;  
 pls. xviii, xix, xxiii; text-figs. 96, 97  
 (Ceratops, Monoclonius).  
 Henning, C. L. 1914 A, 773 (Monoclonius).

### ARRHINOCERATOPS Parks.

- Parks, W. A. 1925 D, 7.  
 Nopcsa, F. 1928 A, 185.

### MONOCLONIUS Cope.

- Hay, O. P. 1902 A, 499.  
 Abel, O. 1912 F, 565.  
 1916 A, 497, figs. 10, 11.  
 1924 A, 712, 713.  
 Anonymous 1923 A, 192.  
 Bowen, C. F. 1915 A, 151.  
 Brown, B. 1914 A, 543, fig. 1.  
 1914 B, 549, 551.  
 1917 A, 282, 285, pl. xiv.  
 1917 B, 135, figs. 1-4.  
 1919 A, 413, 426, pl.  
 Cope, E. D. 1880 U, 147.  
 Cross, W. 1896 A, 238.  
 Gilmore, C. W. 1914 B, 9.

### Brachyceratops montanensis Gilmore.

- Gilmore, C. W. 1914 B, 1, pls. i, ii; text-figs. 1-3.  
 Brown, B. 1914 E, 378.  
 Gilmore, C. W. 1914 D, 19 ("ceratopsian").  
 1917 A, 1, 7, pls. i, iii, iv; text-figs. 2-9,  
 11-26, 41, 47.  
 1919 A, 103, 104, text-fig. 4.  
 1922 B, 1, pls. i-iv.  
 1924 G, 35, fig. 3.  
 1926 H, 163, fig.  
 Gregory, W. K. 1920 A, 127 (B. montanus).  
 Lambe, L. M. 1915 A, 6, pl. iii, fig. 3; pl. vi,  
 fig. 3; pl. x, fig. 3.  
 Shufeldt, R. W. 1916 B, 41, fig. 4.  
 Sternberg, C. M. 1927 B, 136, pl. ii, fig. 2.  
 Upper Cretaceous (Two Medicine); Montana.

- Lambe, L. M. 1904 B, 3, pl. ii (Monoclonius).  
 1904 C, 23, 37, 49 (Monoclonius).  
 1904 D, 81 (Monoclonius).  
 1905 D, 363 A (Monoclonius).  
 1907 B, 179 (Monoclonius).  
 1914 B, 132 (Monoclonius).  
 1914 C, 154 (Ceratops).  
 1915 A, 1, 6, pl. i; pl. ii, fig. 2; pl. v,  
 fig. 1; pl. ix, fig. 1; pl. x, fig. 2.  
 1915 B, 117.  
 1916 A, 194.  
 Lull, R. S. 1907 B, 172, pls. xvii, xix, xxiii;  
 text-figs. 96, 97 (Ceratops).  
 1908 B, 394, fig. 7 (Ceratops).  
 Matthew, W. D. 1916 A, 484 (Ceratops).  
 Osborn, H. F. 1902 H, 675 (Monoclonius).  
 1902 I, 14 (Monoclonius).  
 1923 C, 3.  
 Sternberg, C. M. 1927 A, 69.  
 Upper Cretaceous (Belly River); Alberta.  
**Eoceratops** sp. indet.  
 Gilmore, C. W. 1923 B, 51, pl. v. Upper Cretaceous (Belly River); Alberta.

### Type *A. brachyops* Parks.

#### Arrhinoceratops brachyops Parks.

- Parks, W. A. 1925 D, 5-15, pls. i, ii.  
 Sternberg, C. M. 1926 A, 104.  
 Upper Cretaceous (Edmonton); Alberta.

### Type *M. crassus* Cope.

- Gilmore, C. W. 1917 A, 19.  
 1922 C, 382, pls. iv, vii.  
 1922 F, 1.  
 1925 A, 376.  
 1925 B, 408.  
 Gregory, W. K. 1920 A, 127.  
 Hatcher, J. B. 1905 B, 90.  
 1907 A, 70, fig. 2.  
 Hennig, E. 1916 A, 176.  
 Henning, C. L. 1914 A, 771.  
 Huene, F. 1909 B, 17.  
 Lambe, L. M. 1904 D, 151.  
 1910 A, 151.  
 1912 A, 9.

Lambe, L. M. 1915 A, 12.

Lull, R. S. 1907 B, 161, 162, 167.

1908 B, 393.

1910 A, 19.

1912 B, 774.

1917 B, 526, 528, fig. 166.

1924 A, 244, 273, fig. 32.

Lydekker, R. 1915 C, 631.

Matthew, W. D. 1915 C, 108, 111, figs. 37, 39

Nopcsa, F. 1901 A, 270.

1904 A, 236.

1915 B, 14.

1917 A, 211.

1917 B, 340.

1923 H, 101.

1928 A, 185.

Osborn, H. F. 1902 H, 675.

1902 I, 9, 20.

Parks, W. A. 1925 D, 6.

Pompeckj, J. F. 1921 A, 7.

Romer, A. S. 1927 C, 226, figs. 3, 4, 8.

Scott, W. B. 1917 A, 119.

Stanton and Hatcher 1905 A, 38.

Sternberg, C. H. 1903 B, 357.

1903 C, 871.

1915 A, 133.

1917 A, 120.

Williston, S. W. 1925 A, 118, 191, fig. 156

1925 B, 296.

Zittel and Broili 1911 A, 296.

1923 A, 365.

Zittel, Eastman, etc. 1902 A, 245 (Syn. of *Ceratops*).

### ***Monoclonius crassus* Cope.**

Hay, O. P. 1902 A, 499.

Bowen, C. F. 1915 A, 136.

Brown, B. 1914 B, 549, 558.

1917 A, 285.

Cope, E. D. 1903 A, 872.

Du Toit, P. J. 1913 A, 247.

Gilmore, C. W. 1914 B, 9.

1916 D, 288, figs. 29, 30.

Hatcher, J. B. 1905 B, 91.

1907 A, 8, 71, 298, pl. ii, fig. 1; pl. v, fig. 1; text-figs. 13, 75-88.

Lambe, L. M. 1902 A, 68.

1904 C, 24.

1915 A, 13.

Lull, R. S. 1907, in Hatcher, J. B. 1907 A, 76.

1907 B, 167, 298, figs. 75-88.

1908 B, 394.

Nopcsa, F. 1901 B, 216 (Syn. of *Agathaumas sylvestris*).

Osborn, H. F. 1902 I, 14, 20.

Stanton and Hatcher 1905 A, 40.

Sternberg, C. H. 1909 C, 87.

1914 A, 134.

Zittel, K. A. 1890 A, 752 (*Triceratops*).

Upper Cretaceous (Judith River); Montana.

### ***Monoclonius cutleri* Brown.**

Brown, B. 1917 A, 301, pls. xvi-xix.

Gilmore, C. W. 1919 A, 98.

Joleaud, L. 1920 A, 495.

Sternberg, C. M. 1925 A, 110 (*Centrosaurus*).

Upper Cretaceous (Belly River); Alberta.

### ***Monoclonius dawsoni* Lambe.**

Lambe, L. M. 1902 A, 57, pl. xvi; pl. xix, figs. 4-6; pl. xx, figs. 3, 4; text-figs. 14-17, 23.

Bowen, C. F. 1915 A, 136.

Brown, B. 1914 B, 550, 558.

1914 E, 378.

Gilmore, C. W. 1914 B, 8.

1917 A, 4.

Hatcher, J. B. 1905 B, 91.

1907 A, 89, 298, pl. iv, figs. 1-5; pl. xx; text-fig. 92.

Henning, C. L. 1914 A, 773.

Lambe, L. M. 1904 B, 3.

1904 C, 23, 37, 49.

1904 D, 81.

1910 A, 149.

1915 A, 6, 18, 21, pl. x, fig. 4 (*Brachyceratops*).

1915 B, 117 (*Brachyceratops*).

Lull, R. S. 1907 B, 167, 288, fig. 92.

1911 A, 339.

Matthew, W. D. 1916 A, 434.

Osborn, H. F. 1902 H, 675.

1902 I, 14.

Upper Cretaceous (Belly River); Alberta.

### ***Monoclonius fissus* Cope.**

Hay, O. P. 1902 A, 500.

Bowen, C. F. 1915 A, 136, 149, 150.

Brown, B. 1914 B, 549 (Species indeterminate).

Cope, E. D. 1903 A, 872.

Hatcher, J. B. 1905 B, 93.

1907 A, 5, 81, fig. 89.

Lambe, L. M. 1904 C, 24.

Osborn, H. F. 1902 I, 14, 20.

Sternberg, C. H. 1914 A, 135.

Upper Cretaceous (Judith River); Montana.

### ***Monoclonius flexus* Brown.**

Brown, B. 1914 B, 551, 558, pls. xxxviii-xl; text-figs. 1, 2.

1917 A, 285.

Matthew, W. D. 1916 A, 434.

Sternberg, C. M. 1927 B, 141.

Upper Cretaceous (Belly River); Alberta.

### ***Monoclonius nasicornus* Brown.**

Brown, B. 1917 A, 286, pls. xi-xiii; text-figs. 3, 4.

Abel, O. 1922 C, 341, fig. 297.

1924 A, 713, fig. 9.

Brown, B. 1917 B, 135, 138, fig.

Joleaud, L. 1920 A, 495, fig. 10.

Matthew, W. D. 1920 D, 541, fig.

Sternberg, C. M. 1927 A, 69.

Zittel and Broili 1923 A, 365.

Upper Cretaceous (Belly River); Alberta.

### ***Monoclonius recurvirocornis* Cope.**

Hay, O. P. 1902 A, 500.

Bowen, C. F. 1915 A, 136.

Brown, B. 1910 A, 268.

1914 B, 549.

Hatcher, J. B. 1896 A, 113.

1905 B, 94 (*Ceratops*).

- Hatcher, J. B. 1907 A, 5, 81, 92, 295, pl. iv, fig. 4; pl. v, fig. 4; text-figs. 3, 4, 90.  
 Lambe, L. M. 1902 A, 68.  
 1904 C, 24.  
 Lull, R. S. 1907 B, 173, 295, fig. 90 (Ceratops?).  
 1912 B, 774, fig. (Ceratops?).  
 Osborn, H. F. 1902 I, 14, 20.  
 Sternberg, C. H. 1914 A, 134.  
 Zittel, K. A. 1890 A, 752 (Triceratops).  
 Upper Cretaceous (Judith River); Montana.

**Monoclonius sp. indet.**

- Anonymous 1916 C, 133 ("Monoclonius").  
 Brown, B. 1910 A, 268, fig. 1 ("ceratopsian horn"). Upper Cretaceous (Ojo Alamo); New Mexico.  
 Gilmore, C. W. 1916 D, 256, fig. 29. Upper Cretaceous (Ojo Alamo); New Mexico.  
 1920 A, 9. Upper Cretaceous (Ojo Alamo); New Mexico.  
 1922 A, 7. Upper Cretaceous (Ojo Alamo); New Mexico.  
 Hay, O. P. 1903 D, 119.  
 Reeside, J. B. 1924 A, 31. Upper Cretaceous (Ojo Alamo); New Mexico.

**CHASMOSAURUS Lambe. Type *Monoclonius belli* Lambe.**

- Lambe, L. M. 1914 F, 284.  
 Abel, O. 1924 A, 713.  
 Anonymous 1914 A, 386 (Protosaurus).  
 Brown, B. 1917 A, 305 (Protosaurus).  
 Gilmore, C. W. 1914 B, 4 (Protosaurus).  
 1917 A, 4.  
 1923 B, 51.  
 Gregory and Mook 1925 A, 5, 6.  
 Lambe, L. M. 1914 B, 131 (Protosaurus, pre-occupied).  
 1914 C, 149 (Protosaurus).  
 1914 G, 386 (Protosaurus).  
 1915 A, 4, 17.  
 1915 B, 117.  
 1915 D, 326.  
 Lydekker, R. 1915 C, 629.  
 Nopsca, F. 1923 H, 101.  
 1928 A, 185.  
 Osborn, H. F. 1923 C, 2 (Protosaurus).  
 Parks, W. A. 1925 D, 6.  
 Sternberg, C. H. 1917 A, 73, 80, 104.  
 Sternberg, C. M. 1927 B, 137.  
 Williston, S. W. 1914 A, 132 (Protosaurus).  
 1914 D, 395 (Protosaurus).  
 1925 B, 296.  
 Zittel and Broili 1923 A, 366.  
 This generic name is sometimes spelled *Chasmasaurus*.  
**Chasmosaurus belli** (Lambe).  
 Lambe, L. M. 1902 A, 66, pl. xx, figs. 1, 2; text-fig. 20 (Monoclonius).  
 Abel, O. 1924 A, 712, fig. 7.  
 Anonymous 1914 A, 386 (Protosaurus, Chasmosaurus).  
 Bowen, C. F. 1915 A, 138.

- Brown, B. 1914 B, 550 (Monoclonius).  
 1914 E, 378 (Ceratops).  
 Gilmore, C. W. 1917 A.  
 1920 A, 65.  
 1922 C, 384, pl. iv, fig. 1.  
 Hatcher, J. B. 1905 B, 95 (Ceratops).  
 1907 A, 96, text-fig. 98 (Monoclonius); 295, pl. ii, fig. 6; pl. xxi (Ceratops).  
 Henning, C. L. 1914 A, 773 (Monoclonius); 774 (Chasmosaurus).  
 Lambe, L. M. 1904 B, 7 (Monoclonius).  
 1904 C, 23, 24, 37, 49 (Monoclonius).  
 1914 B, 131, pl. xiv (Protosaurus, pre-occupied).  
 1914 C, 149, pls. xix, xx.  
 1914 F, 294, 296, 297.  
 1914 G, 386 (Monoclonius).  
 1915 A, 11, pl. iv, fig. 1; pl. vii, fig. 1; pl. viii.  
 1915 B, 117.  
 1916 A, 196.  
 1917 B, 82.  
 1917 E, 291.  
 Lull, R. S. 1907 B, 173, 179, pl. xxi; text-fig. 98 (Monoclonius).  
 Matthew, W. D. 1916 A, 484 (Ceratops).  
 Osborn, H. F. 1902 H, 675 (Monoclonius).  
 1902 I, 14 (Monoclonius).  
 Parks, W. A. 1925 D, 8.  
 Sternberg, C. H. 1917 A, 86, figs. 30, 31.  
 1918 A, 208 ("Chasmasaurus").  
 Sternberg, C. M. 1921 A, 64.  
 1925 A, 103, fig.  
 1927 A, 67, figs. 1, 2.  
 Upper Cretaceous (Belly River); Alberta.

**CERATOPS Marsh. Type *C. montanus* Marsh.**

- Hay, O. P. 1902 A, 500.  
 Abel, O. 1912 F, 565.  
 1916 A, 497, fig. 10.  
 Bowen, C. F. 1915 A, 151.  
 Brown, B. 1914 E, 377.  
 1917 A, 282.  
 Darton, N. H. 1901 A, 536, 540.  
 Depéret, C. 1896 A, 185.  
 1912 A, 705.  
 Dollo, L. 1889 G, 675.  
 Gilmore, C. W. 1917 A.  
 1920 A, 64.  
 Gregory and Mook 1925 A, 6.  
 Hatcher, J. B. 1905 B, 93.  
 1907 A, 100.  
 Huene, F. 1909 B, 18.  
 Lambe, L. M. 1912 A, 9.  
 1914 B, 131.  
 1915 A, 10.  
 Lull, R. S. 1906 A, 144 (Proceratops, type *Ceratops montanus*).  
 1907 in Hatcher, J. B. 1907 A, 100 (Proceratops); 143 (Stenrolophus).  
 1907 B, 161, 165, 172, pl. xviii, fig. 1.



- Lull, R. S. 1908 B, 393.  
1910 A, 19.  
1912 B, 774.
- Matthew, W. D. 1915 C, 112, fig. 37.  
1920 D, 542.
- Nopcsa, F. 1901 A, 270.  
1923 H, 101.  
1928 A, 185.
- Osborn, H. F. 1902 I, 9.  
Parks, W. A. 1925 D, 6.  
Scott, W. B. 1917 A, 119.
- Stanton and Hatcher 1905 A, 38, 50, 51, 59.  
Sternberg, C. H. 1915 A, 133.  
1917 A, 119.
- Sternberg, C. M. 1927 A, 70.  
Williston, S. W. 1925 B, 296.
- Zittel, Eastman, etc. 1902 A, 245.
- Proceratops* was proposed by Lull to replace *Ceratops* Marsh, supposed to be preoccupied by *Ceratops* of Rafinesque; but the latter is a *nomen nudum* (Richmond, Auk. xxvi, 1909, 44).
- Ceratops montanus Marsh.**
- Hay, O. P. 1902 A, 500.  
Bowen, C. F. 1915 A, 136, 149.  
Cannon, G. L. 1894 A, 254.  
Cross, W. 1896 A, 227, 229.  
Gilmore, C. W. 1923 B, 51.  
Hatcher, J. B. 1896 A, 113.  
1905 B, 94.  
1907 A, 7, 100, 295, pl. iii, fig. 1; pl. v, fig. 2; text-figs. 14, 103, 104.  
Lambe, L. M. 1915 A, 10.

- Lull, R. S. 1906 A, 144 (Ceratops; to Proceratops).  
1907 B, 172.
- Merrill, G. P. 1907 A, 65.
- Osborn, H. F. 1902 I, 14, 18, 20.  
1917 A, 740.
- Stanton and Hatcher 1905 A, 43.  
Sternberg, C. H. 1909 C, 87.  
Sternberg, C. M. 1927 A, 70.
- Upper Cretaceous (Judith River); Montana: (Denver or Arapahoe?); Colorado.
- Ceratops paucidens Marsh.**
- Hay, O. P. 1902 A, 500.  
Bowen, C. F. 1915 A, 138 (Ceratops); 142. (Trachodon).  
Gilmore, C. W. 1924 C, 26 (Hadrosaurus).  
Hatcher, J. B. 1902 C, 382, 385 (Trachodon (Hadrosaurus)).  
1905 B, 95 (C. paucidens).  
1907 A, 103, 295.
- Lull, R. S. 1906 A, 144.  
1907 B, 295.
- Merrill, G. P. 1907 A, 65 (Ceratops); 73 (Hadrosaurus).  
Osborn, H. F. 1902 I, 15 (Trachodon).  
Upper Cretaceous (Judith River); Montana.
- Ceratops sp. indet.**
- Gilmore, C. W. 1920 A, 64, pl. xxv, figs. 1, 2.  
Upper Cretaceous (Kirtland); New Mexico.  
Williston, S. W. 1907 B, 53 (This genus?).  
Cretaceous (Rattlesnake); Texas.

CENTROSAURUS Lambe. Type *C. apertus* Lambe.

- Lambe, L. M. 1904 D, 81.
- Abel, O. 1912 F, 565.  
1919 A, 651.
- Broili and Fischer 1917 A, 413.
- Gilmore, C. W. 1917 A.
- Huene, F. 1909 B, 17.
- Lambe, L. M. 1905 D, 363 A.  
1910 A, 149.  
1914 F, 294.  
1915 A, 4, 18.  
1915 B, 117.  
1920 B, 40.
- Lull, R. S. 1907 B, 161, 162, 168, 295.  
1908 B, 393.  
1910 A, 19.  
1911 A, 339.  
1915 D, 342.
- Nopcsa, F. 1916 B, 511.
- Parks, W. A. 1925 D, 6.
- Romer, A. S. 1927 C, 235, figs. 3, 4, 5 (Kentrosaurus).
- Sternberg, C. H. 1915 A, 133.  
1917 A, 120.
- Sternberg, C. M. 1927 A, 70.  
1927 B, 139.
- Williston, S. W. 1925 B, 296.
- Zittel and Broili 1911 A, 296.  
1923 A, 366.

- Centrosaurus apertus Lambe.**
- Lambe, L. M. 1904 D, 81.
- Abel, O. 1919 A, 647, fig. 512.  
1924 A, 712, fig. 8.
- Bowen, C. F. 1915 A, 136.
- Brown, B. 1914 B, 550 (Syn. of Monoclonius dawsoni).
- Hatcher, J. B. 1907 A, 93, 295, pl. ii, fig. 2; pl. iv, fig. 3; pl. xxiv; text-fig. 93.
- Henning, C. L. 1914 A, 771.
- Lambe, L. M. 1904 B, 3, pl. i; 1 text-fig.  
1905 D, 363 A.  
1907 B, 179.  
1914 C, 151.  
1914 F, 294, 298.  
1915 A, 21, pl. iii, fig. 1; pl. vi, fig. 1; pl. ix, fig. 2; pl. xi.  
1915 B, 117 (Monoclonius flexus a syn.).
- Lull, R. S., in Hatcher, J. B. 1907 A, 90.  
1907 B, 167, 168, 179, 295, pl. xxiv; text-fig. 93.  
1908 B, 394, fig. 5.  
1911 A, 339.
- Nopcsa, F. 1916 B, 512.
- Parks, W. A. 1925 D, 8.
- Sternberg, C. H. 1914 A, 135.  
1917 A, 226, figs. 35, 38 ("Centrosaurus").  
1918 A, 209 ("Centrosaurus").  
Upper Cretaceous (Belly River); Alberta

STYRACOSAURUS Lambe. Type *S. albertensis* Lambe.

- Lambe, L. M. 1913 C, 109.  
 Abel, O. 1916 A, 497, fig. 11.  
     1919 A, 651.  
 Anonymous 1914 A, 385.  
 Brown, B. 1914 B, 551.  
     1917 A, 282.  
     1917 B, 140.  
 Gilmore, C. W. 1914 B.  
     1917 A, 4.  
     1921 A, 7.  
     1922 C, 386, pl. vi.  
 Gregory and Mook 1925 A, 6.  
 Henning, C. L. 1914 A, 774.  
 Lambe, L. M. 1914 C, 151.  
     1914 G, 385.  
     1915 A, 4, 17.  
 Lull, R. S. 1915 D, 342.  
     1917 B, 526, 528, fig. 166.  
     1924 A, 244, fig. 32.  
 Matthew, W. D. 1915 C, 108, fig. 37.  
     1920 D, 542.  
 Nopcsa, F. 1923 H, 101.  
     1928 A, 185.  
 Osborn, H. F. 1923 C, 2.  
 Parks, W. A. 1925 D, 6.  
 Scott, W. B. 1917 A, 119.  
 Sternberg, C. H. 1917 A, 102, 120, fig. 34.  
 Williston, S. W. 1925 B, 296.  
 Zittel and Broili 1923 A, 366.
- Styracosaurus albertensis* Lambe.**
- Lambe, L. M. 1913 C, 109, pls. x-xii.  
 Abel, O. 1919 A, 649, figs. 514, 515.  
 Anonymous 1914 A, 385.  
 Brown, B. 1914 A, 540.  
     1914 E, 378.  
 Gilmore, C. W. 1914 B.  
     1917 A, 10.  
     1921 A, 7, figs. 1-3.  
 Henning, C. L. 1914 A, 773, figs. 5, 6.

- Lambe, L. M. 1914 F, 294, 296, 298.  
     1914 G, 385.  
     1915 A, 18, pl. iii, fig. 2; pl. vi, fig. 2.  
     1915 B, 117.  
 Lydekker, R. 1915 C, 629.  
 Matthew, W. D. 1916 A, 484.  
 Sternberg, C. H. 1914 A, 135.  
     1917 A, 102, fig. 34 ("Styracosaurus").  
     1918 A, 206.  
 Sternberg, C. M. 1927 B, 138, pl. i.  
     Upper Cretaceous (Belly River); Alberta.

***Styracosaurus sphenocerus* Cope.**

- Unless otherwise indicated the authors, as cited, use the generic name *Monoclonius*.
- Hay, O. P. 1902 A, 500.  
 Ballou, W. H. 1897 A, 21, fig. (*Monoclonius*); 18 (*Agathaumas*).  
 Brown, B. 1914 B, 549 (Syn. of *M. crassus*).  
     1917 A, 285 (*M. sphenoceros*).  
 Bowen, C. F. 1915 A, 136.  
 Cope, E. D. 1903 A, 372.  
 Gilmore, C. W. 1917 A, 15 (*Styracosaurus*).  
 Hatcher, J. B. 1905 B, 93.  
     1907 A, 5, 87, 93, 298, pl. iv, fig. 2; text-fig. 91.  
 Henning, C. L. 1914 A, 774.  
 Lambe, L. M. 1902 A, 68.  
     1904 C, 24.  
     1904 D, 83.  
     1913 C, 115.  
 Lull, R. S. 1907 B, 167, 298, fig. 91.  
 Osborn, H. F. 1902 I, 14.  
     1904 F, 45 (*Agathaumas*).  
 Sternberg, C. H. 1909 C, 87.  
     1914 A, 134.  
 Tornier, G. 1913 B, 375, fig. 53 (*Agathaumas*).  
     Upper Cretaceous (Judith River); Montana.

TOROSAURUS Marsh. Type *T. latus* Marsh.

- Hay, O. P. 1902 A, 499.  
 Abel, O. 1912 F, 565.  
     1916 A, 497, fig. 10.  
     1919 A, 651.  
 Bowen, C. F. 1915 A, 151.  
 Brown, B. 1907 A, 841.  
     1914 A, 539.  
     1917 A, 282.  
 Case, E. C. 1898 C, 642.  
 Gilmore, C. W. 1917 A, 4.  
 Gregory and Mook 1925 A, 5.  
 Hatcher, J. B. 1905 B, 102.  
     1907 A, 300.  
 Henning, C. L. 1914 A, 771.  
 Huene, F. 1909 B, 18.  
 Lambe, L. M. 1912 A, 9.  
     1915 A, 17.  
 Lull, R. S. 1905 A, 420.  
     1907 B, 161, 165, 300.  
     1908 B, 393.  
     1911 A, 339.  
     1912 B, 775.  
     1917 B, 527, fig. 166.  
     1924 A, 244, fig. 32.

- Lydekker, R. 1915 C, 629.  
 Marsh, O. C. 1899 C, 72.  
 Matthew, W. D. 1915 C, 108, 111, fig. 37.  
 Nopcsa, F. 1901 A, 271.  
     1923 H, 101.  
     1928 A, 185.  
 Osborn, H. F. 1902 I, 9.  
     1923 C, 2.  
 Parks, W. A. 1925 D, 6.  
 Schuchert and Levene 1927 A, 323.  
 Scott, W. B. 1917 A, 119.  
 Sternberg, C. M. 1927 A, 70.  
 Williston, S. W. 1925 B, 296.  
 Zittel and Broili 1923 A, 366.  
 Zittel, Eastman, etc. 1902 A, 245.

***Torosaurus gladius* Marsh.**

- Hay, O. P. 1902 A, 499.  
 Bowen, C. F. 1915 A, 140.  
 Hatcher, J. B. 1907 A, 15, 152, 300, pl. ii, fig. 7; pl. iii, fig. 3; text-figs. 7, 12, 14, 119.  
 Janensch, W. 1926 A, 195.  
 Lambe, L. M. 1904 C, 24.  
     1914 B, 131.

Lambe, L. M. 1914 C, 152.

1915 A, pl. iv, fig. 2; pl. vii, fig. 2.

Lull, R. S. 1907 B, 174, 300; text-figs. 7, 12, 14, 119.

1908 B, 394.

1915 D, 343.

Osborn, H. F. 1902 I, 15.

Schuchert, C. 1910 A, 596.

Upper Cretaceous (Lance); Wyoming.

### **Torosaurus latus Marsh.**

Hay, O. P. 1902 A, 499.

Bowen, C. F. 1915 A, 140.

Hatcher, J. B. 1907 A, 35, 150, 300, fig. 118.

Hay, O. P. 1909 A, 98.

Janensch, W. 1926 A, 195.

Lambe, L. M. 1914 B, 131.

Lull, R. S. 1907 B, 174, 300, fig. 118.

1908 B, 394, fig. 4.

1915 D, 343.

Osborn, H. F. 1902 I, 14.

Parks, W. A. 1925 D, 8.

Pompeckj, J. F. 1920 A, 116.

Schuchert, C. 1910 A, 596.

Upper Cretaceous (Lance); Wyoming.

### **ANCHICERATOPS Brown.**

Type *A. ornatus* Brown.

Brown, B. 1914 A, 539, 543, fig. 1.

Abel, O. 1916 A, 497, fig. 10.

Brown, B. 1917 A, 282.

Gilmore, C. W. 1919 A, 110.

Gregory and Mook 1925 A, 6.

Lambe, L. M. 1915 A, 19.

Lydekker, R. 1915 C, 630.

Matthew, W. D. 1915 C, 108, fig. 37.

1920 D, 542.

Nopcsa, F. 1917 A, 211.

1917 B, 340.

1923 H, 101.

1923 A, 185.

Osborn, H. F. 1923 C, 2.

Parks, W. A. 1925 D, 6.

Sternberg, C. M. 1926 A, 103.

1927 A, 70.

Williston, S. W. 1925 B, 296.

Zittel and Broili 1923 A, 365.

### **Anchiceratops ornatus Brown.**

Brown, B. 1914 A, 539, pls. xxix-xxxv; text-fig. 1.

Lambe, L. M. 1915 A, 19.

Sternberg, C. M. 1926 A, 104.

Upper Cretaceous (Edmonton); Alberta.

### **Anchiceratops sp. indet.**

Sternberg, C. M. 1926 A, 104. Upper Cretaceous (Edmonton); Alberta.

### **LEPTOCERATOPS Brown.**

Type *L. gracilis* Brown.

Brown, B. 1914 D, 567.

1917 A, 282.

Gilmore, C. W. 1917 A, 35.

Gregory and Mook 1925 A.

Lull, R. S. 1915 D, 342.

Lydekker, R. 1915 C, 631.

Nopcsa, F. 1922 A, 115.

1923 H, 101, 103.

1923 A, 185.

Osborn, H. F. 1923 C, 2.

Parks, W. A. 1925 D, 6.

Romer, A. S. 1927 C, 235, 237, 243, figs. 3, 4, 8, 13.

Steiner, H. 1922 A, 347.

Williston, S. W. 1925 A, 175, 176, fig. 141.

1925 B, 296.

Zittel and Broili 1923 A, 366.

### **Leptoceratops gracilis Brown.**

Brown, B. 1914 D, 567, pl. xlii; text-figs. 1-19.

Gilmore, C. W. 1915 A, 600.

1917 A, 37.

Janensch, W. 1926 A, 196.

Sternberg, C. M. 1926 A, 104.

Upper Cretaceous (Edmonton); Alberta.

### **DICERATOPS Lull. Type *D. hatcheri* Lull.**

Lull, R. S. 1905, in Hatcher, J. B. 1905 A, 413, 417.

Abel, O. 1912 F, 565, 580.

1919 A, 651.

Anonymous 1923 A, 192.

Gilmore, C. W. 1917 A, 4.

Gregory and Mook 1925 A, 6.

Huene, F. 1909 B, 18.

Lambe, L. M. 1915 A, 2, 16.

Lull, R. S. 1905 A, 420.

1907, in Hatcher, J. B. 1907 A, 149.

1907 B, 161, 163.

1908 B, 393.

1915 D, 342.

1917 B, 528.

1924 A, 244.

Nopcsa, F. 1923 A, 185.

Williston, S. W. 1925 B, 296.

Zittel and Broili 1911 A, 296.

1923 A, 365.

**Diceratops hatcheri Lull.**

Lull, R. S. 1905, in Hatcher, J. B. 1905 A, 417, pl. xviii.

Anonymous 1905 B, 205.

Bowen, C. F. 1915 A, 140.

Gilmore, C. W. 1906 A, 609, pls. xxxiii, xxxiv.

Lucas, F. A. 1906 C, 955.

Lull, R. S. 1905 A, 420, pl. xiv.

1907, in Hatcher, J. B. 1907 A, 149, pl. ii,

fig. 5; pl. iv, fig. 12; pl. v, fig. 10; pls.

xlvii, xlviii.

1907 B, 163, pls. xlvii, xlviii.

1908 B, 392.

1915 D, 343.

Parks, W. A. 1925 D, 8.

Schuchert, C. 1910 A, 596.

Upper Cretaceous (Lance); Wyoming.

TRICERATOPS Marsh. Type *Ceratops horridus* Marsh.

- Hay, O. P. 1902 A, 498 (Triceratops); 499 (Sterrholophus).  
 Abel, O. 1907 B (76).  
     1907 F, 462.  
     1908 D (217).  
     1912 F, 297, 579, 705, figs. 220, 221.  
     1916 A, 470, figs. 1, 3, 10.  
     1919 A, 651.  
     1920 A, 387, 393, fig. 603.  
     1922 C, 340, 358, fig. 308.  
     1924 A, 716.  
     1925 A, 217, fig. 153.  
 Anonymous 1910 B, 8.  
     1923 A, 192.  
 Beasley, W. L. 1903 B, 87, fig. 3.  
 Beddard, F. E. 1898 A, 155.  
 Bigot, A. 1897 A, 462 (Triceratops, Sterrhophus).  
 Boule, M. 1902 B, 908, figs. 13, 14.  
 Bowen, C. F. 1915 A, 151.  
 Brown, B. 1906 A, 297, figs. 1, 2.  
     1907 A, 841.  
     1908 C, 54.  
     1914 A, 539, 543, fig. 1.  
     1914 B, 552.  
     1914 D, 567.  
     1914 E, 377.  
     1915 A, 271.  
     1917 A, 281.  
     1917 B, 140.  
 Campbell, M. R. 1915 A, 73, pl. x.  
 Cannon, G. L. 1894 A, 260.  
 Cross, W. 1909 A, 42.  
 Depéret, C. 1896 A, 185.  
     1912 A, 705.  
 Dollo, L. 1889 J, 686.  
     1905 B, 251.  
     1906 A, 444, 445.  
 Douglass, E. 1909 C, 277.  
 Drevermann, F. 1913 A, 10, fig. 2.  
 Du Toit, P. J. 1913 A, 248.  
 Fraas, E. 1911 B, 33.  
 Gaudry, A. 1898 A, 127.  
 Gilmore, C. W. 1909 A, 210.  
     1914 A, 66.  
     1914 B.  
     1915 C, 58, pl. xi.  
     1917 A.  
     1919 A, 97, pls. v-viii; text-fig. 1.  
     1920 C, 273.  
     1922 A, 6.  
     1922 C, 381, pls. i, iii, v, vii, viii.  
     1924 G, 17, 26.  
     1925 B, 408.  
     1927 I, 393, fig.  
 Gregory, W. K. 1920 A, 126, fig. 46.  
 Gregory and Mook 1925 A.  
 Hatcher, J. B. 1905 A, 418.  
     1907 A, 14, 116, 300, pls. i, xlix; text-figs. 46, 47, 69, 70, 73.  
 Hay, O. P. 1909 A, 95.  
     1910 C, 7.  
 Heilmann, G. 1913 A, 56.  
     1913 B, 73, fig. 101.  
 Hennig, E. 1924 A, 146.  
 Henning, C. L. 1914 A, 770, fig. 1.  
 Hoernes, R. 1912 A, 660.  
 Hoffmann, C. K. 1890 B, 1315 (Polyonax).  
 Hooley, R. W. 1912 A, 449.  
     1925 A, 26.  
 Huene, F. 1905 B, 346.  
     1906 B, 151, fig. 97 (Sterrholophus).  
     1906 C, 337.  
     1908 B, 289, 359, 408.  
     1909 A, 131.  
     1909 B, 13.  
     1911 C, 154, fig. 8.  
     1914 C, 583.  
 Hutchinson, H. N. 1910 A, 182, pls. xxvii, xxviii.  
     1917 A, 363, 364.  
 Janensch, W. 1925 B, 272.  
 Knipe, H. R. 1912 A, 100, fig.  
 Knowlton, F. H. 1909 A, 232.  
     1911 A, 320.  
     1911 B, 360.  
 Lambe, L. M. 1912 A, 9.  
     1915 A, 2, 16.  
 Lankester, E. R. 1905 A, 207, fig. 149.  
 Lebedinsky, N. G. 1913 A, 769.  
     1913 B, 197.  
 Lucas, F. A. 1901 F, 485, pl. vi.  
     1901 J, 101, 109, figs. 22, 26.  
     1902 B, 208, fig.  
     1902 C, 642, pl. i.  
     1902 I, 43, figs.  
 Lull, R. S. 1903 A, 694.  
     1905 A, 420.  
     1907, in Hatcher, J. B. 1907 A, 47, 76.  
     1907 B, 161, 166, 168, 300, pls. x, xxv; text-figs. 55, 61, 82 (Sterrholophus a syn.).  
     1908 B, 387, fig. 1.  
     1908 C, 255.  
     1910 A, 3.  
     1911 A, 339.  
     1912 B, 774.  
     1912 C, 674.  
     1915 D, 342.  
     1917 B, 297, 526, 527, figs. 166, 167.  
     1924 A, 244, 261, 266, fig. 32.  
 Lydekker, R. 1908 B, 545, fig.  
     1912 C, 123, 137.  
 Matthew, W. D. 1910 D, 555.  
     1910 F, 8.  
     1915 C, 110, 111, figs. 38, 40.  
     1920 D, 542.  
 Nopcsa, F. 1901 A, 270 (Sterrholophus); 271 (Triceratops).  
     1902 B, 98.  
     1903 D, 266.  
     1904 A, 236.  
     1905 B, 244.  
     1905 C, 291.  
     1911 B, 8.  
     1915 B, 14.  
     1917 A, 211.  
     1917 B, 340.  
     1918 B, 239.  
     1922 A, 114.  
     1923 G, 110.  
     1923 H, 12, 100, 101, 102, 103, 105, pl. iii, fig. 4.  
     1925 B, 11.

- Nopcsa, F. 1928 A, 185.  
 Osborn, H. F. 1902 I, 9.  
     1904 F, 19.  
     1912 G, 233, fig. 1.  
     1917 A, 738.  
     1917 B, 225.  
     1923 C, 2.  
     1924 L, 145.  
 Oswald, F. 1909 A, 125 (Triceratops, Sterrhophus).  
 Parks, W. A. 1925 D, 6.  
 Petronievics, B. 1919 A, 409, 413, 417.  
 Pompeckj, J. F. 1920 A, 116, 119.  
     1921 A, 1, fig. 1.  
     1922 B, 88.  
 Rogenhofer, A. 1908 A (42).  
 Rogers, A. F. 1924 A, 546.  
 Romer, A. S. 1927 C, 226, figs. 3-5, 8, 10, 12.  
 Schuchert, C. 1905 A, 458.  
     1905 B, 133.  
 Schuchert and Levene 1927 A, 317, fig.  
 Scott, W. B. 1917 A, 119.  
 Seeley, H. G. 1892 D, 83.  
 Seitz, A. L. 1907 A, 345.  
 Shufeldt, R. W. 1916 B, 41.  
 Stanton, T. W. 1909 A.  
     1910 A, 64.  
 Steinmann, G. 1907 A, 452.  
     1908 A, 220, fig. 130.  
 Sternberg, C. H. 1909 A, 114.  
     1909 C, 270.  
     1911 A, 72.  
     1911 B, 219.  
     1917 A, fig. 3.  
 Sternberg, C. M. 1921 B, 97.  
     1927 B, 135.  
 Sternfeld, R. 1909 A, 382.  
 Stremme, H. 1909 B, 796.  
     1910 A, 550.  
 Wegemann, C. H. 1918 A, 59.  
 Whiteaves, J. F. 1901 A, 187.  
 Whitnal, H. O. 1925 A, 19.  
 Wieland, G. R. 1911 A, 122.  
     1912 A, 287.  
     1912 B, 299.  
 Wilckens, O. 1911 A, 706.  
 Williston, S. W. 1925 A, 87, 141, 149, figs. 70, 113, 122.  
     1925 B, 296.  
 Woodward, H. 1904 B, 147.  
 Zittel and Broili 1911 A, 296.  
     1923 A, 364.  
 Zittel, Eastmann, etc. 1902 A, 244 (Triceratops); 245 (Sterrhophus).
- Triceratops alticornis (Marsh).**  
 Hay, O. P. 1902 A, 500 (Ceratops).  
 Bowen, C. F. 1915 A, 138.  
 Cannon, G. L. 1894 A, 258 ("dinosaur").  
     1906 B, 198.  
 Cross, W. 1888 A, 132 (Bison).  
     1896 A, 193 (Ceratops).  
 Gilmore, C. W. 1922 C, 387 (T. alticornis); pl. iii (T. atticornis).  
 Hatcher, J. B. 1896 A, 113 (Ceratops).  
     1907 A, 6, 115, 300, fig. 106 (Ceratops).  
 Lull, R. S. 1907 B, 170, fig. 106.  
 Merrill, G. P. 1907 A, 64 (Bison); 65 (Ceratops).  
 Osborn, H. F. 1902 I, 14 (Ceratops).
- Osborn, H. F. 1917 A, 740.  
     Upper Cretaceous (Denver); Colorado.
- Triceratops brevicornis Hatcher.**  
 Hatcher, J. B. 1905 A, 413, pl. xii.  
 Anonymous 1905 B, 205 (T. brevicornis).  
 Bowen, C. F. 1915 A, 138.  
 Brown, B. 1907 A, 842.  
     1914 E, 358.  
 Gilmore, C. W. 1917 A, 35.  
 Hatcher, J. B. 1907 A, 55, 141, 300, pl. iv, fig. 9, pl. v, fig. 7; pls. xl-xlii; text-fig. 48.  
 Lull, R. S. 1907 B, 169, 300, pls. xl-xlii.  
     1912 B, 775, fig.  
     1915 D, 343, 344.  
 Osborn, H. F. 1923 C, 2.  
 Parks, W. A. 1925 D, 8 (T. brevicornis).  
 Schuchert, C. 1910 A, 596.  
     Upper Cretaceous (Lance); Wyoming; (Hell Creek); Montana.
- Triceratops calicornis Marsh.**  
 Hay, O. P. 1902 A, 498.  
 Abel, O. 1912 F, 564, fig. 437.  
 Bowen, C. F. 1915 A, 140.  
 Gilmore, C. W. 1906 A, 608, pl. xxxii.  
     1917 A, 19.  
     1919 A, 101.  
 Hatcher, J. B. 1907 A, 138, 300, pl. iv, fig. 10; pl. v, fig. 8; pls. xxviii-xl.  
 Knowlton, F. H. 1909 A, 190.  
 Lull, R. S. 1907 B, 171, 300, pls. xxxviii-xl.  
     1912 B, 775 (Syn.? of T. elatus).  
     1915 D, 343, 344 (Syn.? of T. elatus).  
 Merrill, G. P. 1907 A, 79.  
 Nopcsa, F. 1901 B, 217 (T. calicornis).  
 Osborn, H. F. 1902 I, 14.  
 Parks, W. A. 1925 D, 7, 8.  
 Schuchert, C. 1910 A, 596.  
 Shufeldt, R. W. 1916 B, 41, fig. 3 (T. galicornis).  
     Upper Cretaceous (Lance); Wyoming.
- Triceratops elatus Marsh.**  
 Hay, O. P. 1902 A, 498.  
 Bowen, C. F. 1915 A, 138.  
 Gilmore, C. W. 1919 A, 97, pls. iii, ix.  
     1920 C, 274, pl. ii.  
 Hatcher, J. B. 1907 A, 134, 300, pl. xliii; text-figs. 30, 114, 115.  
 Huene, F. 1911 C, 150, fig. 7 (This species?).  
 Lambe, L. M. 1915 A, 24, pl. x, fig. 1.  
 Lull, R. S. 1907 B, 163, 170, 300, pl. xliii.  
     1912 B, 775, fig. (T. calicornis a syn.).  
     1915 D, 343, 344 (T. calicornis a syn.).  
 Merrill, G. P. 1907 A, 79.  
 Moodie, R. L. 1923 B, 134, fig. 9.  
 Osborn, H. F. 1902 I, 14.  
 Parks, W. A. 1925 D, 8.  
 Schuchert, C. 1910 A, 596.  
     Upper Cretaceous (Lance); Wyoming.
- Triceratops flabellatus Marsh.**  
 Hay, O. P. 1902 A, 499 (Sterrhophus).  
 Abel, O. 1925 A, 217, figs. 155, 161.  
 Boule, M. 1891 A, 16, fig. 3.  
 Bowen, C. F. 1915 A, 138.  
 Eimer, G. H. T. 1901 A, 131.

- Eisler, P. 1895 A, 52.  
 Gilmore, C. W. 1919 A, 106, text-fig. 8.  
 Hatcher, J. B. 1907 A, 15, 143, 300, pl. ii, fig. 3; pl. iii, fig. 4; pl. v, fig. 9; pls. xlv-xlvi; text-figs. 6, 8-11, 14, 15, 17-23, 28, 31, 33, 36, 38, 39, 43, 44, 60-62 (Triceratops, Sterrhophus).  
 Hay, O. P. 1909 A, 98.  
 Huene, F. 1911 C, 147, figs. 1, 2, 9.  
 1914 C, 584, pl. xi, fig. 1.  
 Jaekel, O. 1911 A, 161, fig. 179.  
 Koken, E. 1893 B, 433.  
 Lambe, L. M. 1915 A, pl. ii, fig. 3; pl. v, fig. 2.  
 Lull, R. S. 1907 B, 171, 300, pls. xlv-xlvi; text-figs. 6, 8-11, 15, 17-23, 28, 31, 33, 36, 38, 39, 43, 44, 60-62.  
 1915 D, 343, 344.  
 Lydekker, R. 1912 C, 123, fig. 9.  
 Osborn, H. F. 1902 I, 14 (Sterrhophus).  
 Parks, W. A. 1925 D, 8.  
 Pompeckj, J. F. 1920 A, 118.  
 1921 A, 4.  
 Schuchert, C. 1910 A, 596.  
 Woodward, A. S. 1922 C, 20, fig. 14 (Sterrhophus).  
 Zittel and Broili 1911 A, 295.  
 1923 A, 363, figs. 475-477.  
 Upper Cretaceous (Lance); Wyoming.

### Triceratops galeus Marsh.

- Hay, O. P. 1902 A, 498.  
 Bowen, C. F. 1915 A, 140, 150.  
 Cannon, G. L. 1894 A, 254.  
 Cross, W. 1896 A, 227, 230.  
 Hatcher, J. B. 1907 A, 132, 300, fig. 111 (A rejected species).  
 Lull, R. S. 1907 B, 168, 184, 300.  
 Merrill, G. P. 1907 A, 79.  
 Osborn, H. F. 1902 I, 14.  
 Upper Cretaceous (Arapahoe); Colorado.

### Triceratops horridus Marsh.

- Hay, O. P. 1902 A, 498.  
 Abel, O. 1925 A, 217.  
 Bigot, A. 1897 A, 464, fig. 4.  
 Bowen, C. F. 1915 A, 138.  
 Brown, B. 1914 A, 543.  
 Cross, W. 1896 A, 227, 230.  
 Dollo, L. 1889 J, 686.  
 Hatcher, J. B. 1907 A, 117, 300, pl. iv, fig. 6; pls. xvii, xxvi; text-figs. 24, 25, 27, 107.  
 Hay, O. P. 1909 A, 102, 104.  
 Huene, F. 1914 C, 583, pl. xi, fig. 2.  
 Knowlton, F. H. 1909 A, 202.  
 1922 A, 26 (Ceratops).  
 Lull, R. S. 1907 B, 168, 300, pl. xxvi; text-figs. 24-27, 107.  
 1915 D, 343, 344.  
 Osborn, H. F. 1902 I, 14.  
 Pompeckj, J. F. 1921 A, 11.  
 Schuchert, C. 1910 A, 596.  
 Stanton, T. W. 1909 A, 249.  
 Upper Cretaceous (Lance); Wyoming: (Arapahoe?); Colorado.

### Triceratops "ingens."

- Lull, R. S. 1915 D, 343 (No description). Upper Cretaceous (Lance); Wyoming.

### Triceratops obtusus Marsh.

- Hay, O. P. 1902 A, 499.  
 Bowen, C. F. 1915 A, 138.  
 Gilmore, C. W. 1919 A, 98, pl. iv.  
 Hatcher, J. B. 1907 A, 140, 300, pl. iv, fig. 11.  
 Lull, R. S. 1907 B, 171, 300, figs. 116, 117.  
 1915 D, 343.  
 Merrill, G. P. 1907 A, 79.  
 Osborn, H. F. 1902 I, 14.  
 Schuchert, C. 1910 A, 596.  
 Upper Cretaceous (Lance); Wyoming.

### Triceratops prorsus Marsh.

- Hay, O. P. 1902 A, 499.  
 Abel, O. 1909 F, 463, fig. 5.  
 1912 F, 563, fig. 436.  
 1919 A, 648, figs. 513, 516.  
 1920 A, 394, fig. 612.  
 1922 C, 341, fig. 298.  
 1925 A, 218, figs. 156, 157, 159, 160, 162, 165.  
 Anonymous 1905 B, 205.  
 1911 A, 301.  
 1912 C, 509 ("Triceratops").  
 1923 A, 192.  
 Ballou, W. H. 1897 A, 21.  
 Bigot, A. 1897 A, 463, figs. 1, 6.  
 Bowen, C. F. 1915 A, 138.  
 Brown, B. 1906 A, 297, pl. xl.  
 1917 A, 297.  
 1919 A, 413, 427, fig. ("Triceratops").  
 Drevermann, F. 1913 A, 10, fig. 1.  
 Du Toit, P. J. 1913 A, 247.  
 Gaudry, A. 1893 A, 22.  
 Gilmore, C. W. 1905 B, 433, pls. i, ii.  
 1914 B, 5.  
 1916 D, 286, fig. 29.  
 1917 A, 10.  
 1922 C, 387, pl. vii.  
 1922 F, 3, pl. iii.  
 1924 A, 68 (This species?).  
 1924 D, 27 (This genus?).  
 Gregory, W. K. 1923 B, 192.  
 1927 C, 175, fig. 5.  
 Hatcher, J. B. 1907 A, 14, 127, 300, pl. iv, figs. 7, 8; pl. v, figs. 5, 6; pls. vii-xvii, xxx-xxxvi; text-figs. 5, 29, 35, 37, 40, 41, 49-58, 63-67, 71, 109, 110.  
 Henning, C. L. 1914 A, 770, fig. 2.  
 Huene, F. 1908 B, 374, fig. 335.  
 1909 A, 131.  
 1911 C, 150, figs. 3, 4, 10.  
 Jaekel, O. 1911 A, 162, fig. 180.  
 Janensch, W. 1926 A, 193.  
 Lull, R. S. 1907, in Hatcher, J. B. 1907 A, 47.  
 1907 B, 168, 189, 300, pls. vi-xvii, xxx-xxxvi; text-figs. 35, 37, 40, 41, 49-58, 63-67, 71, 109, 110, 124, 125.  
 1908 B, 387.  
 1912 B, 775, fig.  
 1915 D, 342, 343.  
 Lydekker, R. 1905 A, 304.  
 Matthew, W. D. 1924 F, 118, fig.

- Merrill, G. P. 1907 A, 79.  
 Nopcsa, F. 1902 B, 97.  
 Osborn, H. F. 1902 I, 14.  
     1904 F, 18, 45.  
 Parks, W. A. 1925 D, 7, 8.  
 Schuchert, C. 1905 A, 458, pl. xv.  
     1910 A, 596.  
 Sternberg, C. M. 1924 A, 68 (This species?).  
 Woodward, A. S. 1922 C, 21, fig. 15.  
 Woodward, H. 1906 A, 228-229, with 1 fig.  
 Zittel and Broili 1911 A, 296, fig. 447.  
     1923 A, 365, fig. 478.  
 Zittel, Eastman, etc. 1902 A, 244, fig. 350.  
     Upper Cretaceous (Lance); Wyoming.
- Triceratops serratus Marsh.**
- Hay, O. P. 1902 A, 499.  
 Abel, O. 1925 A, 227, figs. 166, 167.  
 Bowen, C. F. 1915 A, 138.  
 Brown, B. 1907 A, 842.  
     1914 E, 358.  
 Gilmore, C. W. 1917 A, 14.  
     1919 A, 105, text-figs. 2, 3.  
 Hatcher, J. B. 1907 A, 122, 300, pl. ii, fig. 4;  
     pls. xxvii-xxix; text-figs. 16, 26, 32, 34, 42,  
     68, 72.  
 Hay, O. P. 1909 A, 95, pl. i, fig. 1; pl. ii, fig.  
     1; pl. iii, figs. 1-3.  
 Huene, F. 1911 C, 148, 150, fig. 5.  
     1914 C, 534.  
 Lambe, L. M. 1902 A, 69.  
 Lull, R. S. 1903 A, 635, pls. lxx, lx; text-fig. 1.  
     1907 B, 163, 169-300, pls. xxvii-xxix; text-  
     figs. 16, 26, 32, 34, 42.  
     1908 B, 337, pls. i-iii; text-fig. 6.  
     1912 A, 212.  
     1915 D, 343, 344.  
 Moodie, R. L. 1923 B, 124, pl. xxvi.  
 Osborn, H. F. 1902 I, 14.  
 Parks, W. A. 1925 D, 8.  
 Pompeckj, J. F. 1920 A, 116, fig. 3.  
     1921 A, 1, 5.  
 Schuchert, C. 1910 A, 596.  
 Stromer, E. 1912 A, 89, fig. 90.  
 Zittel and Broili 1911 A, 296, fig. 446.  
     Upper Cretaceous (Hell Creek); Montana:  
     (Lance); Wyoming.

**Triceratops sulcatus Marsh.**

- Hay, O. P. 1902 A, 499.  
 Bowen, C. F. 1915 A, 138.  
 Gilmore, C. W. 1917 A, 13.  
 Hatcher, J. B. 1907 A, 133, 300, pls. vi, xxxvii;  
     text-figs. 112, 113.  
 Hay, O. P. 1909 A, 96, pl. i, fig. 2; pl. ii, fig.  
     2; pl. iii, fig. 4.  
 Huene, F. 1908 B, 360, fig. 328.  
     1911 C, 162.  
     1914 C, 584.  
 Lull, R. S. 1907 B, 170, 300, pl. xxxvii, fig. 1;  
     text-figs. 112, 113.  
     1915 D, 343.  
 Osborn, H. F. 1902 I, 14.  
 Pompeckj, J. F. 1920 A, 116, fig. 3.  
     1921 A, 5.  
 Schuchert, C. 1910 A, 596.  
     Upper Cretaceous (Lance); Wyoming.

**Triceratops sp. indet.**

- Hay, O. P. 1902 A, 499.  
 Bowen, C. F. 1918 A, 231. Upper Cretaceous  
     (Ferris); Wyoming.  
 Brown, B. 1907 A, 842. Upper Cretaceous (Hell  
     Creek); Montana.  
 Gilmore, C. W. 1924 D, 27. Upper Cretaceous  
     (Lance); Saskatchewan.  
     1926 J, 28. Upper Cretaceous (Lance);  
     Wyoming.  
 Hay, O. P. 1903 D, 119.  
 Janensch, W. 1926 A, 192, figs. 1, 2. Upper  
     Cretaceous; Mexico.  
 Moodie, R. L. 1923 B, 245, 266.  
 Parks, W. A. 1924 B, 38 (This genus?). Creta-  
     ceous (Belly River); Alberta.  
     1925 B, 226 ("new genus"). Alberta.  
 Stanton, T. W. 1910 B, 183.  
 Sternberg, C. M. 1924 A, 68. Upper Creta-  
     ceous (Lance); Saskatchewan.  
 Todd, J. E. 1908 A, 37, pl. xxiii. Upper Creta-  
     ceous (Laramie); South Dakota.  
 Young and Cooper 1927 A, 5, 7.

**PENTACERATOPS Osborn. Type *P. sternbergii* Osborn.**

- Osborn, H. F. 1923 C, 1.  
 Nopcsa, F. 1928 A, 185.

**Pentaceratops sternbergii Osborn.**

- Osborn, H. F. 1923 C, 1, fig. 1.  
 Reeside, J. B. 1924 A, 21, 24.  
     Upper Cretaceous (Fruitland); New Mex-  
     ico.

**AGATHAUMAS Cope. Type *A. sylvestris* Cope.**

- Cope, E. D. 1872 QQ, 2.  
 Hay, O. P. 1902 A, 498.  
 Abel, O. 1912 F, 565.  
     1922 C, 340 (Agathauma).  
 Case, E. C. 1898 C, 641.  
 Gill, T. 1876 A, 153.  
 Gilmore, C. W. 1917 A, 19.  
     1922 C, 382.  
 Hatcher, J. B. 1907 A, 104, 295.  
 Hay, O. P. 1910 B, 301.  
 Hoernes, R. 1886 A, 618.

- Huene, F. 1909 B, 18.  
 Lull, R. S. 1907 B, 161, 162, 168, 295.  
     1912 B, 774.  
 Nat. Sci. 1898 A, 230.  
 Nopcsa, F. 1901 A, 270.  
 Peale, A. C. 1876 A, 153.  
 Seeley, H. G. 1892 D, 85.  
 Williston, S. W. 1925 B, 296.  
 Zittel, Eastman, etc. 1902 A, 244 (Syn. of Tri-  
     ceratops).

**Agathaumas sylvestris** Cope.

- Cope, E. D. 1872 QQ, 2.  
 Hay, O. P. 1902 A, 498.  
 Ballou, W. H. 1897 A, 21.  
 Bowen, C. F. 1915 A, 136.  
 Cope, E. D. 1872 VV, 1.  
     1874 B, 435, 442, 445.  
     1891 N, 43 (A. sylvestre).  
 Cross, W. 1896 A, 228 ("Agathaumas").  
     1909 A, 41.

- Hatcher, J. B. 1896 A, 113.  
     1907 A, 4, 105, 295, pl. xxv.  
 Knowlton, F. H. 1909 A, 215.  
     1922 A, 8, 25, 63, 64.  
 Lull, R. S. 1907 B, 168, 295, pl. xxv.  
 Nopcsa, F. 1901 B, 216 (Monoclonius crassus,  
   a syn.).  
 Osborn, H. F. 1902 I, 14 (A. sylvestre).  
     Upper Cretaceous (Black Buttes); Wyo-  
     ming.

**POLYONAX** Cope. Type *P. mortuarius* Cope.

- Hay, O. P. 1902 A, 498 (Agathaumas, in part).  
 Hatcher, J. B. 1907 A, 111, 299 (A doubtful  
   genus).  
 Huene, F. 1909 B, 18.  
 Lull, R. S. 1907 B, 299.  
 Nopcsa, F. 1901 A, 270 (Syn. of Monoclonius).  
 Reynolds, S. H. 1897 A, 271, 274, 277, 284.  
     A genus of doubtful validity.

**Polygonax mortuarius** Cope.

- Hay, O. P. 1902 A, 498 (Agathaumas).  
 Bowen, C. F. 1915 A, 138, 150.

- Cope, E. D. 1874 B, 433, 448, 451.  
 Cross, W. 1896 A, 244.  
 Gilmore, C. W. 1924 C, 26.  
 Hatcher, J. B. 1902 C, 331, 335 (Polygonax).  
     1907 A, 5, 8, 112, 299.  
 Lambe, L. M. 1902 A, 68.  
 Lull, R. S. 1907 B, 166, 299.  
 Osborn, H. F. 1902 I, 14 (Polponax).  
     Upper Cretaceous (Denver or Arapahoe);  
     Colorado.

**Superfamily STEGOSAURIDÆ**, new form.

Unless otherwise indicated the authors, as  
 cited, use the name Stegosauria for this group.

- Hay, O. P. 1902 A, 495 (Stegosaurioidea).  
 Ardit, T. 1907 D, 683.  
 Berkey, C. P. 1923 A, 3.  
 Brown, B. 1907 B, 392 ("stegosaurid dino-  
   saur").  
 Cannon, G. L. 1894 A, 245 ("stegosaurs").  
     1906 B, 197.  
 Case, E. C. 1897 D, 88.  
 Depéret, C. 1912 A, 705 ("stégosauridés").  
 Dollo, L. 1889 H, 678 ("stégosauriens").  
     1905 B, 251 ("prédenariens bipèdes").  
 Fraas, E. 1911 B, 33 ("stegosaurier").  
 Fürbringer, M. 1888 A, 1620.  
 Gadow, H. 1901 B, 425 (Stegosauri).  
 Geinitz and Deichmüller 1882 B, 15 (Stego-  
   sauria).  
 Gilmore, C. W. 1914 A, 101, 102 (Stegosaurioidea).  
 Günther, A. 1886 A, 443 (Stegosauria).  
 Hatcher, J. B. 1905 B, 102.  
     1907 A, 156, 299.  
 Hennig, E. 1912 B, 100 ("stegosaurier").  
     1915 A, 576 ("stegosaurier").  
     1915 B, 223.  
     1915 D, 1-16.  
     1916 A, 175 ("stegosaurier").  
     1924 A, 119, 127, 128, 133.  
 Hoernes, R. 1886 A, 614.  
 Hoffmann, C. K. 1890 B, 1311 (Stegosauria).  
 Hooley, R. W. 1912 A, 448, 449.  
 Huene, F. 1908 B, 370 ("stegosaurier").  
     1914 A, 145.  
 Johnson, A. 1883 A, 408.
- Koken, E. 1893 B, 365, 397 ("stegosaurier").  
     1900 A, 464.  
 Lambe, L. M. 1918 A, 23, 35 (Psalisauria).  
 Lull, R. S. 1907 B, 279.  
     1910 A, 3, 18.  
     1912 A, 211.  
     1915 C, 325.  
     1915 F, 837.  
     1917 B, 505, 522.  
     1918 C, 131.  
     1924 A, 237, 241, 263.  
 Lydekker, R. 1912 C, 121.  
 Matthew, W. D. 1915 C, 32, 101.  
 Mook, C. C. 1918 A, 467 ("stegosaurs").  
 Nopcsa, F. 1901 A, 276 ("stegosaurier").  
     1902 B, 93 ("bepanzerte dinosaurier").  
     1917 A, 209 (Stegosauridæ).  
     1922 A, 115 (Thyreophora).  
     1923 A, 199 (Thyreophora).  
     1928 A, 185 (Thyreophoroidea).  
 Osborn, H. F. 1902 I, 17.  
     1903 G, 837.  
     1904 Q, 690.  
 Palacký, J. 1902 B, 141 ("stegosaurier").  
 Peale, A. C. 1912 A, 748.  
 Romer, A. S. 1927 C, 226, 238, 251, 258.  
 Seeley, H. G. 1888 G, 168, 171.  
 Simpson, G. G. 1926 H, 208 (Ornithopoda,  
   Stegosauria).  
 Van den Broeck, E. 1900 A, 85.  
 Williston, S. W. 1925 A, 95, 170, 176.  
     1925 B, 214, 295.  
 Woodward, A. S. 1922 C, 20 (Stegosauria).  
 Zittel and Broili 1911 A, 293.  
     1923 A, 359 (Stegosauridæ).

**SCOLIDOSAURIDÆ** Huxley.

- Huxley, T. H. 1869 K, 146.  
 Abel, O. 1919 A, 639 (Stegosaurinæ).  
 Gilmore, C. W. 1920 A, 65.  
 Günther, A. 1886 A, 443.

- Hoffmann, C. K. 1890 B, 1308, 1311.  
 Huxley, T. H. 1870 D, 34.  
 Lydekker, R. 1888 B, 180.  
 Marsh, O. C. 1895 C, 497, pl. x, fig. 6.



- Marsh, O. C. 1896 A, 4, fig. 1 (*Scelidosaurus*).  
1896 C, 243, pl. lxxxiii.  
Matthew, W. D. 1921 D, 211.  
Nicholson and Lydekker 1889 A, 1160.  
Nopcsa, F. 1928 A, 185 (*Scelidosaurinae*).  
Owen, R. 1861 A, 1-14, pls. i-vi (*Scelidosaurus*).

- Owen, R. 1863 B, 1-26, pls. i-xi (*Scelidosaurus*).  
1875 C (*Scelidosaurus*).  
Romer, A. S. 1927 C, 226.  
Zittel, K. A. 1890 A, 741.  
Zittel and Broili 1911 A, 293 (*Stegosauridae*, in part).

#### HOPLITOSAURUS Lucas. Type *Stegosaurus marshi* Lucas.

- Lucas, F. A. 1902 F, 435.  
Gilmore, C. W. 1909 A, 300.  
1914 A, 114.  
Hennig, E. 1924 A, 124.  
Huene, F. 1909 B, 17.  
1909 E, 442.  
Lull, R. S. 1921 A, 115, 124.  
1924 A, chart.  
Romer, A. S. 1927 C, 226 (To *Acanthopholidæ*).

#### *Hoplitosaurus marshi* (Lucas).

- Lucas, F. A. 1901 D, 591, pls. xxiii, xxiv (*Stegosaurus*).  
Gilmore, C. W. 1909 A, 300 [H. (*Stegosaurus*)].  
1914 A, 114, pls. xxvi-xxx; text-figs. 69-71.

- Gilmore, C. W. 1920 A, 65.  
Hennig, E. 1924 A, 124.  
Lucas, F. A. 1902 F, 435 (*Stegosaurus*, replaced by *Hoplitosaurus*).  
Lull, R. S. 1921 A, 117, 124.  
Merrill, G. P. 1907 A, 77 (*Stegosaurus*).  
Mook, C. C. 1916 A, 145.  
Nopcsa, F. 1917 A, 211.  
Jurassic or Lower Cretaceous (Lakota); South Dakota.

#### *Hoplitosaurus?* sp. indet.

- Brown, B. 1920 A, 65.  
Gilmore, C. W. 1920 A, 65, pl. xxvi, fig. 2; text-fig. 37 ("armored dinosaur").  
Upper Cretaceous (Ojo Alamo); New Mexico.

#### STEGOPELTA Williston. Type *S. landerensis* Williston.

- Williston, S. W. 1905 C, 504.  
Eastman, C. R. 1913 B, 678.  
Gilmore, C. W. 1914 A, 100, 118.  
1920 A, 67.  
Hennig, E. 1924 A, 127.  
Huene, F. 1909 E, 442.  
Lull, R. S. 1910 A, 18.  
1921 A, 124.  
Moodie, R. L. 1911 F, 257.  
Nopcsa, F. 1915 B, 13, 18.  
1917 A, 211.  
1918 C, 326, fig. 12.  
1928 A, 185.  
Pompeckj, J. F. 1921 A, 7.  
Romer, A. S. 1927 C, 226.  
Wieland, G. R. 1911 A, 112, 116.  
1912 A, 287.

- Wieland, G. R. 1912 B, 300  
Williston, S. W. 1908 J, 630 (*Ankylosaurus* a syn.).  
1909 A, 398.  
1909 E, 194.  
Zittel and Broili 1911 A, 294.  
1923 A, 362.

#### *Stegopelta landerensis* Williston.

- Williston, S. W. 1905 C, 504.  
Gilmore, C. W. 1920 A, 67, pl. xxvi, fig. 1.  
Hennig, E. 1924 A, 125, 127.  
Moodie, R. L. 1911 F, 257, pls. lv-lix.  
1913 A, 248.  
Wieland, G. R. 1911 A, 112.  
Upper Cretaceous (Benton); Wyoming.

#### STEGOSAURIDÆ Marsh.

- Hay, O. P. 1902 A, 495.  
Abel, O. 1919 A, 639 (*Stegosauridae*, *Stegosaurinae*).  
1922 C, 380 ("stegosaurier").  
1925 A, 211 ("stegosauriden").  
Aldt, T. 1907 D, 683.  
1909 A, 263 ("stegosauriden").  
1912 A, 668, 679.  
Gadow, H. 1896 C, 205 (*Stegosauri*).  
Gilmore, C. W. 1918 A, 475 ("stegosaurs").  
1918 C, 383.  
1921 E, 589.  
1924 E, 43.  
Günther, A. 1886 A, 443.  
Heilmann, G. 1915 A, 116.  
Henning, C. L. 1914 A, 771 ("stegosaurier").  
1924 A, 123.  
Hoernes, R. 1886 A, 614.  
Hoffmann, C. K. 1890 B, 1311.  
Huene, F. 1908 B, 372.

- Huene, F. 1909 B, 17.  
Jaekel, O. 1914 A, 197 ("stegosauriden").  
Janensch, W. 1914 B, 83.  
1925 B, 270 ("stegosauriden").  
Koken, E. 1900 A, 464.  
Lambe, L. M. 1918 A, 32.  
Lucas, F. A. 1901 J, 106 ("stegosaurs").  
Lull, R. S. 1924 A, 242, 264.  
Matthew, W. D. 1915 C, 32.  
Nopcsa, F. 1901 A, 262.  
1902 B, 101.  
1903 D, 267 ("stegosauriden").  
1907 A, 231.  
1911 A, 147.  
1912 A, 481 ("stegosaurs").  
1915 B, 13.  
1917 A, 209.  
1918 C, 328.  
1922 A, 115.

- Nopcsa, F. 1923 H, 103, 104, 126 (Stegosauridae, Stegosaurinae).  
 1928 A, 185 (Stegosauridae, Stegosaurinae).  
 Owen, R. 1875 C.  
 Reynolds, S. H. 1897 A, 209 (Stegosauria).  
 Romer, A. S. 1927 C, 226.
- STEGOSAURUS Marsh. Type *S. armatus* Marsh.
- Hay, O. P. 1902 A, 495.  
 Abel, O. 1907 B, (76).  
 1908 D, (215).  
 1909 F, 461.  
 1910 D, 6.  
 1911 A, 161.  
 1912 F, 72, 564, 591, 702, fig. 218.  
 1916 A, 471, fig. 3.  
 1919 A, 639, 645, fig. 511.  
 1920 A, 387, 393, fig. 603.  
 1922 C, 358, 428, fig. 308.  
 1924 A, 716.  
 1925 A, 191, figs. 139, 147.  
 Berkeley, C. P. 1923 A, 3.  
 Brauns, D. 1890 A, 187.  
 Broili, F. 1908 A, 14.  
 Brown, B. 1908 B, 196.  
 Case, E. C. 1898 C, 640.  
 Cope, E. D. 1880 U, 146 (Hypsirrophus).  
 Darton, N. H. 1908 A, 446.  
 1915 A, 67, pl. x.  
 Depéret, C. 1898 A, 185.  
 1912 A, 705.  
 Dollo, L. 1905 B, 251.  
 1906 A, 444, 445.  
 Fraas, E. 1902 A, 80.  
 Gadow, H. 1901 B, 425.  
 Gaudry, A. 1896 A, 61, 145.  
 1898 A, 127.  
 Gilmore, C. W. 1909 A, 199.  
 1912 B, 693.  
 1912 C, 972.  
 1914 A, 101, 103, 122, pl. xix, fig. 2; pl. xxi, fig. 1; pl. xxv, fig. 5; pls. xxxiii, xxxv; text-figs. 8-10, 14, 18-20, 29, 32, 33, 36, 37, 45, 48-50, 52-54, 61-64.  
 1915 B, 355.  
 1915 C, 52, pl. x.  
 1915 D, 411, 488.  
 1918 A, 475, figs. 1, 2.  
 1918 C, 383.  
 1919 A, 111.  
 1920 C, 275.  
 1924 G, 17, 21, 26.  
 1925 B, 408.  
 Granger and Gregory 1923 A, 3.  
 Gregory, W. K. 1901 A, 145.  
 1916 D, 106.  
 1920 A, 127.  
 Hatcher, J. B. 1901 C, 326.  
 1901 D, 5.  
 1905 B, 102.  
 1907 A, 299.  
 Heilmann, G. 1913 B, 33.  
 1926 A, 207.  
 Heilprin, A. 1887 A, 162.  
 Hennig, E. 1915 B, 220.  
 1916 A, 178.  
 1924 A, *passim*.  
 1925 A, 108.
- Steinmann, G. 1907 A, 451.  
 Van den Broeck, E. 1900 A, 101.  
 Wieland, G. R. 1911 A, 112, 113.  
 Zittel and Broili 1911 A, 293.  
 1923 A, 336, 361, 366.  
 Zittel, Eastman, etc. 1902 A, 241.
- Hoernes, R. 1886 A, 614.  
 Holland, W. J. 1912 A, 204, 205, 206.  
 Hooley, R. W. 1925 A, 9.  
 Huene, F. 1905 B, 346.  
 1906 B, 151, fig. 96.  
 1908 B, 289, 361.  
 1909 B, 16, 17 (Hypsirrophus).  
 1910 A, 77.  
 1914 C, 580, pl. x, figs. 2-4.  
 1914 G, pl. vii.  
 Hutchinson, H. N. 1917 A, 363.  
 Jaekel, O. 1909 C, 707.  
 Janensch, W. 1925 B, 272.  
 Knipe, H. R. 1912 A, 90, fig.  
 Lankester, E. R. 1905 A, 208, fig. 150.  
 Lebedinsky, N. G. 1913 A, 768.  
 1913 B, 197.  
 Lee, Stone, Gale 1915 A, 52, pl. x.  
 Loomis, F. B. 1901 A, 195.  
 Lucas, F. A. 1901 J, 106, fig. 24.  
 1902 B, 170.  
 1902 C, 643, pl. iv.  
 1902 E, 469.  
 1907 A, 47.  
 1910 A, 73.  
 Lull, R. S. 1907 B, 299.  
 1910 A, 3.  
 1910 B, 1.  
 1910 C, 361.  
 1911 B, 176.  
 1912 C, 672.  
 1914 D, 358.  
 1915 C, 325, 332.  
 1915 F, 837, 905, pl. xxxii, fig. 5.  
 1917 A, 473, 474.  
 1917 B, 222, 297, 524.  
 1918 C, 130.  
 1921 A, 115.  
 1924 A, 242, 263, 265, 275, fig. 30.  
 Lydekker, R. 1885 G, 29.  
 1903 D, 76.  
 1910 D, 459.  
 1911 A, 682.  
 1912 C, 122.  
 1915 B, 276.  
 Matthew, W. D. 1915 C, 31, 102.  
 Moodie, R. L. 1911 F, 262.  
 1915 I, 156.  
 Nopcsa, F. 1901 A, 269.  
 1902 B, 96.  
 1902 C, 168.  
 1905 B, 244.  
 1905 C, 292.  
 1911 A, 109, 145, 153.  
 1911 B.  
 1912 A, 481.  
 1915 B, 11.  
 1917 A, 209.  
 1917 B, 340, 344, fig. 11.  
 1918 B, 236, 239.

- Nopcsa, F. 1918 C, 326.  
 1923 A, 195, 198.  
 1923 D, 106.  
 1923 H, 103, 197.  
 1925 A, 19.  
 1925 B, 11.  
 1928 A, 185.
- Osborn, H. F. 1904 I, 35.  
 1917 B, 224.
- Peck, F. B. 1904 A, 32.
- Petronievics, B. 1919 A, 409, 413.
- Reed, W. H. 1909 A, 199.
- Reynolds, S. H. 1897 A, 272, 280.
- Romer, A. S. 1927 C, 226, figs. 3, 8, 12, 20.
- Schuchert, C. 1910 A, 582.  
 1918 B, 252, 254.
- Schuchert and Levene 1927 A, 322, fig.
- Seeley, H. G. 1887 E, 210.  
 1888 G, 168 fig.  
 1892 D, 81.
- Seitz, A. L. L. 1907 A, 320.
- Shufeldt, R. W. 1916 B, 40.
- Simpson, G. G. 1926 H, 205, 206, 208, 209.  
 1926 I, 454.
- Stenman, G. 1907 A, 451.  
 1909 A, 74, fig. 8.
- Sternberg, C. M. 1921 B, 97.  
 1927 B, 137.
- Sternfeld, R. 1909 A, 382.
- Tornier, G. 1913 B, 373.
- Whitnal, H. O. 1925 A, 17.
- Wieland, G. R. 1911 A, 112, 118.  
 1912 A, 287.  
 1912 B, 300.
- Williston, S. W. 1905 B, 346.  
 1909 A, 397.  
 1925 A, 149, 150, 175, figs. 122, 141.
- Woodward, H. 1904 A, 147.  
 1904 B, 147.
- Zittel and Broili 1911 A, 293.  
 1923 A, 361.
- Zittel, Eastman, etc. 1902 A, 230 (Hypsirhophus); 241 (Stegosaurus).
- Stegosaurus affinis Marsh.**  
 Hay, O. P. 1902 A, 496.  
 Gilmore, C. W. 1914 A, 101, 102, 104.  
 Hennig, E. 1924 A, 119.  
 Mook, C. C. 1916 A, 144.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado or Wyoming.
- Stegosaurus armatus Marsh.**  
 Hay, O. P. 1902 A, 496.  
 Dollo, L. 1889 H, 678.  
 Gilmore, C. W. 1914 A, 103, pl. x.  
 Hennig, E. 1915 B, 223 (Syn. of *S. ungulatus*).  
 1924 A, *passim*.  
 Mook, C. C. 1916 A, 143.  
 Nopcsa, F. 1911 B, 6, pls. vi, vii (Omosaurus).  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.
- Stegosaurus? discursus (Cope).**  
 Hay, O. P. 1902 A, 496.  
 Gilmore, C. W. 1914 A, 102, 104.
- Hennig, E. 1924 A, 119, 121 (Hypsirhophus discursus).  
 Mook, C. C. 1916 A, 141 (Hypsirhophus); 144 (Stegosaurus).  
 Osborn and Mook 1919 A, 390 (Hypsirhophus).  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado.  
 A species of doubtful position.
- Stegosaurus duplex Marsh.**  
 Hay, O. P. 1902 A, 496.  
 Gilmore, C. W. 1914 A, 55, 102, 103, 104.  
 Hennig, E. 1924 A, 119, 120.  
 Lull, R. S. 1910 C, 366.  
 Mook, C. C. 1916 A, 145.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado or Wyoming.
- Stegosaurus longispinus Gilmore.**  
 Gilmore, C. W. 1914 A, 83, 95, 111, pl. xxv, fig. 4; text-figs. 60, 66-68.  
 1914 A, 81, fig. 45 (*S. altispinus, errore*).  
 Hennig, E. 1924 A, 127, folder, fig. 3.  
 Lull, R. S. 1919 B, 237.  
 Mook, C. C. 1916 A, 145.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.
- Stegosaurus seeleyanus (Cope).**  
 Hay, O. P. 1902 A, 496.  
 Gilmore, C. W. 1914 A, 102, 104.  
 Hennig, E. 1924 A, 119, 121 (Hypsirhophus).  
 Mook, C. C. 1916 A, 144.  
 Locality and level uncertain; probably from Upper Jurassic or Lower Cretaceous (Morrison); Colorado.
- Stegosaurus stenops Marsh.**  
 Hay, O. P. 1902 A, 496.  
 Abel, O. 1919 A, 643, fig. 509.  
 1922 C, 428, figs. 357, 358.  
 1925 A, 199, figs. 138, 146.  
 Brown, B. 1919 A, 409, fig. ("animal").  
 Eisler, P. 1895 A, 52.  
 Gilmore, C. W. 1912 C, 972.  
 1914 A, 1, 4, 104, pls. ii-ix, xi-xvii, xix, fig. 1; pl. xx, figs. 1, 2; pl. xxi, fig. 3; pls. xxii, xxiii, figs. 4-6; pls. xxiv, xxv, figs. 1, 2; pl. xxxiv; text-figs. 3-7, 12, 13, 16, 23, 31, 40, 42, 45, 58.  
 1915 B, 355, pl. lii; text-fig. 1.  
 1918 B, 59, 62.  
 1918 C, 383, pls. lvii-lxiii.  
 1920 C, 276, pl. iv.  
 1921 F, 66 ("Stegosaurus").  
 Hennig, E. 1915 B, 223, 225.  
 1924 A, *passim*, folder, fig. 1.  
 Huene, F. 1914 C, pl. x, fig. 1.  
 Janensch, W. 1925 B, *passim*.  
 Lull, R. S. 1910 B, 208.  
 1919 B, 237.  
 1921 A, 117.  
 Lydekker, R. 1915 B, 276 (*S. stereops*).  
 Marsh, O. C. 1837 C, 416, pl. ix (Diracodon laticeps).  
 1888 D, 11, pl. iii (D. laticeps).  
 1896 C, 193, pl. ii (D. laticeps).  
 Merrill, G. P. 1907 A, 77.

- Mook, C. C. 1916 A, 144.  
 Pompeckj, J. F. 1920 A, 119.  
 Shufeldt, R. W. 1916 B, 40, figs. 1, 2.  
 Woodward, A. S. 1898 A, 212, fig. 131.  
 Zittel and Broili 1911 A, 293, fig. 442.  
 1923 A, 360, fig. 472.  
 Zittel, Eastman, etc. 1902 A, 242, fig. 346.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado, Wyoming.

### ***Stegosaurus sulcatus* Marsh.**

- Hay, O. P. 1902 A, 496.  
 Abel, O. 1919 A, 644, fig. 510.  
 1922 C, 431, figs. 359, 360.  
 Gilmore, C. W. 1909 A, 193.  
 1914 A, 4, 69, 73, 109, pls. xviii, xx, figs. 3, 4; pl. xxiii, figs. 1-3; pl. xxv, fig. 3; text-figs. 38, 39, 41, 57, 65.  
 Hennig, E. 1924 A, 119, 120.  
 Lull, R. S. 1910 B, 209, fig. 11.  
 Merrill, G. P. 1907 A, 77.  
 Mook, C. C. 1916 A, 145.  
 Upper Jurassic or Lower Cretaceous (Morrison); Colorado?, Wyoming.

### ***Stegosaurus unguatus* Marsh.**

- Hay, O. P. 1902 A, 496.  
 Abel, O. 1909 F, 462, fig. 4.  
 1912 F, 297, fig. 219.  
 1919 A, 642, fig. 508.  
 1920 A, 394, fig. 611.  
 1922 C, 381, 427, fig. 356.  
 1925 A, 193, figs. 133-137, 140-145, 149, 150.  
 Ballou, W. H. 1897 A, 21, 22, fig.  
 Beard, J. C. 1901 A, 185, fig. 1.  
 Bigot, A. 1897 A, 465, figs. 5, 9.  
 Boule, M. 1902 B, 907, figs. 9, 15.  
 Gadow, H. 1901 B, 426, fig. 100.  
 Gaudry, A. 1896 A, 145, fig. 118.

### **DIRACODON Marsh. Type *D. laticeps* Marsh.**

- Hay, O. P. 1902 A, 496.  
 Hennig, E. 1924 A, 120, 122, 124, 129.  
 Hoernes, R. 1886 A, 615.  
 Huene, F. 1909 B, 17.  
 Lull, R. S. 1911 C, 208.  
 1915 C, 333.  
 Marsh, O. C. 1888 B, 93 (Diracodon).  
 Nopcsa, F. 1901 A, 267.  
 1911 A, 115, 146.  
 1917 A, 209.  
 1928 A, 185.  
 Zittel and Broili 1911 A, 294.  
 Zittel, Eastman, etc. 1902 A, 243.  
 Not improbably a synonym of *Stegosaurus*.

- Genitz and Deichmüller 1882 B, 14, 15.  
 Gilmore, C. W. 1914 A, 4, 142, pls. xxxii-xxxv, xxxvi: text-figs. 11, 15, 17, 21, 22, 24-25, 30, 35, 43-47, 51, 56, 59.  
 Heilmann, G. 1913 B, 35, figs. 77, 79.  
 Hennig, E. 1915 B, 223-225.  
 1924 A, *passim*, folder, fig. 2.  
 Hutchinson, H. N. 1910 A, 177, pl. xxvi; text-fig. 61.  
 Jaekel, O. 1911 A, 161, fig. 178.  
 Janensch, W. 1925 B, 267.  
 Lönnberg, E. 1910 A, 18.  
 Lull, R. S. 1910 B, 203, figs. 1-5, 7-10.  
 1910 C, 361, pl. ii; text-figs. 1-10.  
 1911 C, 209.  
 1912 C, 672, figs. 1-4.  
 1917 A, 475.  
 1917 B, 524, pl. xii; text-figs. 164, 165.  
 1919 B, 237.  
 1921 A, 117.  
 Mook, C. C. 1916 A, 144.  
 Nopcsa, F. 1902 B, 97.  
 1911 A, 113, 149, 153.  
 1911 B, 14, 18.  
 Parks, W. A. 1926 A, 10.  
 Peck, F. B. 1904 A, 33.  
 Stromer, E. 1912 A, 121, fig. 118.  
 Tornier, G. 1913 B, 373.  
 Zittel and Broili 1911 A, 293, figs. 443-444.  
 1923 A, 361, figs. 473, 474.  
 Zittel, Eastman, etc. 1902 A, 242, figs. 347, 348.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming, Colorado.
- ### ***Stegosaurus* sp. indet.**
- Mook, C. C. 1916 A, 96. Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.  
 Simpson, G. G. 1926 E, 3. Upper Jurassic; Wyoming.

### ***Diracodon laticeps* Marsh.**

- Hay, O. P. 1902 A, 496 (in part, *Diracodon, errore*).  
 Gilmore, C. W. 1909 A, 198, pl. vi.  
 1912 B, pl. lv.  
 Hennig, E. 1924 A, 120.  
 Merrill, G. P. 1907 A, 70.  
 Mook, C. C. 1916 A, 145.  
 Jurassic (Morrison); Wyoming.

### **NODOSAURIDÆ Marsh.**

- Hay, O. P. 1902 A, 497.  
 Abel, O. 1919 A, 653 (Nodosaurinæ, part of Ceratopsidæ).  
 1922 C, 339 (Nodosaurinæ).  
 Gilmore, C. W. 1921 E, 589.  
 Hatcher, J. B. 1907 A, 156.  
 Hennig, E. 1924 A, 123, 127, 129.  
 Huene, F. 1909 B, 17 (Omosauridæ).  
 Koken, E. 1900 A, 464 (Notosauridæ).  
 Lull, R. S. 1921 A, 123.  
 1924 A, 241, 243, 265.  
 Matthew, W. D. 1921 D, 211.  
 Nopcsa, F. 1912 A, 483.  
 1915 B, 13.  
 1917 A, 211.  
 1923 A, 199 (Nodosaurinæ, part of Acanthopholidæ).  
 1928 A, 185.

Romer, A. S. 1927 C, 226 (*Ankylosauridae*).  
 Wieland, G. R. 1911 A, 112, 118, 119, figs. 4-7.  
 1912 A, 287.

Wieland, G. R. 1912 B, 299.  
 Zittel and Broili 1923 A, 362.

**NODOSAURUS** Marsh. Type *N. textilis* Marsh.

Hay, O. P. 1902 A, 497.  
 Depéret, C. 1896 A, 185.  
 1912 A, 705.  
 Gilmore, C. W. 1914 A, 118.  
 1923 B, 49.  
 Hatcher, J. B. 1907 A, 155.  
 Hennig, E. 1924 A, 126.  
 Huene, F. 1909 B, 17.  
 Lull, R. S. 1910 A, 18.  
 1921 A, 98.  
 1924 A, 243.  
 Lydekker, R. 1912 C, 123.  
 Nopcsa, F. 1901 A, 268.  
 1902 B, 96, 98.  
 1923 D, 106.  
 1923 H, 197.  
 1924 B, 85.  
 1928 A, 185.  
 Osborn, H. F. 1902 A, 674.  
 Pompeckj, J. F. 1921 A, 8.  
 Romer, A. S. 1927 C, 226.

Wieland, G. R. 1912 A, 287.  
 1912 B, 300.  
 Zittel and Broili 1923 A, 362.

**Nodosaurus textilis** Marsh.

Hay, O. P. 1902 A, 497.  
 Bowen, C. F. 1915 A, 134, 148, 149.  
 Gilmore, C. W. 1920 A, 67.  
 Hatcher, J. B. 1907 A, 155, fig. 120.  
 Hennig, E. 1924 A, 123.  
 Lull, R. S. 1912 A, 211.  
 1921 A, 98, pls. i-iv; text-figs. 1-7.  
 Moodie, R. L. 1911 F, 263.  
 Osborn, H. F. 1902 I, 14.  
 Whiteaves, J. F. 1901 A, 188.  
 Upper Cretaceous (Benton); Wyoming.  
**Nodosaurus** sp. indet.  
 Whiteaves, J. F. 1901 A, 184. Upper Cretaceous (Belly River?); Alberta?.

**PRICONODON** Marsh. Type *P. crassus* Marsh.

Hay, O. P. 1902 A, 496.  
 Clark, Bibbins, Berry 1911 A, 67.  
 Gilmore, C. W. 1921 E, 588.  
 Hennig, E. 1924 A, 123, 129.  
 Huene, F. 1909 B, 17.  
 Lull, R. S. 1910 A, 29.  
 1911 C, 208.  
 Nopcsa, F. 1901 A, 219.  
 1902 B, 95.  
 Zittel, Eastman, etc. 1902 A, 243.

**Priconodon crassus** Marsh.

Hay, O. P. 1902 A, 496.  
 Clark, Bibbins and Berry 1911 A, 89.  
 Gilmore, C. W. 1921 E, 588, 591, pl. cx, fig. 3.  
 Hennig, E. 1924 A, 122, 153.  
 Lull, R. S. 1911 B, 176.  
 1911 C, 207, pl. xx, figs. 5, 6.  
 Merrill, G. P. 1907 A, 76.  
 Schuchert, C. 1910 A, 586.  
 Simpson, G. G. 1926 H, 207.  
 Lower Cretaceous (Arundel); Maryland.

**DIOPLOSAURUS** Parks. Type *D. acutosquameus* Parks.

Parks, W. A. 1924 C, 5.  
 Nopcsa, F. 1928 A, 185.

**Dioplosaurus acutosquameus** Parks.

Parks, W. A. 1924 C, 5-25, pls. i-iv.  
 Upper Cretaceous (Belly River); Alberta.

**PALEOSCINCUS** Leidy. Type *P. costatus* Leidy.

Hay, O. P. 1902 A, 497.  
 Abel, O. 1924 A, 712, fig. 5.  
 Brown, B. 1914 E, 374.  
 Cope, E. D. 1880 U, 147.  
 Gilmore, C. W. 1923 B, 48.  
 1924 G, 8.  
 Hatcher, J. B. 1905 B, 102.  
 Hennig, E. 1915 B, 239.  
 1924 A, 123, 126, 128, 153.  
 Huene, F. 1909 B, 17 (= *Stegopelta*).  
 1909 E, 442.  
 Lambe, L. M. 1912 A, 9.  
 1920 B, 42.  
 Lull, R. S. 1910 A, 18.  
 1924 A, 243, 273.  
 Matthew, W. D. 1922 C, 333, figs. 2, 3, 5, 6.  
 Moodie, R. L. 1911 F, 261.  
 Mook, C. C. 1916 A, 155.  
 Nopcsa, F. 1901 A, 268.  
 1902 B, 101.

Nopcsa, F. 1917 A, 210, 211.  
 1923 H, 105, 197.  
 1928 A, 185.  
 Osborn, H. F. 1902 I, 17.  
 Peale, A. C. 1912 A, 748.  
 Simpson, G. G. 1926 H, 207.  
 Stanton and Hatcher 1905 A, 38.  
 Sternberg, C. H. 1903 C, 871.  
 Sternberg, C. M. 1928 A, 94.  
 Wieland, G. R. 1911 A, 117.  
 Williston, S. W. 1902 K, 953.  
 1905 B, 346.  
 1905 C, 504.  
 1909 E, 194.

**Palaescincus asper** Lambe.

Lambe, L. M. 1902 A; 54, pl. xvii, fig. 5.  
 Bowen, C. F. 1915 A, 134, 148-150.  
 Gilmore, C. W. 1923 B, 48.  
 Hatcher, J. B. 1903 D, 372.

- Hatcher, J. B. 1905 B, 88.  
 Hennig, E. 1924 A, 125, 153.  
 Lambe, L. M. 1904 C, 23, 37, 48.  
 1920 B, 42.  
 Nopsa, F. 1918 C, 326, fig. 11 (*P. rugosus*).  
 Osborn, H. F. 1902 I, 13, 17.  
 Williston, S. W. 1902 K, 953.  
 Upper Cretaceous (Belly River); Alberta:  
 (Lance); Wyoming.

***Palaeoscincus costatus* Leidy.**

- Hay, O. P. 1902 A, 497.  
 Bowen, C. F. 1915 A, 134, 148, 150.  
 Brown, B. 1908 B, 191, fig. 6.  
 1914 E, 373.  
 Gilmore, C. W. 1920 A, 67.  
 1921 E, 588.  
 1923 B, 48.  
 1927 G, 1.  
 Hatcher, J. B. 1905 B, 82, 88.  
 Hay, O. P. 1910 B, 299.  
 Hennig, E. 1924 A, 115, 155.  
 Lambe, L. M. 1902 A, 53.  
 1904 C, 23, 37, 48.  
 Lull, R. S. 1911 B, 176.  
 1911 C, 208.  
 Nopsa, F. 1902 B, 95.  
 1918 C, 326.  
 Osborn, H. F. 1902 H, 674.  
 1902 I, 13, 17.  
 Parks, W. A. 1924 C, 5.  
 Peale, A. C. 1912 A, 748, 754.

- Stanton and Hatcher 1905 A, 56.  
 Sternberg, C. H. 1914 A, 134.  
 Sternberg, C. M. 1928 A, 192.  
 Upper Cretaceous (Judith River); Montana:  
 (Belly River); Alberta: (Lance); Wyoming.

***Palaeoscincus latus* Marsh.**

- Hay, O. P. 1902 A, 497.  
 Bowen, C. F. 1915 A, 134.  
 Cannon, G. C. 1906 B, 195 (This species?).  
 Hennig, E. 1924 A, 124, 155.  
 Marsh, O. C. 1896 C, 225, pl. lxxv.  
 Nopsa, F. 1918 C, 326, fig. 7.  
 Osborn, H. F. 1902 I, 13, 17.  
 Upper Cretaceous (Lance); Wyoming, Colorado?

***Palaeoscincus magoder* Henning.**

- Henning, C. L. 1919 A, 771 (nom. nud.).

***Palaeoscincus* sp. indet.**

- Bowen, C. F. 1915 A, 134. Upper Cretaceous  
 (Lance); Wyoming, Montana.  
 Brown, B. 1907 A, 842. Upper Cretaceous (Hell  
 Creek); Montana: (Lance); Wyoming.  
 Marsh, O. C. 1896 C, 225. Upper Cretaceous  
 (Lance); Wyoming.  
 Matthew, W. D. 1916 A, 484. Cretaceous;  
 Alberta.  
 Williston, S. W. 1902 K, 952. Upper Cretaceous  
 (Lance); Wyoming.

**PANOPLOSAURUS Lambe. Type *P. mirus* Lambe.**

- Lambe, L. M. 1920 B, 39.  
 Nopsa, F. 1928 A, 185.  
 Sternberg, C. M. 1921 B, 93.

***Panoplosaurus mirus* Lambe.**

- Lambe, L. M. 1920 B, 40, pls. i-xii.  
 Gilmore, C. W. 1923 B, 48.  
 Parks, W. A. 1924 C, 5, 7.  
 Sternberg, C. M. 1921 B, 93, pls. i, ii.  
 1928 A, 93.  
 Upper Cretaceous (Belly River); Alberta.

**EDMONTONIA Sternberg. Type *E. longiceps* Sternberg.**

- Sternberg, C. M. 1928 A, 93.

***Edmontonia longiceps* Sternberg.**

- Sternberg, C. M. 1928 A, 93, pls. i-iii.  
 Upper Cretaceous (Edmonton); Alberta.

**ANKYLOSAURIDÆ Brown.**

- Brown, B. 1908 B, 187.  
 1914 E, 377.  
 Arlitt, T. 1909 A, 263 ("ankylosauriden").  
 Berkey, C. P. 1923 A, 4 ("ankylosaurs").  
 Gilmore, C. W. 1916 D, 287.  
 1920 A, 65.  
 1921 E, 589.  
 Hennig, E. 1912 B, 100 ("ankylosauriden").  
 1924 A, 126.  
 Huene, F. 1908 B, 408.  
 1909 B, 17 (Ankylosauridæ).  
 1909 E, 441 (Ankylosauridæ).  
 1914 G, pl. vii (Ankylosauria).  
 Jaekel, O. 1914 A, 197 ("ankylosauriden").  
 Lambe, L. M. 1918 A, 32.

- Lull, R. S. 1918 C, 132 ("ankylosaurs").  
 1921 A, 124.  
 Lydekker, R. 1909 C, 461 (Ankylosauridæ).  
 Matthew, W. D. 1914 B, 387.  
 1915 C, 32.  
 Nopsa, F. 1918 C, 327, 328.  
 1922 A, 115 (Ankylosauridæ).  
 1923 A, 199 (Ankylosaurine, part of Acan-  
 thopholidæ).  
 1923 H, 126, 197 (Ankylosaurinæ).  
 1928 A, 185 (Nodosauridæ).  
 Osborn, H. F. 1923 D, 3 (Ankylosauria).  
 Sternberg, C. M. 1921 A, 63.  
 Wieland, G. R. 1909 B, 252.  
 1911 A, 118.

ANKYLOSAURUS Brown. Type *A. magniventris* Brown.

- Brown, B. 1908 B, 188.  
 Abel, O. 1909 F, 461.  
     1912 F, 564.  
     1916 A, 470, figs. 1, 3.  
     1919 A, 653.  
     1920 A, 387, fig. 603.  
     1922 C, 339, 358.  
     1924 A, 716.  
 Anonymous 1910 B, 8.  
 Brown, B. 1908 C, 54.  
     1914 E, 377.  
 Campbell, M. R. 1915 A, 74.  
 Gilmore, C. W. 1914 A, 118.  
     1915 C, 59, pl. xi.  
     1915 D, 411, 488.  
     1923 B, 49.  
 Huene, F. 1909 B, 17 (*Ancyllosaurus*).  
     1909 E, 441 (*Ancyllosaurus*).  
 Lambe, L. M. 1918 A, 32.  
     1920 B, 42.  
 Lull, R. S. 1910 A, 19.  
     1910 B, 205, fig. 6.  
     1917 B, 526.  
     1921 A, 99, 124.  
     1924 A, 243, 266.  
 Lydekker, R. 1911 A, 181 (*Ancyllosaurus*).  
 Matthew, W. D. 1910 F, 8.  
     1912 D, 219.  
     1915 C, 103, figs. 35, 36.  
     1920 D, 542.  
 Moodie, R. L. 1928 C, 1.  
 Nopcsa, F. 1911 B, 14.  
     1915 B, 13.  
     1917 A, 210, 211.  
     1917 B, 340.  
     1918 C, 326.  
     1923 A, 195.  
     1923 H, 105, 197.  
 Osborn, H. F. 1917 B, 225.  
     1923 D, 3.  
     1924 B, 6.  
 Pompeckj, J. F. 1921 A, 7, 11.  
 Romer, A. S. 1927 C, 226, figs. 3-5, 8, 12.  
 Simpson, G. G. 1926 H, 209.
- Steinmann, G. 1909 A, 71.  
 Sternberg, C. M. 1921 B, 96.  
     1928 A, 101.  
 Wieland, G. R. 1911 A, 117, 122.  
     1912 A, 287.  
     1912 B, 300.  
 Williston, S. W. 1908 J, 630.  
     1909 E, 194.  
     1925 A, 150.  
 Woodward, A. S. 1910 C, 13.  
 Zittel and Broili 1911 A, 294 (Syn. of *Palæoscincus*).  
     1923 A, 362.
- Ankylosaurus magniventris** Brown, B.  
 Brown, B. 1908 B, 188, figs. 1-5, 9-20.  
 Abel, O. 1908 D (215), fig. 3.  
     1912 F, 562.  
 Bowen, C. F. 1915 A, 134.  
 Brown, B. 1911 B, 279, fig. ("Ankylosaurus").  
     1914 E, 358, 374.  
     1915 B, 157, fig. 48 ("Ankylosaurus").  
     1919 A, 413 ("Ankylosaurus").  
 Gilmore, C. W. 1920 A, 67.  
 Hay, O. P. 1910 B, 300.  
 Hennig, E. 1924 A, 126, 153.  
 Huene, F. 1909 E, 441 (*Ancyllosaurus*).  
 Lydekker, R. 1909 C, 461.  
 Matthew, W. D. 1915 C, 103, figs. 35, 36 ("Ankylosaurus").  
     1920 D, 539, fig.  
 Moodie, R. L. 1911 F, 270.  
     1928 C, 1, pls. iii, v.  
 Parks, W. A. 1924 C, 6, 7.  
 Steinmann, G. 1909 A, 71, figs. 5, 7.  
 Sternberg, C. H. 1909 B, 257 (*Anchyllosaurus*).  
     1917 A, 94 (*Anchyllosaurus*).  
 Sternberg, C. M. 1921 B, 95.  
     1926 A, 104.  
     Upper Cretaceous (Hell Creek); Montana.
- Ankylosaurus** sp. indet.  
 Gilmore, C. W. 1926 J, 28 (This genus?).  
     Upper Cretaceous (Lance); Wyoming.

EUPOLOCEPHALUS Lambe. Type *Stereocephalus tutus* Lambe.

- Unless otherwise indicated the authors, as quoted, use the name *Stereocephalus*.  
 Lambe, L. M. 1910 A, 151 (*Euplocephalus*; to replace *Stereocephalus* preoccupied).  
 Brown, B. 1908 B, 187, 190.  
 Gilmore, C. W. 1917 A, 3 (*Europlocephalus*).  
 Hatcher, J. B. 1905 B, 102.  
 Henning, C. L. 1914 A, 771.  
 Huene, F. 1909 B, 17.  
 Lambe, L. M. 1902 A, 55.  
     1903 A, 60.  
     1903 C, 468.  
     1918 A, 32.  
     1920 B, 40 (*Euplocephalus*).  
 Lull, R. S. 1911 A, 339 (*Euplocephalus*).  
     1921 A, 125.  
 Moodie, R. L. 1911 F, 261.  
 Nopcsa, F. 1903 D, 266.  
     1905 B, 244.  
     1917 A, 211 (*Stereocephalus*; a syn. of *Ankylosaurus*).
- Nopcsa, F. 1913 C, 326.  
     1923 H, 197 (*Europlocephalus*).  
     1928 A, 185 (*Erroplocephalus*).  
 Osborn, H. F. 1902 I, 9.  
 Peale, A. C. 1912 A, 748.  
 Steinmann, G. 1909 A, 73.  
 Sternberg, C. H. 1917 A, 96.  
 Sternberg, C. M. 1928 A, 94.  
 Wieland, G. R. 1911 A, 116, 117.
- Euplocephalus tutus** Lambe.  
 Unless otherwise indicated, the authors, as cited, use the generic name *Stereocephalus*.  
 Lambe, L. M. 1902 A, 55, pl. xi; pl. xii, figs. 1-5; pl. xxi, figs. 6-8 (*Euplocephalus*).  
 Bowen, C. F. 1915 A, 134.  
 Brown, B. 1908 B, 191, 197, fig. 7.  
 Gilmore, C. W. 1917 A, 43 (*Europlocephalus*).  
     1920 A, 67.  
     1921 E, 589.  
     1923 B, 47, 48, pls. ii, iii, iv, fig. 1.  
 Hatcher, J. B. 1905 B, 89.

- Hatcher, J. B. 1907 A, 69.  
 Hay, O. P. 1910 B, 300.  
 Hennig, E. 1924 A, 125, 153.  
 Lambe, L. M. 1904 C, 23, 37, 48.  
     1910 A, 151 (To *Euoplocephalus*).  
     1914 B, 132.  
     1914 F, 298.  
     1915 B, 117.  
     1920 B, 39 (*Euoplocephalus*).  
 Lull, R. S. 1911 A, 339.  
 Osborn, H. F. 1902 H, 674.

- Osborn, H. F. 1902 I, 14, 17.  
 Parks, W. A. 1924 C, 7.  
 Sternberg, C. H. 1915 A, 133 ("*Euoplocephalus*").  
     1918 A, 212.  
 Sternberg, C. M. 1926 A, 104.  
     1928 A, 101.  
     Upper Cretaceous (Belly River); Alberta.  
***Euoplocephalus* sp. indet.**  
 Gilmore, C. W. 1917 B, 4, 43, fig. 57. Upper  
 Cretaceous (Two Medicine); Montana.

### **HIEROSAURUS** Wieland. Type *H. sternbergii* Wieland.

- Wieland, G. R. 1909 B, 250.  
 Abel, O. 1922 C, 339.  
 Gilmore, C. W. 1914 A, 118, pl. xxxi, fig. 2  
 (This genus?).  
 Hennig, E. 1924 A, 126.  
 Lull, R. S. 1921 A, 122.  
     1924 A, chart.  
 Nopcsa, F. 1915 B, 11.  
     1917 A, 211.  
     1923 D, 106.  
     1928 A, 185.  
 Wieland, G. R. 1911 A, 112, 113.  
     1912 A, 288.

- Wieland, G. R. 1912 B, 300.  
     1925 A, 603.  
 Zittel and Broili 1923 A, 362.

### **Hierosaurus sternbergii** Wieland.

- Wieland, G. R. 1909 B, 250, figs. 1-7.  
 Gilmore, C. W. 1920 A, 67.  
 Hennig, E. 1924 A, 126 (*H. sternbergii*).  
 Moodie, R. L. 1911 F, 271.  
 Sternberg, C. H. 1909 B, 257 ("*armored dinosaur*").  
 Wieland, G. R. 1911 A, 114, 116, figs. 1-3.  
     Upper Cretaceous (Niobrara); Kansas.

### **TYLOSTEUS** Leidy. Type *P. ornatus* Leidy.

- Hay, O. P. 1902 A, 477.  
 Camp, L. C. 1923 A, 303.  
 Williston, S. W. 1925 B, 274.  
     A possible dinosaur of undetermined position.

### **Tylosteus ornatus** Leidy.

- Hay, O. P. 1902 A, 477.  
 Gilmore, C. W. 1927 G, 1, 6.  
     Cretaceous?; Montana (Head of Missouri  
 River).

## Subclass MONOTRETA, new name.

### *Superorder* **SQUAMATA** Oppel.

- Hay, O. P. 1902 A, 463.  
 Abel, O. 1919 A, 656 (*Lepidosauria*).  
     1920 A, 397 (*Lepidosauria*).  
 Arlét, T. 1907 D, 662 (*Lepidosauria*).  
 Bonaparte, C. L. 1833 B, 1184.  
 Boulenger, G. A. 1891 D, 113, 117.  
     1893 B, 206.  
     1904 C, 430.  
 Broili, F. 1904 D, 587 ("*lepidosaurier*").  
     1926 C, 33.  
 Broom, R. 1913 C, 508.  
     1924 B, 40, 65.  
 Case, E. C. 1905 C, 10.  
 Cope, E. D. 1891 N, 35, 45.  
 Day, H. 1915 A, 428.  
 Dollo, L. 1903 B, 138 ("*lépidosauriens*").  
 Fraas, E. 1905 B, 372.  
 Fuchs, H. 1911 B.  
 Fürbringer, M. 1904 A, 581.  
 Gervais, P. 1859 A, 454 ("*sauriens*").  
 Gilmore, C. W. 1927 G, 11, 14.  
 Goodrich, E. S. 1916 A, 263.  
 Gray, J. E. 1837 C, 131.  
 Gregory, W. K. 1913 E, 39.  
 Haeckel, E. 1868 A, 441 (*Lepidosauria*).  
 Hayek, H. 1924 A, 138.  
 Hilzheimer, M. 1913 A, 513 ("*lepidosaurier*").  
 Howes and Swinnerton 1901 A, 56.  
 Huene, F. 1925 D, 233, 238.

- Huene, F. 1925 I, 249.  
     1926 I, 78, 81.  
     1927 E, 325.  
 Jaekel, O. 1910 C, 336.  
     1911 A, 152 (*Lyognathi*).  
 Kingsley, J. S. 1912 B, 93.  
     1925 A, 43.  
 Koken, E. 1898 A, 141.  
 Kornhuber, A. 1901 A, 150 (*Lepidosauria*).  
 Lull, R. S. 1917 B, 294.  
 Lydekker, R. 1912 C, 3, 4, 25, 27, 132.  
 Matthew, W. D. 1921 D, 211.  
 Moodie, R. L. 1908 D, 463.  
 Nitzsch, C. L. 1822 A, 82.  
 Nopcsa, F. 1922 A, 115, 116, 117 (*Lepidosauria*).  
     1923 E, 1048.  
     1923 H, 2, 5-7, 10, 58, 72, 74, 76 (*Lepido-*  
     *sauria*); 3, 8, 79, 85, 92, 94, 114, 124, 128,  
     162, 169 (*Squamata*); 7 (*Liognathi*).  
     1924 C, 206.  
     1925 A, 24 ("*squamaten*").  
     1926 A, 634.  
     1928 A, 174.  
 Osborn, H. F. 1903 H, 452, 454, 466, 504.  
     1904 H, 114.  
     1904 N, 308.  
     1905 C, 295.  
 Parker and Haswell 1897 A, 311.  
 Reynolds, S. H. 1897 A, 198, 272, 278, 280, 286.



- Sewertzoff, A. N. 1908 A.  
 Stejneger, L. 1907 C, 162.  
 Stejneger and Barbour 1917 A, 42.  
 Stromer, E. 1912 A, 74, 125.  
 Thyng, F. W. 1906 A, 58.  
 Versluys, J. 1912 B, 626, 687 (Lepidosauria).  
 1919 A, 27 (Lepidosauria).  
 Watson, D. M. S. 1921 B, 75 (Squamates).  
 Wegner, R. N. 1922 A, 480 (Lepidosauria).  
 Williston, S. W. 1902 G, 314.  
 1904 A, 43, 48.  
 1904 B, 176.  
 1911 B, 92.

- Williston, S. W. 1912 B, 661.  
 1914 A, 17, 45, 138.  
 1914 D, 892.  
 1917 C, 417 (Squamata); 414, 416, 420 (Parapsida, in part).  
 1925 A, *passim*.  
 1925 B, 212, 264 (Squamata); 212 (Parapsida, in part).  
 Woodward, H. 1904 B, 144.  
 Zittel and Broili 1911 A, 207 (Lepidosauria).  
 1923 A, 253 (Squamata); 221 (Parapsida, in part).  
 Zittel, Eastman, etc. 1902 A, 152.

### Order ARÆOSCELOMORPHI, new name.

- Abel, O. 1919 A, 654.  
 1920 A, 394.  
 Baur, G. 1887 C, 103 (Proganosauria).  
 1889 L, 311 (Proganosauria).  
 Brauns, D. A. 1890 A, 160 (Protorosauria).  
 Gadow, H. 1901 B, 290 (Protorosauri).  
 Huene, F. 1908 B, 378-386 (Protorosaurus).  
 Lydekker, R. 1888 B, 301 (Protorosauria).  
 Nicholson and Lydekker 1889 A, 1130 (Protorosauria).  
 Nopcsa, F. 1922 A, 115 (Aræoscelidæ); 116 ("aræoscelier").  
 1923 E, 1055 (Aræoscelia).  
 1923 H, 4, 7, 9, 10 (Protorosauria); 125, tab. (Protorosauria).  
 1924 C, 207 (Aræoscelia, Aræoscelioidea).

- Nopcsa, F. 1928 A, 173 (Aræoscelia); 174 (Aræoscelioidea).  
 Williston, S. W. 1913 A, 825 (Aræoscelidia).  
 1914 D, 400.  
 1916 B, 235 (= ? Protorosauria).  
 1925 A, 62, 66 (Protorosauria).  
 1925 B, 212, 259 (Protorosauria).  
 Zittel, K. A. 1890 A, 449 (Protorosauria); 592, 594 (Protorosauria).  
 Zittel and Broili 1911 A, 203 (Protorosauridæ).  
 1923 A, 251 (Protorosauria).  
 A group of very uncertain position. Referred by Williston with doubt to Squamata or to the Protorosauria. Citations to the literature of the Protorosauria are presented above.

### ARÆOSCELIDÆ Williston.

- Williston, S. W. 1910 F, 587.  
 Ardit, T. 1912 A, 656.  
 Case, E. C. 1915 A, 99, 122, 145 (Aræoscelidæ).  
 Eastman, C. R. 1912 C, 657.  
 Huene, F. 1913 B, 377.  
 1925 D, 237, 238.

- Nopcsa, F. 1924 C, 207.  
 1928 A, 174.  
 Williston, S. W. 1911 B, 71.  
 1911 C, 631.  
 1916 B, 236.  
 1925 B, 259.  
 Zittel and Broili 1923 A, 251.

### ARÆOSCELIS Williston. Type *A. gracilis* Williston.

- Williston, S. W. 1910 F, 587.  
 Abel, O. 1919 A, 654, 656.  
 1920 A, 394.  
 Broili, F. 1926 C, 33.  
 Broom, R. 1913 D, 511.  
 1924 B, 40, 63.  
 Camp, L. C. 1923 A, 310, 337, 347, etc., fig. 77.  
 Case, E. C. 1915 A, 102, 108, 145 (Aræoscelis).  
 Gilmore, C. W. 1927 G, 11, 12, 100, text-figs. 3, 4.  
 Goodrich, E. S. 1916 A, 269.  
 Gregory, W. K. 1920 A, 130, fig. 48.  
 Haughton, S. H. 1924 A, 9.  
 Huene, F. 1925 D, 234, 236, fig. 9.  
 1926 F, 469, 473.  
 1926 I, 80, 81, 86.  
 1927 E, 324.  
 Lydekker, R. 1915 C, 634.  
 Nopcsa, F. 1922 B, 166.  
 1923 E, 1047.  
 1923 H, 12, 68-71, 73, 74, 92, 169, pl. ii, fig. 7; pl. iv, fig. 6.  
 1924 C, 206, 207.  
 1928 A, 174.

- Osborn, H. F. 1917 B, 186, fig.  
 1918 D, 687.  
 Romer, A. S. 1922 B, *passim*, pl. xxxvii.  
 Sollas, W. J. 1916 A, 115.  
 Sushkin, P. P. 1927 A, 313.  
 Thorpe, M. R. 1926 A, 77.  
 Watson, D. M. S. 1913 D, 24 (Aræoscelis).  
 1914 B, 89, 94 (Acrosceles).  
 1914 G, 1005.  
 1917 C, 180.  
 Williston, S. W. 1911 B, 66.  
 1911 F, 662.  
 1913 A, 825.  
 1913 C, 743.  
 1914 A, 133, 138, fig. 62.  
 1914 D, 364, 400.  
 1914 E, 121.  
 1916 B, 236.  
 1917 C, 418, fig. 4.  
 1925 A, 11, 62, 113, 161, 172, 190, 192, 195, figs. 52, 53, 155.  
 1925 B, 259, figs. 179, 180.  
 Zittel and Broili 1923 A, 252, 253.

**Aræoscelis gracilis** Williston.

- Williston, S. W. 1910 F, 587, pl. i, figs. 4-19.  
 Abel, O. 1919 A, 654, fig. 517.  
 1920 A, 396, figs. 615, 616.  
 Case, E. C. 1915 A, 99, 146, text-fig. 31  
 (Aræoscelis).

- Gilmore, C. W. 1926 A, 9, 35, text-fig.  
 ("Aræoscelis").  
 Huene, F. 1912 B, 56, fig. 4.  
 Osborn, H. F. 1918 D, 686.  
 Williston, S. W. 1913 C, 743, fig. 1.  
 1914 D, 364, figs. 1-5, 7, 8.  
 Permian (Clear Fork); Texas.

## Order THALATTOSAURUMORPHI, new name.

Unless otherwise indicated, the authors, as cited, employ for this order the name *Thalattosauria*.

- Abel, O. 1912 F, 123, 509.  
 1919 A, 656, 661.  
 Broom, R. 1922 A, 24, 25  
 1924 B, 48, 64, fig. 13.  
 Bryant, H. C. 1914 B, 155.  
 Huene, F. 1910 B, 45.  
 1912 B, 54 ("thalattosaurier").  
 Merriam, J. C. 1904 A, 420.  
 1904 C, 218.  
 1905 E, 248.  
 1905 F, 1-52.  
 1915 G, 97 ("thalattosaurs").  
 Nopcsa, F. 1922 A, 115, 116 ("thalattosaurer").  
 1923 H, 8, 9, 56, 57, 60, 123, tab.

- Nopcsa, F. 1928 A, 172 (Thalattosauroides).  
 Pompeckj, J. F. 1910 A, 132.  
 1925 A, 6, 10 ("thalattosaurer").  
 Steinman, G. 1907 A, 442.  
 1908 A, 235, 237 ("thalattosaurier").  
 1912 A, 52 ("thalattosaurier").  
 1912 B, 718, 721.  
 Versluys, J. 1912 B, 625.  
 Watson, D. M. S. 1917 C, 178, 185.  
 Williston, S. W. 1909 A, 395 ("thalattosaurs").  
 1914 A, 17, 45, 171.  
 1917 C, 414.  
 1925 A, 113, 135, 169.  
 1925 B, 213.  
 Zittel and Broili 1911 A, 206.  
 1923 A, 251, 383.

## THALATTOSAURIDÆ Merriam.

- Merriam, J. C. 1904 A, 420.  
 Huene, F. 1925 I, 248 ("thalattosaurier").  
 Merriam, J. C. 1905 E, 248.  
 1905 F, 5.

- Nopcsa, F. 1923 H, 123.  
 1928 A, 172.  
 Tornier, G. 1913 B, 350.  
 Zittel and Broili 1911 A, 206.

THALATTOSAURUS J. C. Merriam. Type *T. alexandræ* Merriam.

- Merriam, J. C. 1904 A, 419.  
 Abel, O. 1919 A, 663.  
 1928 A, 369.  
 Broom, R. 1922 A, 24.  
 1925 A, 9.  
 Camp, C. L. 1923 A, 348.  
 Dollo, L. 1913 B, 622.  
 Heilmann, G. 1926 A, 11, fig. 5.  
 Huene, F. 1910 B, 46.  
 1912 B, 56.  
 1925 I, 247.  
 Merriam, J. C. 1905 E, 247.  
 1905 F, 7, 33.  
 1908 A, 217, 218.  
 Merriam and Camp 1916 A, 171.  
 Nopcsa, F. 1923 H, 57, 76.  
 1928 A, 172.  
 Williston, S. W. 1914 A, 172, figs. 82-84.  
 1925 A, 74, 113, figs. 61, 87.  
 Zittel and Broili 1923 A, 251.

**Thalattosaurus alexandræ** J. C. Merriam.

- Merriam, J. C. 1904 A, 419, fig. 1.  
 Abel, O. 1919 A, 662, fig. 519.  
 1920 A, 397, fig. 617.  
 1922 C, 306, fig. 258.  
 Broom, R. 1922 A, 23, fig. 4.

- Huene, F. 1910 B, 45, figs. 12, 14, 16.  
 1912 B, 55, figs. 1, 2.  
 1925 I, 247, text-figs. 25-27.  
 Merriam, J. C. 1905 E, 247.  
 1905 F, 7, 34, pls. i, ii; pl. iv, fig. 1; pl. v, figs. 1, 2; pl. vi; pl. vii, figs. 1-3, 8, 9; pl. viii, figs. 1-2, 4-6.  
 1908 C, 62, fig. 88.  
 Pompeckj, J. F. 1910 A, 133.  
 Zittel and Broili 1923 A, 251.  
 Triassic (Hosselkus limestone); California.

**Thalattosaurus perrini** J. C. Merriam.

- Merriam, J. C. 1905 F, 36, pl. iv, fig. 3; pl. v, fig. 3; pl. vii, fig. 6. (With *Scenodon* as alternative generic name).  
 Huene, F. 1922 D, 279 (Shastasaurus).  
 Merriam, J. C. 1908 A, 218.  
 Triassic (Hosselkus limestone); California.

**Thalattosaurus shastensis** J. C. Merriam.

- Merriam, J. C. 1905 F, 35, pl. iii; pl. iv, figs. 2a-2c; pl. vii, figs. 4, 7; pl. viii, figs. 3, 7, 8.  
 Huene, F. 1910 B, 46, fig. 13.  
 1912 B, 56, fig. 3.  
 Merriam, J. C. 1908 A, 219.  
 Triassic (Hosselkus limestone); California.

NECTOSAURUS Merriam. Type *N. halius* Merriam.

Merriam, J. C. 1905 F, 37.

Abel, O. 1919 A, 663.

Merriam, J. C. 1908 A, 217.

Moodie, R. L. 1909 C, 123.

Nopcsa, F. 1923 H, 57.

1928 A, 172.

Versluys, J. 1910 B, 230.

Watson, D. M. S. 1917 C, 178.

Zittel and Broili 1923 A, 251.

**Nectosaurus halius** Merriam.

Merriam, J. C. 1905 F, 37, pl. iv, figs. 4, 5; (pl. v, figs. 4-6. This species?); pl. vii, fig. 5.

1908 A, 217, pls. xvii, xviii.

Triassic (Hosselkus limestone); California.

## Order SAURIA Macartney.

Hay, O. P. 1902 A, 473.

Abel, O. 1909 F, 467 ("eidechsen").

1912 F, 272, 300, 414, 681.

1914 E, 341 ("eidechsen").

1919 A (Lacertilia).

1920 A, 397 ("eidechsen").

1921 A, 252 ("lacertilius").

Ahlborn, F. 1896 B, 7 ("eidechsen").

Allis, E. P. 1919 B, 84.

1923 A, 50.

Altmann, F. 1925 A, 94 ("saurier").

Ameghino, F. 1909 B, 108 ("lizards").

Anderson, R. J. 1912 D, 251.

Andreas, A. 1903 A, 150.

Anthony, R. 1912 A ("lacertiens").

1913 A, 248 ("saurier").

Arlt, T. 1907 C, 677 ("eidechsen").

1907 D, 661.

1912 A, 678.

Arthaber, G. 1910 A, 552 ("lacertilius").

Bardeleben, K. 1901 A ("saurier").

1903 A, 27 ("lacertilius").

1904 A, 109 ("saurier").

Batelli, A. 1880 A, 357 (Lacerta).

Baur, G. 1887 H, 43 ("lacertilius").

1890 F, 157 (Lacertilia).

1894 B, 350 (Lacertilia).

Beddard, F. E. 1904 B, 6.

Beecker, A. 1903 A, 565 ("saurier").

Beer, G. R. 1926 A, 312, fig. 82 (Lacertilia).

Bender, O. 1911 A, 173 ("lacertilius").

Beyer, H. 1907 B, 279, figs. 8, 9 ("saurier").

Bittner, F. 1912 A, 7 ("eidechsen").

Blainville, H. M. D. 1835 A, 243.

Blanchard, E. 1861 A, 375 ("sauriens").

Bluntschli, H. 1912 B, 333 ("saurier").

Boas, J. E. V. 1914 B, 559 ("saurier").

1914 C, 268 ("saurier").

Bogoljubsky, S. 1914 A, 620.

Bojanus, L. H. 1821 A, 1162 (Lacerta).

Bolk, L. 1913 A, 70 (Lacertilia).

1923 B, 374, fig. 4 (Lacerta).

Bonaparte, C. L. 1832 A, 313 (Lacertiformes, Saurii).

1833 B, 1184 (Saurii).

1840 A, 36 (Sauria).

Boulenger, G. A. 1885 B, 77 (Lacertilia).

1891 D, 114 (Lacertilia).

1893 B, 205.

1901 B, 402.

1917 C, 457 ("lacertiens").

1918 E, 517 ("lacertiens").

Brandt, J. F. 1865 A, 19 ("eidechsen").

Brauns, D. 1890 A, 147, 149, 160, 202 ("lacertiden," "lacertiliens").

Braus, H. 1906 A ("lacertilius").

Broili, F. 1908 E, 296 ("lacertilius").

1926 C ("lacertilius").

Brown, H. G. 1849 A, 812, seq. (Saurii).

Broom, R. 1896 A, 430.

1897 C, 279.

1901 A, 183.

1902 B, 168 ("lizard").

1902 D, 552 ("lizards").

1903 I, 546.

1903 J, 107.

1903 K, 1 ("lizards").

1906 F, 373 ("lizards").

1909 B, 162 ("lizard").

1911 A, 922 ("lizards").

1912 A, 627 ("lizards").

1913 C, 507 ("lizards").

1913 P, 227 ("lizards").

1922 A, 17, 18, 24, 25 (Lacertilia).

1924 B, 40 ("lizards"); 50, 64, fig. 13 (Lacertilia).

1925 A, 1-16 ("lizards").

1927 A, 74 ("lizards").

Camp, L. C. 1923 A, 289-481, figs. 1-112.

Camper, A. 1812 A, 218, pls. i-iii ("lizards").

Carlsson, A. 1896 A, 753 ("saurier").

Cartier, O. 1874 A, 192 ("eidechsen").

Carus, V. 1875 A, 432.

Cärus und Engelmann 1861 A, 1093-1095, 1562, 1674, 1800.

Case, E. C. 1910 C, 192.

1923 A, 517 (Lacertilia).

Chapman, H. C. 1894 A, 49 ("lizard").

Clason, E. 1871 A, 300-376 ("eidechsen").

Cleland, J. 1863 B, 309 ("lizards").

Cigny, A. 1899 A, 126 ("sauriens").

Cope, E. D. 1885 FF, 796 ("lizards").

1891 N, 45 (Lacertilia).

1892 CC, 223 (Lacertilia).

Cutler, I. E. 1924 A, 144 (Lacertilia).

Cuvier, G. 1803 A, 168 ("sauriens").

1805 A ("sauriens").

1815 A, 106 ("lizards").

1825 A, v, 2, 251-299, pls. xvi, xvii ("lizards").

Dablow, A. 1926 A, 95 ("saurier").

Dana, J. D. 1863 C, 343 ("lacertoids").

Dendy, A. 1907 A, 286.

Denker, A. 1901 A, 661 ("saurier").

Döderlein, L. 1900 A, 332 (Lacertilia).

Dollo, L. 1883 G, 579.

1884 E, 65 (Lacertilia).

1889 E, 162.

1893 D, 4 ("lacertiliens").

1903 B, 133 ("lacertiliens").

1904 B, 218.

1905 A, 126 ("lacertiliens").

- Dollo, L. 1923 A, 80 ("lacertiliens").  
 1924 A, 211 ("lacertiliens").
- Dombrowski, B. A. 1925 A, 72, fig. 5 (Lacertilia).
- Duerden, J. E. 1924 A, 561 ("lizards").
- Du Toit, P. J. 1911 A, 417 ("eidechsen").
- Edgeworth, F. H. 1907 A, 516 (Lacertilia).
- Eichwald, E. 1832 A, 869 ("eidechsen").
- Eimer, G. H. T. 1901 A, 248 ("saurier").
- Eisler, P. 1895 A, 13 ("saurier").
- Fejérváry, G. J. 1918 A (Lacertilia).
- Fischer, E. 1903 A, 386 ("eidechsen").
- Fleischmann, A. 1910 A, 682, 695 ("saurier").
- Fraas, E. 1905 B, 372.
- Frassetto, F. 1915 A ("sauri").
- Fuchs, H. 1906 A, 8 ("saurier").  
 1907 B, 413 ("saurier").  
 1907 C, 23 ("saurier").  
 1908 A, 359 ("lacertilier").  
 1908 B, 585 ("saurier").  
 1908 C, 174 ("saurier").  
 1909 B, 131, 149, 157 (Lacertilia).  
 1909 D, 26 ("lacertilier").  
 1910 A, 39 ("lacertilier").  
 1910 B, 252 ("lacertilier").  
 1911 A, 52 ("saurier").  
 1912 B, 82 ("saurier").  
 1912 D, 156 ("lacertilier").  
 1927 A, 309.
- Fürbringer, M. 1888 A, 1620 (Lacertilia).  
 1902 A, 203 ("lacertilier").  
 1902 B, 727, 732 ("lacertilier").  
 1904 A ("lacertilier").
- Gadow, H. 1901 A, 398.  
 1901 B, 490, 491 (Autosauri or Lacertilia).  
 1902 B, 359.  
 1905 A, 211.  
 1914 A, 508 ("lizards").
- Gaupp, E. 1891 B, 107 ("saurier").  
 1895 A, 58, seq. ("saurier").  
 1899 A, 1034, 1067 ("lacertilier").  
 1900 A, 439 ("saurier").  
 1902 A, 169 ("saurier").  
 1905 A, 277 ("saurier").  
 1905 C, 127 ("saurier").  
 1905 D, 1008 ("saurier").  
 1905 E, 159 ("saurier").  
 1906 B, 757 ("saurier").  
 1908 A, 182 ("saurier").  
 1908 B ("saurier").  
 1910 A, 531 ("saurier").  
 1910 B, 358 ("lacertilier").  
 1910 C, 385 ("saurier").  
 1910 D, 86 ("saurier").  
 1911 A, 423 ("saurier").  
 1911 B, 104 (Sauria).  
 1911 C, 444, 446 ("saurian").  
 1911 D, 635 ("saurier").  
 1911 E, 404 ("saurier").  
 1912 B, 239 ("saurier").  
 1913 A, 47 ("saurier").
- Gegenbaur, C. 1863 A, 466 ("saurier").  
 1864 C, 190 ("eidechsen").  
 1865 C, 562 ("lizards").  
 1866 A, 123 ("eidechsen").  
 1871 A, 201 ("eidechsen").  
 1880 A, 596 ("eidechsen").
- Gelderen, C. 1922 A, 223.
- Gelderen, C. 1923 A, 15.  
 1925 A, 495 ("saurier").
- Geoffroy St.-Hilaire, E. F. 1825 B, 127 ("lézards").  
 1832 A, 353 ("lézards").
- Gervais, P. 1852 A, 257 ("sauriens").  
 1853 B, 44 ("sauriens").  
 1859 A, 454 ("sauriens").
- Giebel, C. G. 1855 A, 91 (Lacertici).
- Gill, T. 1886 C, 801 ("lizards").  
 1907 A, 493 ("lizards").
- Gilmore, C. W. 1927 G, 4, 14.
- Göppert, E. 1905 A, 532 (Sauria).
- Goodrich, E. S. 1916 A, 264, 273 (Lacertilia).
- Goodsir, J. 1857 A (Sauria).
- Gottlieb, H. 1914 A, 195 ("saurier").
- Gray, J. E. 1825 A, 196 (Sauri).  
 1837 C, 132 ("saurians").
- Greene, J. R. 1861 A, 219, 226.
- Gregory, W. K. 1913 E, 3.
- Gregory and Adams 1915 A, 763 ("lizards").
- Gregory and Noble 1924 A, 437, fig. 5 (Lacertilia).
- Haeckel, E. 1868 A, 453, 455 (Lacertilia).  
 1873 A, 512, 531.
- Haller, G. 1924 A, 306, figs. 1, 3, 7 (Lacerta).
- Hanson, F. B. 1920 B, 332, 337 (Lacertilia).
- Harkness, R. 1852 A, 258 (Sauria).
- Hayek, H. 1924 A, 147 ("eidechsen").
- Heilmann, G. 1914 A, 60, 75 (Lacertilia).  
 1926 A, 205-206 (Lacertilia).
- Heilprin, A. 1887 A, 45, 315, 320 ("lizards").
- Henshaw, H. W. 1912 A, 318 ("lizards").
- Hoernes, R. 1886 A, 604 (Sauria).
- Hoffmann, O. 1905 A ("saurier").
- Holland, H. 1864 C, 368 ("sauriens").
- Hombres, J. H. 1924 A, 36 (Lacertilia).
- Howes, G. B. 1891 A, 156 (Lacertilia).  
 1893 C, 587 ("lizards").
- Howes and Swinnerton 1901 A, 17, 30, 54.
- Huene, F. 1908 F, 403 ("saurier").  
 1910 B, 5.  
 1910 D, 313 ("lacertilier").  
 1922 G, 451 ("eidechsen").
- Huxley, T. H. 1859 D, 401, 449.  
 1859 F, 137.  
 1862 A, liii.  
 1863 F, 476, 529, figs. 43, 44, 46, 47.  
 1867 D, 83.  
 1867 F, 173.  
 1869 H, 389.  
 1870 F, 529, 538, 547.  
 1875 E, 73, 83.  
 1876 F, 173.  
 1877 A, 50.  
 1879 A, 398.  
 1887 B, 655.
- Jaekel, O. 1905 B, 61.  
 1910 C, 336 (Lacerti).  
 1911 A, 154 (Lacerti).
- Janensch, W. 1906 A, 27 ("lacertilier").
- Johnson, A. 1883 A, 406 ("lizards").
- Juhn, M. 1923 A, 65-110 (Lacerta).
- Kerbert, C. 1876 A, 206 ("saurier").
- Kesteven, H. 1916 A, 305 (Lacertilia).  
 1922 A, 316 (Lacertilia).
- Kingsley, J. S. 1900 A, 214 ("lizards").  
 1901 A, 198 ("lizards").

- Kingsley, J. S. 1912 B, 93 ("lizards").  
 1925 A, 44, 54, 152, 154 (Lacertilia).  
 Klaauw, C. J. 1924 B, 581 (Lacertilia).  
 Klein, E. E. 1868 A ("saurier").  
 Köstlin, O. 1844 A ("saurier").  
 Koken, E. 1887 B, 33 ("lacertilier").  
 1893 A, 141 ("lacertilier").  
 Kornhuber, A. 1901 A, 151.  
 Kühne, K. 1914 A, 407 ("eidechsen").  
 Laaser, P. 1903 A, 575 ("eidechsen").  
 Lakjer, T. 1927 A, 343-354.  
 Lavocat, A. 1885 A, 35 ("lacertiens").  
 1889 A, 44 ("lizards").  
 Lebedinsky, N. G. 1913 A, 767 ("lacertilier").  
 Leche, W. 1893 C, 797 ("saurier").  
 Le Damany, P. 1902 A, 334 ("sauriens").  
 1903 G, 314 ("sauriens").  
 Leunis and Ludwig 1883 A, 545.  
 Leydig, F. 1873 A, 761 ("eidechsen").  
 1890 A, 443 ("eidechsen").  
 Lobley, J. L. 1908 A, 198.  
 Lorenz, L. E. F. 1807 A, 19 (Sauria).  
 Lubosch, W. 1926 A, 103 ("lacertilier").  
 Lull, R. S. 1910 D, 152.  
 Lydekker, R. 1912 C, 3, 4, 41.  
 Mantell, G. A. 1844 A, 753 ("lacertiens").  
 Matthew, W. D. 1915 A, 288.  
 1921 D, 214 (Lacertilia).  
 Meckel, J. F. 1825 A ("saurier").  
 Meek, A. 1908 A, 1, fig. 1 ("lizard").  
 Mehnert, E. 1891 A, 123 ("eidechsen").  
 Menmuir, W. H. 1902 A, 273 (Sauria).  
 Mitchell, P. C. 1894 A, 212 ("lizards").  
 Mivart, St. G. 1871 B, 331 ("saurians").  
 1879 B, 538 ("lizards").  
 1888 A, 374.  
 Mivart and Clarke 1879 A, 513 ("lizards").  
 Moodie, R. L. 1907 A, 84.  
 1908 D, 462.  
 1909 G, 362.  
 Müller, J. 1832 A, 507 (Sauria).  
 1841 B, cliv ("eidechsen").  
 1841 C, 329 ("eidechsen").  
 Nauck, E. T. 1923 A, 18, figs. 3, 4 ("lacertilier").  
 Newton, E. T. 1888 B, 439 ("lizards").  
 Nitzsch, C. L. 1822 A, 68 (Sauria).  
 Nopcea, F. 1903 A, 119.  
 1908 A, 33 ("eidechsen").  
 1922 A, 115 ("lacertilier").  
 1923 E, 1047 (Lacertilia).  
 1923 G, 138 ("lepidosaurier").  
 1923 H, 1-174, tab. (Lacertilia).  
 1924 B, 86 ("lacertilier").  
 1926 A, 644 (Lacertilia).  
 1928 A, 163, 174 (Saurioidea).  
 Nowikoff, M. 1907 A, 364 ("saurier").  
 1910 A, 118 ("saurier").  
 1910 B, 167 ("saurier").  
 1912 A, 334 ("saurier").  
 Osborn, H. F. 1903 H, 456.  
 1904 H, 114.  
 1905 C, 295.  
 1905 N, 239 ("lizards").  
 1912 K, 53.  
 1917 B, 193, 201, 231.  
 1925 F, 962 (Lacertilia).  
 Otto, H. 1908 A, 193 ("saurier").  
 Owen, R. 1842 F, 73, 77 (Sauria).  
 Owen, R. 1845 B, 234 ("saurians").  
 1848 B.  
 1868 A, 887.  
 Palacký, J. 1894 A, 129 ("eidechsen").  
 1899 C, 247 ("eidechsen").  
 1902 B, 142, 145 ("eidechsen").  
 Paramore, R. H. 1910 A, 1462 ("lizards").  
 Parker, W. K. 1864 B, 56 (Lacertilia).  
 1869 A, 505 ("lizards").  
 1878 C, 214.  
 1881 B, 99.  
 1888 C, 397 ("lizards").  
 Parker and Haswell 1897 A, 312.  
 Parsons, F. G. 1903 A, 316 ("lizards").  
 Pearson, H. G. 1921 A, 20 (Lygosoma).  
 Peter, K. 1898 A, 570 ("saurier").  
 Peters, W. 1867 A, 725 ("saurier").  
 1868 B, 388 ("lizards").  
 1869 A, 6 ("eidechsen").  
 Pfeiffer, H. 1854 A, 12, 39 ("saurier").  
 Pictet, F. J. 1853 A, 500 ("lacertiiformes").  
 Plieninger, F. 1906 A, 406 ("lacertilier").  
 Rabi, C. 1903 A, 158, 163 ("saurier").  
 Reichert, K. B. 1849 A, 498 ("eidechsen").  
 Reynolds, S. H. 1897 A, 545, fig. 54 (Lacertilia).  
 Rice, E. L. 1920 A.  
 Romer, A. S. 1922 A, 39 ("lizards").  
 1922 B, *passim* ("lizards").  
 Sabatier, A. P. 1897 A, 808 ("lizards").  
 1897 B, 933 ("lizards").  
 1902 A, 100 ("sauriens").  
 Schauinsland, H. 1899 A, 333 ("saurier").  
 1906 A ("saurier").  
 Schmalhausen, J. J. 1923 A, 541 (Lacertilia).  
 Schmidt, W. J. 1909 A, 359 ("saurier").  
 1910 A ("eidechsen").  
 1912 A, 84 ("saurier").  
 1912 B, 163 ("saurier").  
 Schöne, G. 1902 A, 27 ("saurier").  
 Schwartz, H. 1908 B, 100 ("lacertilier").  
 Scott, W. B. 1917 A, 178 ("lizards").  
 Seeley, H. G. 1865 B, 144 ("lizards").  
 1876 C, 168, 182, 190 ("lizards").  
 1882 A, 366 (Lacertilia).  
 1887 E, 191.  
 Seemann, G. 1926 A, 107 ("saurier").  
 Serres, M. 1852 B ("sauriens").  
 Sewertzoff, A. N. 1904 A, 473, 483 ("saurier").  
 1908 A (Lacertilia).  
 Seydel, O. 1899 A ("saurier").  
 Shiino, K. 1914 A, 374 ("lacertilier").  
 Shore, T. W. 1887 A, 366 (Lacertilia).  
 Siebenrock, F. 1892 B, 373 ("saurier").  
 Simpson, G. G. 1926 E, 8 ("lacertilians").  
 Sippel, W. 1907 A, 492, 514 ("saurier").  
 Sirena, S. 1872 A, 125 ("eidechse").  
 Sixta, V. 1900 A, 213 ("saurier").  
 1900 B, 329 ("eidechsen").  
 1901 A, 330 ("saurier").  
 Smith, G. E. 1912 A, 426.  
 Sokolowsky, A. 1904 A, 754 ("eidechsen").  
 Spencer, W. B. 1886 A, 165.  
 Stannius, H. 1856 A.  
 Stefano, G. 1904 A, 382 (Lacertilia).  
 Stehli, G. 1910 A, 763 ("saurier").  
 Steiner, H. 1922 A, 330 ("saurier").  
 Steinmann, G. 1907 A, 437 (Lacertilia).  
 1908 A, 213 ("eidechsen").

- Steinmann, G. 1912 B, 731.  
 Stejneger, L. 1907 C, 162.  
 Stejneger and Barbour 1917 A, 42 (Sauria).  
 Stromer, E. 1912 A, 75.  
 Struck, W. 1915 A, 141, fig. 10 (Lacerta).  
 Sushkin, P. P. 1927 A, 268, 307 (Lacertilia).  
 Sutton, J. B. 1884 A, 570 (Lacertilia).  
 Swinnerton and Howes 1901 A, 55.  
 Symington, J. 1892 A, 577 (Lacertilia).  
 Taschenberg, O. 1894 A, 3615.  
 Terra, P. 1911 A, 231 (Sauri).  
 Thyng, F. W. 1906 A, 58 (Lacertilia).  
 Tomes, C. S. 1875 A, 93.  
 Tornier, G. 1909 A, 195 ("eidechsen").  
 1909 C, 547.  
 1913 A, 330 (Sauria).  
 1913 B, 344, 374 (Lacertosauria).  
 Versluys, J. 1898 A, 161 (Lacertilia).  
 1903 A, 107 ("lacetilier").  
 1910 B, 178 ("eidechsen").  
 1911 A, 138 ("eidechsen").  
 1912 A, 491 ("lacetilier").  
 1912 B, 626, 687.  
 Vialleton, L. 1917 A, 190 ("sauriens").  
 1919 A, 307 ("sauriens").  
 Virchow, H. 1914 A, 79 ("eidechsen").  
 1914 C, 132 ("eidechsen").  
 1921 A, 137 ("eidechsen").  
 Vitah, G. 1909 A, 210 ("sauri").  
 Vort, M. 1909 B, 142 ("saurier").  
 Wagner, R. 1843 A, 146 (Sauria).  
 Wallace, A. R. 1876 A, i, 99; ii, 388, 403, 404 (Lacertilia).  
 Wamich, P. 1913 A, 23 ("lacetilien").  
 Watson, D. M. S. 1914 F, 733 ("lizards").  
 1914 G, 1006 ("lizards").  
 1914 J, 1037 ("lizards").  
 1917 A, 980 ("lizards").  
 1926 A, 202 ("lizards").  
 Wegner, R. N. 1922 A, 420 ("saurier").  
 Werner, F. 1904 A, 336 ("eidechsen").  
 Wiedersheim, R. 1880 E, 496 ("saurier").  
 Williston, S. W. 1902 L, 918 (Lacertilia).  
 1904 A, 43 (Lacertilia); 48 (Sauria).  
 1910 A, 271 ("lizards").  
 1912 B, 661 (Sauria).  
 1914 A, 17, 45, 139, 140 ("lizards").  
 1917 C, 418.  
 1925 A, *passim* (Sauria, Kionocrania, Lacertilia).  
 1925 B, 212, 265 (Lacertilia).  
 Zavattari, E. 1908 A, 1133 ("sauri").  
 Ziegler, H. E. 1901 A, 231 ("eidechsen").  
 Zittel and Broili 1911 A, 207.  
 1923 A, 254 (Lacertilia).  
 Zittel, Eastman, etc. 1902 A, 160.

### Suborder IGUANIFORMES, new name.

- Camp, C. L. 1923 A, 295, 297, 303, etc., figs. 1-7 (Ascalabota).  
 Gilmore, C. W. 1927 G, 14 (Ascalabota).  
 Merrem, B. 1820, Tent. Syst. Amphib., 9 (Ascalabotæ).

### Superfamily IGUAENOIDEÆ, new name.

- Camp, C. L. 1923 A, 296, 298, 307, etc., figs. 5, 6, 58-61 (Iguana).  
 Cope, E. D. 1900 A, 211 (Pachyglossa).  
 Gilmore, C. W. 1927 G, 14 (Iguana).

### IGUANIDÆ Bonaparte.

- Bonaparte, C. L. 1840 A, 30.  
 Hay, O. P. 1902 A, 474.  
 Adams, L. A. 1919 A, 93, pl. vii (Iguana).  
 Arldt, T. 1907 C, 677.  
 1907 D, 660.  
 1912 A, 689, 712.  
 Blainville, H. M. D. 1835 A, 250 ("iguanes").  
 Boulenger, G. A. 1885 B, 79.  
 1890 A, 412 ("iguanoid lizards").  
 1891 D, 113.  
 1901 B, 402.  
 Brauns, D. 1890 A, 151, fig. 1 (Iguana).  
 Brocm, R. 1903 K, 3 ("iguanas").  
 Carus, V. 1875 A, 447.  
 Cuvier, G. 1805 A ("iguanes").  
 Dollo, L. 1884 E, 68.  
 1893 D, 3.  
 1923 A, 81.  
 Fuchs, H. 1927 A, 310, fig. 3 (Iguana).  
 Fürbringer, M. 1900 A, 235, figs. 1, 7.  
 Gadow, H. 1896 A, 29, fig. 17.  
 1901 B, 528.  
 Gaupp, E. 1899 A, 1069, figs. 9, 10 (Iguana).  
 Gill, T. 1886 C, 802.  
 Gilmore, C. W. 1927 G, 8, 16, fig. 6.  
 Günther, A. 1908 A, 523.  
 Hoffmann, C. K. 1890 B, 1217, pls. lvi, lxii.  
 Jaekel, O. 1902 C, 610 (Iguana).  
 Jaekel, O. 1903 A, 119 (Iguana).  
 Juhn, M. 1923 A, 71.  
 Kingsley, J. S. 1925 A, 250 (Iguana).  
 Köstlin, O. 1844 A (Iguana).  
 Lakjer, T. 1927 A, 84, 266, 267.  
 Leche, W. 1893 C, 793, figs. 1-7 (Iguana).  
 Leunis and Ludwig 1883 A, 564.  
 Lobley, J. L. 1903 A, 202, 208.  
 Lorenz, L. E. F. 1807 A, 31 (Lacerta iguana).  
 Lull, R. S. 1910 A, 6.  
 Lydekker, R. 1912 C, 41.  
 Matthew, W. D. 1914 B, 387.  
 Meckel, J. F. 1825 A (Iguana).  
 Mehnert, E. 1891 A, 124 (Iguana).  
 Mivart and Clarke 1879 A, 517, pl. lxxvii, fig. 1 (Iguana).  
 Moodie, R. L. 1908 D, 456.  
 Nopcsa, F. 1908 A, 49, 51.  
 1923 G, 122 ("iguaniden").  
 1923 H, 73, 124 (Iguaninæ).  
 1923 A, 175.  
 Nowikoff, M. 1910 A, 181.  
 Owen, R. 1845 B, 240 ("iguanians").  
 1866 A, 402.  
 Palacký, J. 1899 C, 251, 280 ("iguaniden").  
 1902 B, 145 ("iguaniden").  
 Paramore, R. H. 1910 A, 1396, figs. 4-6 (Iguana).  
 Scharff, R. F. 1911 A, 126, 202, 207, 304.

- Schmidt, W. J. 1909 A, 362, 378.  
 Siebenrock, F. 1892 B, 373 (Iguana).  
 Sokolowsky, A. 1904 A, 754 ("iguaniden").  
 Spencer, W. B. 1886 A, 195 (Iguana).  
 Stefano, G. 1904 A, 387.  
 Terra, P. 1911 A, 231.  
 Tornier, G. 1913 B, 344 ("iguaniden").

## IGUANAVUS Marsh.

- Hay, O. P. 1902 A, 474.  
 Gilmore, C. W. 1924 D, 27.  
 1927 G, 9, 15, 16.  
 Heilprin, A. 1887 A, 320.  
 Matthew, W. D. 1915 A, 289.  
 Palacký, J. 1899 C, 281.  
 Scharff, R. F. 1911 A, 127.  
 Williston, S. W. 1902 K, 953.  
 1925 B, 267.

*Iguanavus exilis* Marsh.

- Hay, O. P. 1902 A, 474.  
 Gilmore, C. W. 1927 G, 9, 15, 16, pl. ii, fig. 2.  
 Nopcsa, F. 1908 A, 41.  
 Middle Eocene (Bridger); Wyoming.

ACIPRION Cope. Type *A. formosus* Cope.

- Hay, O. P. 1902 A, 477.  
 Broili, F. 1908 E, 297.  
 Gilmore, C. W. 1927 G, 7, 9, 15, 18.  
 Williston, S. W. 1925 B, 274.

*Aciprion formosus* Cope.

- Hay, O. P. 1902 A, 477.  
 Gilmore, C. W. 1927 G, 6, 8, 9, 15, 34, pl. xx, figs. 10, 10a.

EXOSTINUS Cope. Type *E. serratus* Cope.

- Hay, O. P. 1902 A, 476.  
 Gilmore, C. W. 1927 G, 7, 9, 15, 21, 90, 91.  
 Seeley, H. G. 1886 A, 512.

*Exostinus? lancensis* Gilmore.

- Gilmore, C. W. 1927 G, 8, 10, 15, 23, pl. xxvi, fig. 2; pl. xxvii, figs. 2, 2a; text-fig. 9.  
 Upper Cretaceous (Lance); Wyoming.

CHAMOPS Marsh. Type *C. segnis* Marsh.

- Hay, O. P. 1902 A, 474.  
 Boulenger, G. A. 1918 C, 594.  
 Camp, C. L. 1923 A, 309, 418.  
 Gilmore, C. W. 1927 G, 7, 9, 15, 24.  
 Scharff, R. F. 1911 A, 127.  
 Williston, S. W. 1902 K, 953.  
 1925 B, 268.  
 Zittel and Schlosser 1911 A, 210.  
 1923 A, 257 (Chamops).

*Chamops denticulatus* Gilmore.

- Gilmore, C. W. 1927 G, 8, 10, 15, 26, pl. xxvii, fig. 5; text-fig. 14.  
 Upper Cretaceous (Lance); Wyoming.

PARASAUROMALUS Gilmore. Type *P. olsenii* Gilmore.

- Gilmore, C. W. 1927 G, 8, 15, 27.

- Versluys, J. 1898 A, 203.

1903 A, 114.

- Virchow, H. 1914 A, 79 (Iguana).  
 Wallace, A. R. 1876 A, ii, 400.  
 Williston, S. W. 1914 A, 140, fig. 65 (Iguana).  
 1925 B, 267.  
 Zavattari, E. 1908 A, 1141 (Iguana).

Type *I. exilis* Marsh.*Iguanavus teres* Marsh.

- Hay, O. P. 1902 A, 474.  
 Bowen, C. F. 1915 A, 128.  
 Gilmore, C. W. 1927 G, 3, 6, 8, 9, 15, 16, 17, pl. ii, fig. 1.  
 Nopcsa, F. 1908 A, 41.  
 Osborn, H. F. 1902 I, 12, 17.  
 Upper Cretaceous (Lance); Wyoming.

*Iguanavus* sp. indet.

- Gilmore, C. W. 1924 D, 27. Upper Cretaceous (Lance); Saskatchewan.  
 Sternberg, C. M. 1924 A, 68. Upper Cretaceous (Lance); Saskatchewan.

- Nopcsa, F. 1908 A, 36.

- O'Harra, C. C. 1910 A, 121.

- Seeley, H. G. 1886 A, 512.

Oligocene (White River); Colorado.

*Aciprion majus* Gilmore.

- Gilmore, C. W. 1927 G, 8, 10, 15, 20, pl. xx, fig. 11; text-fig. 7.  
 Oligocene (White River); Colorado.

*Exostinus serratus* Cope.

- Hay, O. P. 1902 A, 476.  
 Gilmore, C. W. 1927 G, 6, 8, 9, 15, 22, pl. xxv, figs. 4-6; text-fig. 8.  
 Nopcsa, F. 1908 A, 39.  
 Oligocene (White River); Colorado.

Type *C. segnis* Marsh.*Chamops segnis* Marsh.

- Hay, O. P. 1902 A, 474.  
 Bowen, C. F. 1915 A, 128.  
 Camp, C. L. 1923 A, 309, figs. D, E.  
 Gilmore, C. W. 1927 G, 3, 6, 8, 9, 15, 24, text-figs. 10-12.  
 Nopcsa, F. 1908 A, 38 (*C. seguis*).  
 Osborn, H. F. 1902 I, 12.  
 Upper Cretaceous (Lance); Wyoming.

*Parasauromalus olsenii* Gilmore.

- Gilmore, C. W. 1927 G, 8, 10, 15, 27, text-fig. 15.  
 Middle Eocene (Wind River); Wyoming.

PHRYNOSOMA Wiegmann. Type *P. orbicularis* Wiegmann.

- Wiegmann, A. F. A. 1828, Isis, xxi, 387.  
 Boulenger, G. A. 1885 A, II, 239.  
 Cope, E. D. 1900 A, 403.  
 Gilmore, C. W. 1927 G, 6, 15, 28.  
 Seemann, G. 1926 A, 122.  
 Stejneger and Barbour 1923 A, 60.

## Phrynosoma sp. indet.

- Brown, B. 1908 A, 166, 207 ("lacertian sp.").  
 Gilmore, C. W. 1927 G, 8, 15, 28, pl. xxvii, fig. 4. Pleistocene (Middle); Arkansas.

CROTAPHYTUS Holbrook. Type *Agama collaris* Say = *Crotaphytus collaris* Holbrook.

- Holbrook, J. E. 1842, N. A. Herpet., II, 79.  
 Baird and Girard 1852, Stansbury's Explor. Salt Lake, 339.  
 Boulenger, G. A. 1885 A, II, 203.  
 Cope, E. D. 1900 A, 245.  
 Gilmore, C. W. 1927 G, 5, 13, 20, 29, text-fig. 7.

## Crotaphytus sp. indet.

- Gilmore, C. W. 1927 G, 5, 15, 29. Pliocene or Pleistocene; Arizona.

## Superfamily CHAMÆLEONOIDÆ, new name.

- Hay, O. P. 1902 A, 478 (Rhaptoglossi).  
 Boulenger, G. A. 1891 D, 117 (Rhaptoglossa).  
 Camp, C. L. 1923 A, 298, 298, 310, 351, 417, fig. 7 (Rhaptoglossa).  
 Dollo, L. 1904 B, 218 (Rhaptoglossa).  
 Gelderen, C. 1925 A, 495 (Rhaptoglossa).  
 Gilmore, C. W. 1927 G, 29 (Rhaptoglossa).  
 Latreille, P. A. 1825 A, 97 (Chamæleoni).  
 Lydekker, R. 1912 C, 4 (Rhaptoglossa).  
 Merrem, B. 1820, Tentamen Syst. Amphib., 166 (Prendentia).

- Nauck, E. T. 1923 A, 22 ("chameleonten").  
 Rafinesque, C. S. 1815 A, 75 (Camælonia).  
 Sewertzoff, A. N. 1908 A (Chamæleontia).  
 Stannius, H. 1856 A (Chamæleonida).  
 Werner, F. 1902 A, 326 (Rhaptoglossi).  
 Williston, S. W. 1904 A, 48 (Rhaptoglossi).  
 1925 A, 19, 21, 22, 70, 95, 106, 132, 187, 198 (Rhaptoglossa).  
 1925 B, 212, 274 (Rhaptoglossa).

## CHAMÆLONIDÆ Bonaparte.

- Bonaparte, C. L. 1831 A, 65.  
 Hay, O. P. 1902 A, 478.  
 Abel, O. 1912 F, 394 (Chamæleon).  
 1919 A, 659, fig. 518 (Chameleo).  
 Arldt, T. 1907 D, 645 (Chamæleontidæ).  
 Bauer, F. 1901 A, 54 ("chamæleone").  
 Baur, G. 1894 B, 350 (Chamæleon).  
 Beddard, F. E. 1907 A, 85 ("chamæleons").  
 Beyer, H. 1907 B, 282, fig. 10 (Chamæleon).  
 Blainville, H. M. D. 1835 A, 246 ("caméléons").  
 Blanchard, E. 1861 A, 380 ("caméléons").  
 Boas, J. E. V. 1914 C, 268, fig. 49 (Chamæleon).  
 Bolik, L. 1914 A (Chamæleon).  
 Bonaparte, C. L. 1832 A, 315.  
 1833 B, 1184.  
 Boulenger, G. A. 1885 B, 79 (Chamæleontidæ).  
 1891 D, 113 (Chamæleontidæ); 118, fig. 6 (Chamæleon).  
 1917 C, 456 ("caméléoniens").  
 Branca, W. 1908 B, 35 (Chamæleon).  
 Broom, R. 1903 J, 110 (Chamæleontidæ).  
 1906 F, 374 (Chameleo).  
 1908 E, 115 ("chamæleons").  
 1909 D, 212 (Chameleo).  
 1911 A, 922 (Chamæleon).  
 1924 B, 42, fig. 1 (Chamæleon).  
 1925 A, 16.  
 Camp, C. L. 1923 A, 298, 311, 333 (Chamælonidæ).  
 Carlsson, A. 1896 A, 758 ("chamæloniden").  
 Cartier, O. 1874 A, 201 ("chamæleon").  
 Carus, V. 1875 A, 451 (Chamæleontidæ).  
 Cuvier, G. 1825 A, v, 2, 268 ("caméléon").  
 Dollo, L. 1884 E, 68.  
 1884 F, 347 ("caméléons").

- Dollo, L. 1893 D, 3 (Chamæleontidæ).  
 1923 A, 80 ("caméléoniens").  
 Eaton, G. F. 1910 A, 11.  
 Edgeworth, F. H. 1907 A, 516, figs. 32-35 (Chameleo).  
 Eichwald, E. 1832 A, 866 (Chamæleon).  
 Fitzinger, L. 1843 A, 41 (Chamæleontes).  
 Foote, J. S. 1916 A, 49, pl. iii (Chameleo).  
 Gadow, H. 1896 A, 29.  
 1901 A, 410 ("chamæleons").  
 1901 B, 567 (Chamæleontes); 573 (Chamæleontidæ).  
 Gaupp, E. 1895 A, 62 ("chamæleonen").  
 1899 A, 1069 (Chameleo).  
 1910 A, 1069 ("chamæleoniden").  
 1910 C (Chameleo).  
 Gegenbaur, C. 1871 A, 199 (Chameleo).  
 Gelderen, C. 1923 A, 29 (Chameleo).  
 Gervais, P. 1853 B, 45 ("caméléons").  
 Giebel, C. G. 1855 A, 94 (Chamæleon).  
 Gill, T. 1886 C, 802 (Chamæleontidæ).  
 Gilmore, C. W. 1927 G, 29.  
 Hanson, F. B. 1919 B, 74 (Chameleo).  
 Hasse and Schwarck 1870 A, 54 ("chamæleonten").  
 Heilmann, G. 1926 A, 204 ("chameleon").  
 Heilprin, A. 1887 A, 316, 318 (Chameleon).  
 Hommes, J. H. 1924 A, 36 (Chamæleon).  
 Huene, F. 1925 D, 235 (Chamæleon).  
 Humphrey, G. M. 1870 B, 75, figs. 6, 7 ("chameleon").  
 Kerbert, C. 1876 A, 213 (Chamæleon).  
 Kingsley, J. S. 1925 A, 156, 265, figs. 165, 285 (Chameleo).  
 Klein, E. E. 1868 A (Chamæleon).



- Küstlin, O. 1844 A (Chameleo).  
 Lakjer, T. 1927 A, 115, 266, figs. 23-25, 94, 130.  
 Le Damany, P. 1903 G, 320, fig. 13 ("camé-léon").  
 Lobley, J. L. 1908 A, 202.  
 Lönnberg, E. 1910 A, 17 ("kameleont").  
 Lubosch, W. 1926 A, 104, 107, figs. 7, 8, 16 (Chamaeleon).  
 Lwoff, W. 1884 A, 313.  
 Lydekker, R. 1912 C, 4, 40, 151 ("chameleons").  
 Mivart, St. G. 1879 B, 538 ("chameleon").  
 Mivart and Clarke 1879 A, 514, pl. lxvi, fig. 1.  
 Moodie, R. L. 1907 A, 86 (Chameleon).  
 1908 D, 465 ("chameleons").  
 Nitzsch, C. L. 1822 A, 83.  
 Nopcsa, F. 1908 A, 49 (Chamaeleontidae).  
 1923 G, 111 ("chamaelodontidae").  
 1923 H, 61, 73, 75, 76, 124, 149, 184 (Chamaeleontidae, Chamaeloninae).  
 1928 A, 177 (Rhaptoglossidae).  
 Nowikoff, M. 1910 A, 180 (Chameleo).  
 Owen, R. 1845 B, 238 ("chameleons").  
 1866 A, 193, fig. 123 (Chameleo).  
 1868 A, 872 (Chameleo).  
 Palacký, J. 1899 C, 256 ("chameleone").  
 Parker, W. K. 1878 C, 214 ("chameleon").  
 1881 B, 77 ("chameleons").  
 Pfeiffer, H. 1854 A, 39 ("chameleonten").  
 Plieninger, F. 1906 A, 406 (Chamaeleon).  
 Reynolds, S. H. 1897 A, 199, 272, 278, 291, 293 (Chamaeleon).  
 Röse, C. 1893 D, 566, figs. 1-8 (Chamaeleon).  
 Schaunsland, H. 1903 A, 32, pl. xxv (Chamaeleo).  
 Schmidt, W. J. 1909 A, 363, 414 (Chamaeleontidae).  
 1910 A, 639 (Chameleo).  
 1912 B, 185, 189 (Chamaeleon).  
 Seeley, H. G. 1876 C, 184 ("chameleon").  
 Seemann, G. 1926 A, 128, text-figs. 14, 15.  
 Spencer, W. B. 1886 A, 190 (Chameleo).  
 Stannius, H. 1856 A, 7, 89 (Chameleo).  
 Stefano, G. 1904 A, 337 (Chamaeleontidae).  
 Strecker, C. 1837 A, 305 ("chameleon").  
 Taschenberg, O. 1894 A, 3620 (Chamaeleon).  
 Thäter, K. 1910 A, 504 (Chamaeleontidae).  
 Tornier, G. 1913 A, 334 ("chamaelonidae").  
 1913 B, 344 ("chamaeloniden").  
 Versluys, J. 1898 A, 162, 252 (Chamaeleontidae).  
 1903 A, 151 (Chamaeleon).  
 Wagner, R. 1843 A ("chamaelon").  
 Wallace, A. R. 1876 A, II, 402.  
 Werner, F. 1902 A, 295 ("chamaeleonten").  
 Wiedersheim, R. 1892 A, 53 ("chamaeleonten").  
 Williston, S. W. 1925 A, 63, 177, figs. 55, 143 ("chameleon").  
 1925 B, 274 (Chamaeleontidae).

#### TINOSAURUS Marsh. Type *T. stenodon* Marsh.

- Hay, O. P. 1902 A, 476.  
 Fejérváry, G. J. 1918 A, 362 (Syn. of Thinosaurus).  
 Gilmore, C. W. 1922 D, 25.  
 1927 G, 1, 9, 10, 30 (Tinosauros); 7, 9, 10, 31 (Chamaeleo).  
 Nopcsa, F. 1908 A, 47 (Thinosaurus).  
**Tinosauros pristinus** (Leidy).  
 Hay, O. P. 1902 A, 478 (Chamaeleo).  
 Abel, O. 1919 A, 679 (Chamaeleo).  
 Camp, L. C. 1923 A, 310 (Chamaeleo).  
 Gilmore, C. W. 1927 G, 5, 8, 9, 32, pl. ii, figs. 16, 16a (Tinosauros); 6, 9 (Chamaeleo).  
 Matthew, W. D. 1915 A, 289 (Chamaeleon).  
 Nopcsa, F. 1908 A, 38 (Chamaeleo).  
 Palacký, J. 1899 C, 231 (Chamaeleo).  
 Stefano, G. 1904 A, 392 (Chamaeleo).  
 Middle Eocene (Bridger); Wyoming.  
**Tinosauros stenodon** Marsh.  
 Hay, O. P. 1902 A, 476 (T. stenodon, T. lepidus).  
 Gilmore, C. W. 1927 G, 6, 8, 10, 31, pl. ii, figs. 14, 15 (T. stenodon); 6, 10, 31 (T. lepidus).  
 Nopcsa, F. 1908 A, 47 (Thinosaurus stenodon, T. lepidus).  
 Middle Eocene (Bridger); Wyoming.

#### PLACOSAURUS Gervais. Type *P. rugosus* Gervais.

- Hay, O. P. 1902 A, 474.  
 Ameghino, F. 1906 A, 458.  
 1909 B, 94, 96, fig. 349.  
 Boulenger, G. A. 1918 D, 890.  
 Camp, C. L. 1923 A, 327, 329, figs. 97, 104, 105.  
 Gervais, P. 1859 A, 457.  
 Gilmore, C. W. 1927 G, 88, 92.  
 Leenhardt, L. E. E. 1909 A, 103.  
 Nopcsa, F. 1928 A, 177.  
 Stefano, G. 1904 A, 403.  
 Williston, S. W. 1925 B, 268.  
 A genus of uncertain systematic position.  
**Placosaurus?** sp. indet.  
 Hay, O. P. 1902 A, 474. Eocene; New Mexico.  
 Gilmore, C. W. 1927 G, 6. Eocene; New Mexico.  
 Nopcsa, F. 1908 A, 44.

#### Suborder ANGUIFORMES Bonaparte.

- Bonaparte, C. L. 1831 A, 71.  
 Camp, C. L. 1923 A, 296, 298, 312, etc. (Autarchoglossa).  
 Gilmore, C. W. 1927 G, 33 (Autarchoglossa).  
 Wagler, G. 1830, Nat. Syst. Amphib., 152 (Autarchoglossa).

#### Superfamily SCINCOIDÆ, new name.

- Camp, C. L. 1923 A, 296, 298 (Scincomorpha).  
 Cope, E. D. 1900 A, 231, 539 (Leptoglossa).  
 Gilmore, C. W. 1927 G, 33 (Scincomorpha).

## LACERTIDÆ Bonaparte.

- Bonaparte, C. L.* 1831 A.  
*Blainville, H. M. D.* 1835 A, 254 ("lacertiens").  
*Boulenger, G. A.* 1887 A, 1.  
 1918 C, 594 ("lacertides").  
*Camp, C. L.* 1923 A, 296, 298, 299, 312, etc.  
 (Lacertidæ, Lacertoidea).  
*Gadow, H.* 1901 B, 549.
- Gill, T.* 1886 C, 800 (Lacertoidea); 802 (Lacertidæ).  
*Kühne, K.* 1914 A, 407 (Lacerta).  
*Lydekker, R.* 1888 B, 287.  
*Owen, R.* 1845 B, 254 ("lacertians").  
*Rice, E. L.* 1920 A (Lacerta).  
*Versluys, J.* 1898 A, 230.

LACERTA Linnæus. Type *L. agilis* Linnæus.

- Linnæus, C.* 1758 A, 200.  
*Allis, E. P.* 1919 B, 84.  
 1919 D, 209.  
 1919 E, 364.  
*Blainville, H. M. D.* 1835 A, 257.  
*Boulenger, G. A.* 1887 A, 8.  
 1918 C, 595.  
*Gadow, H.* 1901 B, 551, 553, fig. 142.  
*Gaupp, E.* 1900 A, 433-594, pls. xlii-xlvii.  
*Kühne, K.* 1914 A, 407, figs. 1-29.  
*Lydekker, R.* 1888 B, 287.  
*Mivart and Clarke* 1879 A, 515, pl. lxvi, fig. 2.
- Owen, R.* 1845 B, 257.  
 1866 A, 58, 157, 174, 401.  
*Rice, E. L.* 1920 A.  
*Stefano, G.* 1904 A, 412.  
*Versluys, J.* 1898 A, 161.  
*Weiss, A.* 1901 A, 496.  
*Zittel, K. A.* 1890 A, 609.
- Lacerta? sp. indet.**  
*Lawson and Palache* 1902 A, 391 (This genus?).  
 Pliocene (Siesta); California.  
*Merriam, J. C.* 1914 D, 14. Pleistocene (Siesta); California.

## SCINCIDÆ Gray.

- Gray, J. E.* 1825 A, 201.  
*Boulenger, G. A.* 1884 A, 120.  
 1887 A, 130.  
*Cope, E. D.* 1900 A, 615, with synonymy.  
*Fürbringer, M.* 1900 A, 232, 242.  
*Hoffmann, C. K.* 1890 B, 1129-1170.
- Lydekker, R.* 1888 B, 288.  
*Nopcsa, F.* 1923 A, 175.  
*Owen, R.* 1866 A, 175, 198, 338.  
*Stannius, H.* 1856 A, 6, 22 (Scincoidea).  
*Taschenberg, O.* 1894 A, 3629.

EUMECES Wiegmann. Type *E. pavimentatus* G. St. Hilaire.

- Wiegmann, F. A.* 1834 A, 36.  
*Boulenger, G. A.* 1887 A, 365, with synonymy.  
*Cope, E. D.* 1900 A, 624, 1255, with synonymy.  
*Hoffmann, C. K.* 1890 B, 1132, 1148.  
*Stejneger and Barbour* 1923 A, 74.
- Eumeces anthracinus (Baird).**  
*Baird, S. F.* 1849, Jour. Acad. Nat. Sci. Phila.  
 (8), 1, 294 (Plestiodon).  
*Boulenger, G. A.* 1887 A, 376.  
*Cope, E. D.* 1900 A, 630, 661, fig. 135.  
*Peterson, O. A.* 1926 A, 252, text-fig. 2.  
*Stejneger and Barbour* 1917 A, 74.  
 Recent; New York to North Carolina, west  
 to Texas: Pleistocene (Middle); Pennsylvania.

## AMPHISBÆNIDÆ Gray.

- Gray, J. E.* 1825 A, 203.  
*Hay, O. P.* 1902 A, 476.  
*Arlt, T.* 1907 C, 677.  
 1907 D, 637.  
 1912 A, 758.  
*Beyer, H.* 1907 A, 286 ("amphisbænen").  
*Blainville, H. M. D.* 1835 A, 262 ("amphisbænes").  
*Boas, J. E. V.* 1914 C, 269 ("amphisbænen").  
*Bonaparte, C. L.* 1831 A, 66.  
 1832 A, 316 (Amphisbænia).  
 1833 B, 1185 (Amphisbænidæ, Saurophidii).  
*Boulenger, G. A.* 1885 B, 79.  
 1901 B, 403.  
 1902 F, 352.  
*Camp, C. L.* 1923 A, 299, 300, 316, 333 (Amphisbænidæ, Amphisbænoidea).  
*Carus, V.* 1875 A, 436 (Amphisbænoidea).  
*Cope, E. D.* 1892 CC, 241.  
*Cuvier, G.* 1805 A ("amphisbænes").  
*Dollo, L.* 1923 A, 81.  
*Gadow, H.* 1901 B, 565.
- Gadow, H.* 1905 A, 219.  
*Gaupp, E.* 1899 A, 1070 (Amphisbæna).  
 1911 C, 446.  
*Gill, T.* 1886 C, 802.  
*Gilmore, C. W.* 1927 G, 6, 8, 33, 34, fig. 16.  
*Gray, J. E.* 1837 C, 131 ("amphisbæniens").  
 1872 B, 31, 34.  
*Heilprin, A.* 1887 A, 319 (Amphisbænia).  
*Hoernes, R.* 1886 A, 607 (Amphisbænoidea).  
*Hoffmann, C. K.* 1890 B, 1238, pl. lx (Amphisbæna).  
*Huene, F.* 1913 C, 394 (Amphisbæna).  
*Kerbert, C.* 1876 A, 206 ("amphisbænid").  
*Kingsley, J. S.* 1902 B, 328 (Amphisbænia).  
*Köstlin, O.* 1844 A ("amphisbænen").  
*Lakjer, T.* 1927 A, 158, 266, fig. 55-60, 97, 129.  
*Leunis and Ludwig* 1883 A, 570 (Amphisbænidæ).  
*Lobley, J. L.* 1908 A, 202, 208.  
*Lydekker, R.* 1912 C, 41, 114.  
*Mayer, C.* 1824 C, 834 (Amphisbæna).  
*Meckel, J. F.* 1825 A (Amphisbæna).  
*Müller, J.* 1832 A, 508 (Amphisbæna).

- Nopcsa, F. 1923 H, 73, 75, 76 (Amphisbænia).  
1928 A, 176.  
Owen, R. 1845 B, 234 ("amphisbæniæans").  
1866 A, 59.  
Palacký, J. 1899 C, 254, 281.  
1902 B, 145 ("amphisbæniden").  
Peter, K. 1898 A, 607 ("amphisbæniden").  
Scharff, R. F. 1911 A, 375.  
Schmidt, W. J. 1910 A, 637 ("amphisbæniden").  
Seeley, H. G. 1882 A, 353 (Amphisbæna).  
Sirena, S. 1872 A, 132 (Amphisbæna).  
Smalian, C. 1885 A, 126-202 ("amphisbæniden").  
Terra, P. 1911 A, 234.

- Thäter, K. 1910 A, 504.  
Tornier, G. 1913 A, 334.  
Versluys, J. 1898 A, 242.  
1903 A, 157 ("amphisbæniden").  
1912 B, 632, 684, 687 (Amphisbænida).  
Wagner, R. 1843 A ("amphisbæniden").  
Wallace, A. R. 1876 A, II, 388.  
Weitzel, A. 1865 A, 313 (Amphisbæna).  
Williston, S. W. 1904 A, 48 (Amphisbænia).  
1918 A, 82 (Amphisbænia).  
1925 A, 69, fig. 56.  
1925 B, 274.

#### OTOTRITON Loomis. Type *O. solidus* Loomis.

- Loomis, F. B. 1919 A, 217.  
Gilmore, C. W. 1927 G, 9, 35, 43.

#### Ototriton anceps (Marsh).

- Hay, O. P. 1902 A, 475 (Glyptosaurus).  
Douglass, E. 1908 C, 283 (Glyptosaurus).  
Gilmore, C. W. 1917 A, 160 (Glyptosaurus).  
1927 G, 3, 6, 9 (Glyptosaurus); 8, 34, 46,  
pl. xviii, figs. 14, 15; text-fig. 23 (Oto-  
triton).

- Nopcsa, F. 1908 A, 39 (Glyptosaurus).  
Middle Eocene (Bridger); Wyoming.

#### Ototriton solidus Loomis.

- Loomis, F. B. 1919 A, 217, fig. 1.  
Gilmore, C. W. 1927 G, 4, 5, 7, 8, 9, 34, 43,  
text-figs. 20, 21.  
Lower Eocene (Wasatch); Wyoming.

#### LEPOSTERNIDÆ Stejneger and Barbour.

- Stejneger and Barbour 1917 A, 72.

- Gray, J. E. 1844, Cat. Tortoises, etc. Brit.  
Mus., 68, 73 (Lepidosternidæ).

#### RHINEÛRA Cope. Type *R. floridana* Cope.

- Hay, O. P. 1902 A, 476 (Rhineûra); 477  
(Platyrhachis).  
Broili, F. 1908 E, 297 (Rhineûra, Platyrhachis).  
Brown, A. E. 1904 A, 469.  
Cope, E. D. 1892 CC, 241, pl. xiii, fig. 14.  
Eigenmann, C. H. 1902 A, 533, fig. 22.  
1909 A, 48.  
Fürbringer, M. 1900 A, 264.  
Gilmore, C. W. 1927 G, 5, 7, 10, 35, 38, text-  
fig. 19 (Rhineûra); 7, 10 (Platyrhachis).  
Lydekker, R. 1912 C, 114.  
Scharff, R. F. 1911 A, 173, 203.  
Stejneger and Barbour 1917 A, 72.  
Williston, S. W. 1925 B, 274 (Rhineûra, Pla-  
tyrhachis).

#### Rhineûra coloradoensis (Cope).

- Hay, O. P. 1902 A, 477 (Platyrhachis).  
Gilmore, C. W. 1927 G, 8, 10, 34, 42, pl. xxv,  
figs. 10-12 (Rhineûra); 6, 10, 34 (Platyrhachis).

- Nopcsa, F. 1908 A, 44 (Platyrhachis colorad-  
ensis).  
Oligocene (White River); Colorado.

#### Rhineûra hatcheri Baur.

- Hay, O. P. 1902 A, 476.  
Cope, E. D. 1900 A, 684.  
Douglass, E. 1908 C, 283, figs. 3-5 (R. hatch-  
eri).  
Eigenmann, C. H. 1902 A, 534.  
1909 A, 48.  
Gilmore, C. W. 1927 G, 6, 8, 10, 34, 35, pl. i,  
figs. 2-4; text-figs. 17, 18.  
Nopcsa, F. 1908 A, 46 (R. hatcheri).  
O'Harra, C. C. 1910 A, 121, fig. 20.  
1920 A, 160.  
Oligocene (White River); South Dakota.

#### HYPSORHINA Baur. Type *H. antiqua* Baur.

- Hay, O. P. 1902 A, 477 (Hypsorhina, *errore*).  
Broili, F. 1908 E, 297.  
Cope, E. D. 1900 A, 684 (Hypsorhina).  
Gilmore, C. W. 1927 G, 7, 9, 35, 47.  
Nopcsa, F. 1908 A, 40.  
Williston, S. W. 1925 B, 274.

#### Hyporhina antiqua Baur.

- Hay, O. P. 1902 A, 477 (Hypsorhina, *errore*).  
Cope, E. D. 1900 A, 684 (Hypsorhina).

- Eigenmann, C. H. 1902 A, 534 (Hypsorhina  
antigua).  
1909 A, 48 (Hypsorhina antiqua).  
Gilmore, C. W. 1927 G, 4, 6, 8, 9, 34, 38, 47,  
pl. i, fig. 1; text-figs. 24-26.  
Nopcsa, F. 1908 A, 40.  
O'Harra, C. C. 1910 A, 121 (H. antiqua).  
1920 A, 160 (H. antiqua).  
Oligocene (White River); South Dakota.

#### Superfamily ANGUIOIDÆ, new form.

- Camp, C. L. 1923 A, 297, 299, 313, 326, 333  
(Anguioidea).

- Fürbringer, M. 1900 A, 621 (Anguimorpha).  
Gilmore, C. W. 1927 G, 88 (Anguioidea).

## VARANIDÆ Bonaparte.

- Bonaparte, C. L.* 1831 A, 65.  
*Hay, O. P.* 1902 A, 476.  
*Adams, L. A.* 1919 A, 97, pl. vii (*Varanus*).  
*Aichel, O.* 1917 A, 109, fig. 7 (*Varanus*).  
*Arlt, T.* 1907 D, 688.  
 1912 A, 712.  
*Blanchard, E.* 1861 A, 380 ("varans").  
*Bolk, L.* 1913 A, 79, figs. 60-62 (*Varanus*).  
*Bonaparte, C. L.* 1833 B, 1184.  
*Boulenger, G. A.* 1885 B, 79.  
 1891 D, 113, 116.  
 1893 B, 205.  
 1918 D, 890 ("varanides").  
*Broili, F.* 1926 B, 173, fig. 2.  
 1926 C, 20, 36, figs. 6, 11 ("varaniden").  
*Broom, R.* 1924 B, 41, 50 (*Varanus*).  
 1924 C, 71 (*Varanus*).  
*Burden, D.* 1927 A, 18, figs. (*Varanus*).  
*Camp, C. L.* 1923 A, 297 (*Varanidæ*); 297, 300, 320 (*Varanoidea*).  
*Carus, V.* 1875 A, 437.  
*Cuvier, G.* 1808 D, 82 ("monitors").  
*Dollo, L.* 1884 E, 68 (*Monitoridæ*).  
 1893 D, 2.  
 1903 B, 137.  
 1904 B, 218.  
*Fejérváry, G. J.* 1918 A.  
 1920 A, 351.  
 1921 B, 184.  
*Foot, J. S.* 1916 A, 51 (*Varanus*).  
*Frassetto, F.* 1915 A, 105, fig. 63 (*Varanus*).  
*Fürbringer, M.* 1900 A, 236, 241, 250, figs. 5, 13, 26, 40.  
*Gadow, H.* 1896 A, 29.  
 1901 B, 542.  
*Gaupp, E.* 1899 A, 1069 (*Varanus*).  
 1905 D, 1011.  
*Geoffroy St. Hilaire, E. F.* 1825 B, 127 ("monitors").  
 1832 A, 353 ("monitors").  
*Gervais, P.* 1853 B, 45 ("varans").  
*Gill, T.* 1886 C, 802 (*Varanidæ*); 800 (*Varanoidea*).  
*Gilmore, C. W.* 1922 D, 23.  
 1927 G, 5, 51.  
*Haller, G.* 1926 A, 457, fig. 4 (*Varanus*).  
*Heilprin, A.* 1887 A, 319.  
*Hoffmann, C. K.* 1890 B, 1068, pls. (*Monitoridæ*).  
*Huene, F.* 1906 C, 336 (*Varanus*).  
 1914 G, pl. vii.  
*Huxley, T. H.* 1859 F, 137 ("monitors").  
*Iwanzoff, N.* 1894 A, 583 (*Monitor*).  
*Juhn, M.* 1923 A, 71.  
*Kingsley, J. S.* 1925 A, 142, 154, 155, figs. 163, 164 (*Varanus*).  
*Köstlin, O.* 1844 A (*Monitor*).  
*Koken, E.* 1901 B, 22 ("varaniden").  
*Kornhuber, A.* 1901 A, 151 ("varaniden").  
*Lakjer, T.* 1927 A, 121, 268, figs. 27-29, 126, 127, 135, 136.  
*Le Damany, P.* 1903 G, 330, fig. 18 ("varan").  
*Leunis and Ludwig* 1883 A, 549.  
*Lobley, J. L.* 1903 A, 208.  
*Lydekker, R.* 1912 C, 41, 141.  
*Matthew, W. D.* 1915 A, 289.  
*Mehnert, E.* 1891 A, 124 (*Monitor*).  
*Mivart and Clarke* 1879 A, 520, pl. lxvii, fig. 2.  
*Nopce, F.* 1903 C, 37, 39.  
 1903 A, 49, 51.  
 1923 E, 1054, fig. 9 (*Varanus*).  
 1923 G, 109, 111, 122 ("varaniden").  
 1923 H, 124, 149, 173 (*Varaninæ*).  
 1926 A, 649.  
 1928 A, 177 (*Varaninæ*).  
*Nowikoff, M.* 1910 A, 179 (*Varanus*).  
*Owen, R.* 1845 B, 263, pls. lxix, lxxvii, lxxviii ("varanians").  
 1848 B, 60.  
*Palacký, J.* 1899 C, 253 ("varaniden").  
*Reynolds, S. H.* 1897 A, 201, figs. 33, 34.  
*Schmidt, W. J.* 1909 A, 362.  
*Seeley, H. G.* 1876 C, 169 ("monitors").  
*Sippel, W.* 1907 A, 518 (*Varanus*).  
*Spencer, W. B.* 1886 A, 181 (*Varanus*).  
*Stefano, G.* 1904 A, 407.  
*Taschenberg, O.* 1894 A, 3631 (*Varanus*).  
*Terra, P.* 1911 A, 233.  
*Thäfer, K.* 1910 A, 504.  
*Tornier, G.* 1913 A, 320 ("varaniden").  
 1913 B, 344.  
*Versluys, J.* 1898 A, 224.  
 1903 A, 151.  
*Virchow, H.* 1914 A, 69 (*Varanus*).  
 1914 C, 130 (*Varanus*).  
 1921 A, 137, figs. 4, 5 (*Varanus*).  
*Wallace, A. R.* 1876 A, II, 389.  
*Watkinson, G. B.* 1906 A, 451, pls. xi-xiii (*Varanus*).  
*Wegner, R. N.* 1922 A, 463, pl. xv; text-figs. 34, 35 (*Varanus*).  
*Wieland, G. R.* 1925 A, 603.  
 1925 B, 557, 559 ("varanids").  
*Williston, S. W.* 1903 A, 32, pl. v (*Varanus*).  
 1904 A, 44, 48 (*Varanidæ*); 45 (*Varanoidea*).  
 1925 A, 70, 71, 100.  
 1925 B, 269.  
*Zavattari, E.* 1908 A, 1140.

## SANIWINÆ Camp.

*Camp, C. L.* 1923 A, 297, 300, 320.

SANIWA Leidy. Type *S. ensidens* Leidy.

- Hay, O. P.* 1902 A, 475 (*Saniwa*); 476 (*Thinosaurus*).  
*Ameghino, F.* 1893 E, 731 (*Saniva*).  
*Camp, C. L.* 1923 A, 345 (*Thinosaurus*); 419, fig. 24 (*Saniwa*, *Thinosaurus*).  
*Dollo, L.* 1923 A, 77.  
*Fejérváry, G. J.* 1918 A, 364, 422, 433 (*Saniva*).  
*Gilmore, C. W.* 1922 D, 23 (*Thinosaurus* a syn.).  
 1927 G, 6, 8, 10, 58, 57, 73 (*Saniwa*); 7 (*Saniva*); 7, 10 (*Thinosaurus*).  
*Heilprin, A.* 1887 A, 320 (*Saniva*).  
*Matthew, W. D.* 1915 A, 289.

Nopcsa, F. 1923 H, 76 (Saniva).

1928 A, 177 (Saniva, *Thinosaurus*).

Williston, S. W. 1925 B, 268 (*Thinosaurus*); 269 (Saniva).

***Saniwa agilis* (Marsh).**

Hay, O. P. 1902 A, 476 (*Thinosaurus*).

Gilmore, C. W. 1922 D, 25.

1927 G, 8, 10, 54, 81, pl. ix, figs. 1-6 (Saniva); 6, 10 (*Thinosaurus*).

Nopcsa, F. 1908 A, 47 (*Thinosaurus*).

Middle Eocene (Bridger); Wyoming.

***Saniwa crassa* (Marsh).**

Marsh, O. C. 1872 K, 301 (*Thinosaurus*).

Hay, O. P. 1902 A, 476 (*Thinosaurus*).

Gilmore, C. W. 1922 D, 25.

1927 G, 6, 10, 80 (*Thinosaurus*); 8, 10, 54, 56, 80, pl. x, figs. 6-10; text-fig. 47 (Saniva); 1, 6, 10 (S. major).

Nopcsa, F. 1908 A, 47 (*Thinosaurus*).

Middle Eocene (Bridger); Wyoming: Upper Eocene (Uinta); Wyoming.

***Saniwa ensidens* Leidy.**

Hay, O. P. 1902 A, 475 (S. *ensidens*, S. major); 476 (S. *leptodus*).

Fejérváry, G. J. 1918 A, 420, 444, text-fig. 20 (Saniva); 444 (Saniva major).

Gilmore, C. W. 1922 D, 1-23, pls. i-iii; text-figs. 2-19 (S. *ensidens*); 25 (S. *leptodus*).

Gilmore, C. W. 1927 G, 6, 8, 10, 54, 56, pl. iii; pl. iv, figs. 1, 2; pls. v-vii; pl. viii; text-figs. 31-33, 35-38, 52, 53 (Saniva); 6, 10, 58 (*Thinosaurus leptodus*).

Merrill, G. P. 1907 A, 77.

Nopcsa, F. 1908 A, 46 (Saniva *ensidens*, S. major); 47 (*Thinosaurus leptodus*).

Wetmore, A. 1922 A, 455 (S. major).

Lower Eocene (Wasatch); Wyoming: Middle Eocene (Bridger); Wyoming.

***Saniwa grandis* (Marsh).**

Hay, O. P. 1902 A, 476 (*Thinosaurus*).

Gilmore, C. W. 1922 D, 25.

1927 G, 8, 10, 54, 78, pl. x, figs. 1-5 (Saniva); 6-10, 78 (*Thinosaurus*).

Middle Eocene (Bridger); Wyoming: Lower Eocene (Wind River); Wyoming.

***Saniwa paucidens* (Marsh).**

Hay, O. P. 1902 A, 476 (*Thinosaurus*).

Gilmore, C. W. 1922 D, 25.

1927 G, 1, 6, 10, 53, 54, 77 (*Thinosaurus*); 8, 10, 54, 77, pl. ix, figs. 7-9 (Saniva).

Middle Eocene (Bridger); Wyoming: Upper Eocene (Uinta); Wyoming.

***Saniwa* sp. indet.**

Gilmore, C. W. 1923 B, 52. Upper Cretaceous (Belly River); Alberta.

Camp, C. L. 1923 A, 442, fig. 23 (*Thinosaurus*).

Gilmore, C. W. 1927 G, 83, text-fig. 54. Eocene (White River); Nebraska: Eocene (Huerfano); Colorado.

**PALÆOSANIWA Gilmore. Type *P. canadensis* Gilmore.**

Gilmore, C. W. 1927 G, 5, 8, 53, 83.

**Palæosaniwa canadensis Gilmore.**

Gilmore, C. W. 1927 G, 5, 8, 10, 84, pl. xi, figs. 5-6a; text-fig. 55.

Upper Cretaceous (Belly River); Alberta.

**PARASANIWA Gilmore. Type *P. wyomingensis* Gilmore.**

Gilmore, C. W. 1927 G, 5, 8, 53, 85.

**Parasaniwa obtusa Gilmore.**

Gilmore, C. W. 1927 G, 8, 10, 86, pl. xxvi, figs. 10, 12; text-figs. 56, 57.

Upper Cretaceous (Lance); Wyoming.

**Parasaniwa wyomingensis Gilmore.**

Gilmore, C. W. 1927 G, 8, 85, pl. xxvi, fig. 11. Upper Cretaceous (Lance); Wyoming.

**HELODERMIDÆ Gray.**

Gray, J. E. 1837, Proc. Zool. Soc. Lond., 132.

Baur, G. 1889 F, 473.

Boulenger, G. A. 1884 A, 120, 122 (*Helodermatidæ*).

1885 A, 300 (*Helodermatidæ*).

1885 B, 78.

1891 A, 109, figs. (*Helodermatidæ*).

1891 D, 109, 116 (*Helodermatidæ*).

1918 D, 890 ("helodermatides").

Camp, C. L. 1923 A, 297, 301, 333, etc., figs. 98, 100 (*Helodermatidæ*).

Cope, E. D. 1864 A, 223.

1900 A, 473, 1257 (*Helodermatidæ*); 472 (*Helodermatoidæ*).

Fürbringer, M. 1900 A, 241, 609, 621.

Gill, T. 1886 C, 800, 802 (*Helodermatidæ*); 802 (*Helodermatoidæ*).

Gilmore, C. W. 1927 G, 8, 88, 92.

Hoffman, C. K. 1890 B, 1064, 1071.

Juhn, M. 1923 A, 71.

Lakjer, T. 1927 A, 91, 266 (*Helodermatidæ*).

Nopcsa, F. 1908 A, 49, 51 (*Helodermatidæ*).

1923 H, 75, 124 (*Helodermatinæ*).

1928 A, 177 (*Helodermatinæ*).

Owen, R. 1845 B, 264 ("heloderm").

Schmidt, W. J. 1912 B, 142 ("helodermatiden").

Versluys, J. 1898 A, 219 (*Helodermatidæ*).

Wiegmann, A. F. A. 1834 A, 23 (*Trachydermi*).

Williston, S. W. 1925 A, 67, 71 (*Helodermatidæ*).

1925 B, 267 (*Helodermatidæ*).

Zittel and Broili 1923 A, 257 (*Helodermatidæ*).

**HELODERMA** Wiegmann. Type *Trachyderma horridum* Wiegmann.

- Wiegmann, F. A. 1829 A, col. 421 (Trachyderma; preoccupied).  
 Baur, G. 1889 C, 239.  
 1891 F, 334.  
 Boulenger, G. A. 1891 D, 109, figs. 1-3, 5.  
 Cope, E. D. 1864 A, 228.  
 Fuchs, H. 1927 A, 316.  
 Fürbringer, M. 1900 A, 236, 621, figs. 3, 11, 38.  
 Gilmore, C. W. 1927 G, 5, 6, 8, 15, 88.  
 Hoffmann, C. K. 1890 B, 1064.  
 Kingsley, J. S. 1925 A, 156, fig. 166.  
 Lakjer, T. 1927 A, 91, fig. 12.  
 Moodie, R. L. 1907 A, 85, 88.  
 Nopcsa, F. 1923 E, 1056, fig. 9.  
 1923 H, 74-76.  
 Schmidt, W. J. 1912 C, 219, pl. xiii; text-figs. 1-3.  
 Shufeldt, R. 1890 D, 235, pls. xvi-xviii.  
 Troschel, F. H. 1853 A, 294, pls. xiii, xiv.  
 Versluys, J. 1898 A, 219.  
 Wiegmann, A. F. A. 1829 B, col. 627.  
 1834 A, 23, pl. i.

**Heloderma matthewi** Gilmore.

- Gilmore, C. W. 1927 G, 8, 10, 89, pl. xi, figs. 1, 1a; text-figs. 53, 59.  
 Oligocene (White River); Colorado.

**ANGUIDÆ** Bonaparte.

- Bonaparte, C. L. 1831 A, 66.  
 Hay, O. P. 1902 A, 474.  
 Adloff, P. 1918 A, 132, figs. 1, 2 (Anguis).  
 Arldt, T. 1912 A, 712.  
 Batelli, A. 1880 A, 359 (Anguis).  
 Bogoljubsky, S. 1914 A, 653 (Anguis).  
 Bonaparte, C. L. 1833 B, 1185.  
 Boulenger, G. A. 1891 D, 113, 116.  
 1893 B, 208.  
 1901 B, 402.  
 1913 D, 890 ("anguides").  
 Cope, E. D. 1892 CC, 227.  
 1900 A, 488.  
 Corning, H. K. 1891 A, 613, pl. xxx (Anguis).  
 Dendy, A. 1907 A, 288 (Anguis).  
 Fejérváry, G. J. 1918 A, 440.  
 Fürbringer, M. 1900 A.  
 1902 B, 203 ("anguiden").  
 Gadow, H. 1896 A, 29.  
 1901 B, 537.  
 Gaupp, E. 1905 D, 1011.  
 1910 A, 538.  
 1911 B, 107.  
 1911 C, 446.  
 Gelderen, C. 1925 A, 496 (Anguis).  
 Gill, T. 1886 C, 802.  
 Gilmore, C. W. 1927 G, 5, 8, 89, fig. 60 (Anguidæ); 91, 93 (Glyptosauridæ).  
 Goepfert, E. 1897 A, 247 (Anguis).  
 Hanson, F. B. 1919 B, 71 (Anguis).  
 Hayek, H. 1924 A, 139, pl. ii (Anguis).  
 Hoffmann, C. K. 1890 B, 1133, 1155, pls. (Anguis).  
 Juhn, M. 1923 A (Anguis).  
 Lakjer, T. 1927 A, 95, 266, 267, fig. 16 (Anguis).  
 Lebedinsky, N. G. 1917 A, 334, figs. 23, 24 (Anguis).  
 Leydig, F. 1890 A, 489 (Anguis).  
 Lydekker, R. 1912 C, 41, 113, 131.  
 Mayer, C. 1824 C, 831 (Anguis).  
 Nopcsa, F. 1903 A, 495 (Anguinidæ).  
 1923 G, 111, 122, 148 ("anguiniden").  
 1923 H, 74 ("anguiniden").  
 1923 A, 176 (Anguinidæ).  
 Nowkoff, M. 1907 A (Anguis).  
 Osborn, H. F. 1909 D, 47.  
 Otto, H. 1908 A, 193-252, fig. 2 (Anguis).  
 Owen, R. 1845 B, 235 ("anguans").  
 Palacký, J. 1899 C, 253, 281 ("anguiden").  
 1902 B, 145 ("anguiden").  
 Scharf, R. F. 1911 A, 202, 231, 348.  
 Schmidt, W. J. 1909 A, 362.  
 1910 A ("anguiden").  
 1912 A, 84 ("anguiden").  
 1912 B, 142 ("anguiden").  
 1914 A, 1 ("anguiden").  
 Seydel, O. 1899 A, 496, fig. 21 (Anguis).  
 Sirena, S. 1872 A, 132 (Anguis).  
 Spencer, W. B. 1886 A, 204 (Anguis).  
 Stehli, G. 1910 A, 748 (Anguis).  
 Thäfer, K. 1910 A, 504.  
 Versluys, J. 1898 A, 212.  
 Williston, S. W. 1925 B, 267 (Anguinidæ).  
 Zimmermann, S. 1913 A, 594 (Anguis).

**GLYPTOSAURUS** Marsh. Type *G. sylvestris* Marsh.

- Hay, O. P. 1902 A, 475.  
 Abel, O. 1926 B, 338.  
 Ameghino, F. 1893 E, 731.  
 1909 B, 94, 97, 110 (Helodermoides).  
 Boulenger, G. A. 1891 D, 116.  
 Camp, C. L. 1923 A, 327, 474, figs. 95, 96 (Glyptosaurus); 327 (Helodermoides).  
 Douglass, E. 1903 A, 160 (Helodermoides; type *H. tuberculatus*).  
 1905 A, 211 (Helodermoides).  
 Gilmore, C. W. 1915 H, 159.  
 1927 G, 3, 7, 9, 90, 91 (Glyptosaurus); 7, 9, 10, 92 (Helodermoides).  
 Matthew, W. D. 1915 A, 289.  
 Nopcsa, F. 1923 H, 76.  
 1923 A, 177.  
 Osborn, H. F. 1909 D, 47, 49.  
 Williston, S. W. 1925 B, 268 (Glyptosaurus, Helodermatoides).  
**Glyptosaurus giganteus** Gilmore.  
 Gilmore, C. W. 1927 G, 8, 10, 94, 95, 119; pl. xiv, fig. 1.  
 Oligocene (White River); Nebraska.  
**Glyptosaurus hillsi** Gilmore.  
 Gilmore, C. W. 1927 G, 8, 10, 94, 95, 107, pl. iv, fig. 3; pl. xvi; text-figs. 62-67.

Hills, R. C. 1889 A, 221 ("Glyptosaurus").  
 Osborn, H. F. 1897 G, 249 ("Glyptosaurus").  
 1909 D, 49 ("Glyptosaurus").  
 1910 B, 129 ("Glyptosaurus").  
 Middle Eocene (Huerfano); Colorado.

### **Glyptosaurus montanus** Douglass.

Douglass, E. 1908 C, 278, figs. 1, 2 (This genus?).  
 Gilmore, C. W. 1915 H, 160.  
 1927 G, 4, 7, 8, 9, 93, 95, 115, text-fig. 72.  
 Lower Oligocene (Titanotherium); Montana.

### **Glyptosaurus nodosus** Marsh.

Hay, O. P. 1902 A, 475.  
 Douglass, E. 1908 C, 282.  
 Gilmore, C. W. 1915 H, 160.  
 1927 G, 3, 6, 8, 9, 94, 104, pl. xiv, figs. 2-5.  
 Nopcsa, F. 1908 A, 40.  
 Middle Eocene (Bridger); Wyoming.

### **Glyptosaurus obtusidens** Loomis.

Loomis, F. B. 1907 B, 358, 363, fig. 3.  
 Cope, E. D. 1877 K, 42, pl. xxxii, figs. 26, 36 (Placosauidae).  
 Gilmore, C. W. 1927 G, 4, 7, 8, 9, 94, 95, 117, pl. xix, figs. 1, 2 (G. obtusidens); pl. xx, figs. 12-12) (Placosauidae).  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

### **Glyptosaurus princeps** Marsh.

Hay, O. P. 1902 A, 475.  
 Douglass, E. 1908 C, 282.  
 Gilmore, C. W. 1915 H, 160.  
 1927 G, 6, 8, 9, 94, 95, 102, pl. xv, figs. 1, 3, 4, 7, 8.  
 Nopcsa, F. 1908 A, 40.  
 Middle Eocene (Bridger); Wyoming.

### **Glyptosaurus rugosus** Marsh.

Hay, O. P. 1902 A, 475.  
 Boulenger, G. A. 1891 A, 116.  
 1891 D, 116.  
 Douglass, E. 1908 C, 282.  
 Gilmore, C. W. 1915 H, 160.  
 1927 G, 6, 8, 9, 94, 95, 104, pl. xvi.  
 Nopcsa, F. 1908 A, 40.  
 Middle Eocene (Bridger); Wyoming.

### **Glyptosaurus sphenodon** Marsh.

Hay, O. P. 1902 A, 475.  
 Douglass, E. 1908 C, 283.  
 Gilmore, C. W. 1915 H, 160.  
 1927 G, 6, 8, 9, 94, 95, 106, pl. xviii, figs. 12, 13.  
 Nopcsa, F. 1908 A, 40.  
 Middle Eocene (Bridger); Wyoming.

### **Glyptosaurus sylvestris** Marsh.

Hay, O. P. 1902 A, 475 (G. sylvestris, G. ocellatus).  
 Douglass, E. 1908 C, 281 (G. sylvestris, G. brevidens, G. ocellatus).  
 Gilmore, C. W. 1915 H, 160 (G. anceps, G. sylvestris, G. brevidens, G. ocellatus).  
 1927 G, 3, 6, 8, 9, 46, 94, 95, 96, pl. iv, fig. 4; pls. xii-xiv; text-fig. 61 (G. sylvestris); 3, 9, 96 (G. ocellatus); 6, 96 (G. brevidens).  
 Nopcsa, F. 1908 A, 40 (G. sylvestris, G. brevidens, G. ocellatus).  
 Middle Eocene (Bridger); Wyoming.

### **Glyptosaurus tuberculatus** (Douglass).

Douglass, E. 1903 A, 149, 160, figs. 4, 5 (Helodermoides).  
 1908 C, 280 (Helodermoides).  
 Gilmore, C. W. 1927 G, 3, 9, 94, 95, 113, pl. xviii, figs. 1-11; text-figs. 68, 69 (Glyptosaurus); 7, 9, 113 (Helodermoides).  
 Nopcsa, F. 1908 A, 40 (Helodermoides).  
 Oligocene (Pipestone Creek beds, White River); Montana.

### **Glyptosaurus sp. indet.**

Gilmore, C. W. 1915 H, 159, 160. Upper Eocene (Uinta); Utah.  
 1927 G, 94, 119. Oligocene (Lower White River); Canada: Eocene (Upper Uinta); Utah: Eocene (Wind River); Wyoming: Eocene (Upper Huerfano, Pawnee Creek); Colorado: Oligocene (Cypress Hills); Saskatchewan.  
 Sinclair and Granger 1911 A, 91. Eocene (Wind River); Wyoming.

## **PELTOSAURUS** Cope. Type *P. granulatus* Cope.

Hay, O. P. 1902 A, 475.  
 Gilmore, C. W. 1926 K, 229.  
 1927 G, 7, 9, 90, 93, 120, text-fig. 96.  
 Matthew, W. D. 1915 A, 289.  
 Nopcsa, F. 1928 A, 177.  
 Seeley, H. G. 1886 A, 512.

### **Peltosaurus abbotti** Gilmore.

Gilmore, C. W. 1927 G, 8, 10, 121, 131, 135, pl. xxii, figs. 1, 2; text-fig. 83.  
 Oligocene (White River); South Dakota.

### **Peltosaurus granulatus** Cope.

Hay, O. P. 1902 A, 475.  
 Douglass, E. 1908 C, 284, figs. 6-8 (This species?).  
 Gilmore, C. W. 1926 K, 229, pl. xv.  
 1927 G, 6, 8, 9, 93, 121, 122, pl. xx, figs. 1-9; pl. xxii, fig. 3; text-figs. 73, 75-79, 82.  
 Lambe, L. M. 1905 D, 366 A.  
 1908 A, 9, 19, pl. i, figs. 23-25.  
 Nopcsa, F. 1908 A, 44.  
 Sinclair, W. J. 1924 A, 132.  
 Oligocene (White River); Colorado, South Dakota, Nebraska.

**Peltosaurus? piger** Gilmore.

Gilmore, C. W. 1927 G, 8, 10, 121, 136, pl. xxvi, figs. 4-6a; text-fig. 85.  
Upper Cretaceous (Lance); Wyoming.

**Peltosaurus** sp. indet.

Gilmore, C. W. 1927 G, 137. Paleocene (Fort Union); Montana: (Torrejon); New Mexico: Oligocene (Cypress Hills); Saskatchewan.

**MELANOSAURUS** Gilmore. Type *M. maximus* Gilmore.

Gilmore, C. W. 1927 G, 8, 11, 93, 133.

**Melanosaurus maximus** Gilmore.

Gilmore, C. W. 1927 G, 8, 10, 93, 133, pl. xv, fig. 2; pls. xxiii, xxiv; text-figs. 86-92, 94, 95.  
Lower Eocene (Wasatch); Wyoming.

**XESTOPS** Cope. Type *Oreosaurus vagans* Marsh.

Hay, O. P. 1902 A, 475.

Camp, C. L. 1923 A, 327, 329, figs. 1, 94, 101-103, 106, 107, 109-111.

Gilmore, C. W. 1927 G, 7, 10, 90, 93, 144, text-fig. 96.

Nopcsa, F. 1928 A, 177.

**Xestops? gracilis** (Marsh).

Hay, O. P. 1902 A, 475.

Gilmore, C. W. 1927 G, 6, 8, 10, 144, 146, pl. ii, figs. 5-10.

Nopcsa, F. 1908 A, 48.

Middle Eocene (Bridger); Wyoming.

**Xestops? lentus** (Marsh).

Hay, O. P. 1902 A, 475.

Gilmore, C. W. 1927 G, 6, 8, 10, 144, 149, pl. ii, figs. 13, 13a.

Nopcsa, F. 1908 A, 48.

Middle Eocene (Bridger); Wyoming.

**Xestops? microdus** (Marsh).

Hay, O. P. 1902 A, 475.

Gilmore, C. W. 1927 G, 6, 8, 10, 144, 148, pl. ii, figs. 2, 3.

Nopcsa, F. 1908 A, 48.

Middle Eocene (Bridger); Wyoming.

**Xestops? minutus** (Marsh).

Hay, O. P. 1902 A, 475.

Gilmore, C. W. 1927 G, 6, 8, 10, 144, 147, pl. ii, figs. 11, 12.

Nopcsa, F. 1908 A, 48 (*X. munitis*).

Middle Eocene (Bridger); Wyoming.

**Xestops? pawneensis** Gilmore.

Gilmore, C. W. 1927 G, 8, 10, 144, 150.

Oligocene (White River); Colorado.

**Xestops vagans** (Marsh).

Hay, O. P. 1902 A, 475.

Gilmore, C. W. 1927 G, 6, 8, 10, 144, 145, pl. xix, figs. 3-11.

Nopcsa, F. 1908 A, 48.

Middle Eocene (Bridger); Wyoming.

## SAURIA OF UNDETERMINED FAMILIES.

**ALETHESAURUS** Gilmore. Type *A. quadratus* Gilmore.

Gilmore, C. W. 1927 G, 9, 162.

**Alethesaurus quadratus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 162, pl. xxvi, fig. 13.

Upper Cretaceous (Lance); Wyoming.

**CREMASTOSAURUS** Cope. Type *C. carinicollis* Cope.

Hay, O. P. 1902 A, 477.

Broih, F. 1908 E, 297.

Gilmore, C. W. 1927 G, 7, 9, 151.

Williston, S. W. 1925 B, 274.

**Crematosaurus carinicollis** Cope.

Hay, O. P. 1902 A, 477.

Gilmore, C. W. 1927 G, 6, 9, 34, 151, pl. xxv, figs. 3-8c.

Nopcsa, F. 1908 A, 38.

Seeley, H. G. 1886 A, 513.

Oligocene (White River); Colorado.

**Crematosaurus rhambastes** (Cope).

Hay, O. P. 1902 A, 477 (Platyrrhachis).

Gilmore, C. W. 1927 G, 10, 152, pl. xxv, figs. 8-8c (*Crematosaurus*); 6, 9, 10, 34, 152 (Platyrrhachis).

Nopcsa, F. 1908 A, 44 (Platyrrhachis rhambastes).

Oligocene (White River); Colorado.

**Crematosaurus unipedalis** (Cope).

Hay, O. P. 1902 A, 477 (Platyrrhachis).

Gilmore, C. W. 1927 G, 9, 153, pl. xxvi, figs. 1-1b (*Crematosaurus*); 6, 9, 10, 34, 152 (Platyrrhachis); 9, 153 (Diacium).

Nopcsa, F. 1908 A, 44 (Platyrrhachis).

Oligocene (White River); Colorado.



CTENIOGENYS Gilmore. Type *C. antiquus* Gilmore.

Gilmore, C. W. 1927 G, 9, 162.

**CtenioGENYS antiquus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 162, pl. xx, figs. 13, 14.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

DIACIUM Cope. Type *D. quinquepedale* Cope.

Hay, O. P. 1902 A, 477.

Broili, F. 1908 E, 297.

Gilmore, C. W. 1927 G, 7, 9, 153.

Williston, S. W. 1925 B, 274.

**Diacium quinquepedale** Cope.

Hay, O. P. 1902 A, 477.

Gilmore, C. W. 1927 G, 6, 9, 34, 154, pl. xxv, figs. 2-2c.

Nopcsa, F. 1908 A, 38.

Seeley, H. G. 1886 A, 513.

Oligocene (White River); Colorado

HABROSAURUS Gilmore. Type *H. dilatus* Gilmore.

Gilmore, C. W. 1927 G, 9, 161.

**Habrosaurus dilatus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 161, pl. xxvi, figs. 7, 9; text-fig. 106.

Upper Cretaceous (Lance); Wyoming.

HARPAGOSAURUS Gilmore. Type *H. parvus* Gilmore.

Gilmore, C. W. 1927 G, 9, 156.

**Harpagosaurus excedens** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 157, text-figs. 99, 100.

Paleocene (Fort Union); Montana.

**Harpagosaurus parvus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 156, text-fig. 98.

Upper Cretaceous (Lance); Wyoming.

LANCEOSAURUS Gilmore. Type *L. hatcheri* Gilmore.

Gilmore, C. W. 1927 G, 9, 160.

**Lanceosaurus compressus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 161, text-fig. 105.

Upper Cretaceous (Lance); Wyoming.

**Lanceosaurus hatcheri** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 160, pl. xxvi, fig. 8; text-fig. 104.

Upper Cretaceous (Lance); Wyoming.

MACHÆROSAURUS Gilmore. Type *M. torreonensis* Gilmore.

Gilmore, C. W. 1927 G, 9, 155.

**Machærosaurus torreonensis** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 155, pl. iv, fig. 5.

Paleocene (Torreon); New Mexico.

MEGASAURUS Gilmore. Type *M. robustus* Gilmore.

Gilmore, C. W. 1927 G, 9, 157.

**Megasaurus robustus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 157, pl. xxvii, figs. 1, 1a.

Upper Cretaceous (Lance); Wyoming.

NAOCEPHALUS Cope. Type *N. porrectus* Cope.

Cope, E. D. 1872 NN, 6.

Hay, O. P. 1902 A, 477.

Gilmore, C. W. 1927 G, 9, 154.

Nopcsa, F. 1908 A, 43.

1923 H, 76.

Williston, S. W. 1925 B, 274.

**Naocephalus porrectus** Cope.

Cope, E. D. 1872 NN, 6.

Hay, O. P. 1902 A, 477.

Gilmore, C. W. 1927 G, 1, 6, 9, 34, 154.

Nopcsa, F. 1908 A, 43.

Middle Eocene (Bridger); Wyoming.

ODAXOSAURUS Gilmore. Type *O. obliquus* Gilmore.

Gilmore, C. W. 1927 G, 9, 158.

**Odaxosaurus obliquus** Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 158, pl. xxvi, figs. 3, 5; text-figs. 101, 102.

Upper Cretaceous (Lance); Wyoming.

PRIONOSAURUS Gilmore. Type *P. regularis* Gilmore.

Gilmore, C. W. 1927 G, 9, 159.

*Prionosaurus regularis* Gilmore.

Gilmore, C. W. 1927 G, 9, 10, 159, pl. xxvi, fig. 1; text-fig. 103.

Upper Cretaceous (Lance); Wyoming.

## Suborder MOSASAURIFORMES, new name.

- Hay, O. P. 1902 A, 464 (Pythonomorpha).  
 Abel, O. 1904 B, 741 (Pythonomorpha).  
 1905 B, 203 ("mosasauriens").  
 1907 A, 226 ("pythonomorphen").  
 1907 G, 16, fig. 10 ("mosasaurier").  
 1908 E, 406 ("pythonomorphen").  
 1908 G, (44) ("pythonomorphen").  
 1910 B, (186) (Pythonomorpha).  
 1912 F, 123, 460, 686 ("mosasaurier"); 159 ("pythonomorphen").  
 1919 A, 666 (Mosasauria).  
 1920 A, 397 (Mosasauria).  
 1921 A, 222 ("mosasaurier").  
 1922 C, 306 ("mosasaurier").  
 Anderson, R. J. 1912 D, 251 (Pythonomorpha).  
 Arldt, T. 1907 D, 678 (Pythonomorpha).  
 Arthaber, G. 1906 A, 319 ("pythonomorphen").  
 Bardeleben, K. 1901 A, 46 ("mosasaurier").  
 Baur, G. 1889 L, 312 (Mosasauria).  
 Beard, J. C. 1901 B, 267 ("mosasaur").  
 Boas, J. E. V. 1914 B, 560 ("mosasaurier").  
 Bogolubow, N. 1910 A, 8 ("mosasauriens").  
 Boule, M. 1891 A, 10 ("mosasauriens").  
 1902 B, 906 ("mosasauriens").  
 Boulenger, G. A. 1891 D, 117 (Pythonomorpha).  
 1893 B, 205 (Pythonomorpha).  
 1917 D, 1045 ("mosasaur").  
 Brauns, D. 1890 A, 151, 202 (Pythonomorpha).  
 Broom, R. 1901 A, 188 (Pythonomorpha).  
 1913 C, 507 ("mosasaur").  
 1924 B, 64, fig. 13 (Pythonomorpha).  
 Camp, C. L. 1923 A, 297, 300, 322, etc. (Mosasauriodes).  
 Camper, A. 1812 A, 215, pls. i-iii ("sauroïdes de Maestricht").  
 Case, E. C. 1898 C, 718 ("mosasaur").  
 1905 E, 179 ("mosasaur").  
 Cope, E. D. 1880 U, 146 ("pythonomorphes").  
 1891 N, 45, 50 (Pythonomorpha).  
 Dames, W. 1899 D, 552 ("mosasaurier").  
 Depéret, C. 1907 B ("pythonomorphes").  
 Diener, C. 1909 A, 41 ("pythonomorphen").  
 Döderlein, L. 1900 A, 335 (Pythonomorpha).  
 Dollo, L. 1889 K, 271 ("mosasauriens").  
 1903 B, 137 ("mosasauriens").  
 1904 A, 207 ("mosasauriens").  
 1904 B, 217 ("mosasauriens").  
 1909 A, 106 ("mosasaur").  
 1913 B, 615 ("mosasauriens").  
 1924 A, 172, 184, 187, 196 ("mosasauriens").  
 Duncan, P. M. 1878 A, 752 ("mosasaur").  
 Fejérváry, G. J. 1918 A, 434 (Mosasauria).  
 Fraas, E. 1901 B, cxxvi ("pythonomorphen").  
 1902 B, 6 ("pythonomorphen").  
 1905 B, 373 ("mosasaurier").  
 Frech, F. 1906 A, 494 ("mosasaurier").  
 Fuchs, H. 1908 C, 213 ("pythonomorphen").  
 1909 B, 149 (Mosasauria).  
 Fürbringer, M. 1900 A (Mosasauria).  
 1904 A, 585 (Mosasauria).  
 Gadow, H. 1901 B, 487 (Pythonomorpha); 489 (Mosasauria).  
 1902 B, 359 (Pythonomorpha).  
 1914 A, 503 ("pythonomorphs").  
 Gaupp, E. 1911 C, 445 ("pythonomorphen").  
 1912 B, 233 ("pythonomorphen").  
 1913 A, 58 ("mosasaurier").  
 Gervais, P. 1859 A, 461 ("mosasauridés").  
 Gill, T. 1881 A, 376 ("mosasauroids").  
 Gilmore, C. W. 1927 G, 14, 73, 86, 87 (Mosasauroides).  
 Goodrich, E. S. 1916 A, 264 (Pythonomorpha).  
 Heilprin, A. 1887 A, 169, 172 (Pythonomorpha).  
 Hoernes, R. 1886 A, 608 (Pythonomorpha).  
 1912 A, 661 (Pythonomorpha).  
 Howes and Swinnerton 1901 A, 29, 69 (Mosasauria).  
 Huene, F. 1910 B, 50 ("mosasaurier").  
 1910 D, 313 ("mosasauriden").  
 1914 G, 47, pl. vii ("mosasaurier").  
 Hutchinson, H. N. 1910 A, 187 ("sea-serpents").  
 Jaekel, O. 1902 A, 110 ("mosasaurier").  
 1905 B, 61 (Mosasauria).  
 1908 B, 464 ("mosasaurier").  
 1910 C, 336 (Mosasauria).  
 1911 A, 154 (Mosasauria).  
 1913 C, 14 ("mosasaurier").  
 Janensch, W. 1906 A, 30 ("pythonomorphen").  
 Juhn, M. 1923 A, 71 (Mosasauria).  
 Kingsley, J. S. 1905 A, 62 ("mosasaur").  
 1912 B, 93 ("pythonomorpha").  
 1925 A, 186 (Pythonomorpha).  
 Koken, E. 1901 B, 221 ("mosasaurier").  
 Lavocat, A. 1885 A, 34 ("mosasaur").  
 Lydekker, R. 1912 C, 4, 106, 132 (Pythonomorpha).  
 Matthew, W. D. 1916 C, 519 ("mosasaur").  
 Merriam, J. C. 1912 B, 222 (Mosasauria).  
 Moodie, R. L. 1907 A, 91 (Mosasauria).  
 1923 B, 563 ("mosasaur").  
 1926 A, 90 ("mosasaur").  
 Nopcsa, F. 1903 A, 119 ("mosasaur").  
 1903 C, 38 (Pythonomorpha).  
 1922 A, 115 ("mosasaurier").  
 1923 B, 357 ("mosasaurier").  
 1923 G, 109, 110, 111, 140.  
 1923 H, 1, 2, 8, 56, 73, 75, 76, 163, 181 (Pythonomorpha); 124 (Pythonomorphidae); 4, 76, 113, 162 (Mosasauria).  
 1926 A, 638 (Mosasauria).  
 Osborn, H. F. 1903 H, 456 (Mosasauria).  
 1904 H, 114 (Mosasauria).  
 1905 C, 295 (Mosasauria).  
 1905 N, 240 (Mosasauria).  
 1912 J, 5 ("mosasaur").  
 1917 B, 201, 209 (Mosasauria).  
 Osburn, R. C. 1906 A, 448 (Mosasauria).

- Palacký, J. 1902 B, 141 (Pythonomorphi).  
 Parker and Haswell 1897 A, 312, 349 (Pythonomorpha).  
 Pompeckj, J. F. 1910 A, 127 (Mosasauria).  
 1925 A, 6, 10 ("mosasaurier").  
 Reynolds, S. H. 1897 A, 204, 273, 284, 287, 290 (Pythonomorpha).  
 Rogenhofer, A. 1908 A, (44) ("pythonomorphen").  
 Schwarz, H. 1908 B, 100 ("mosasaurier").  
 Seeley, H. G. 1878 C, 752 ("mosasaurians").  
 Sewertsoff, A. N. 1908 A, 300 (Mosasauria).  
 Steinmann, G. 1907 A, 442 (Thalattosauria).  
 1908 A, 235, 239 (Mosasauria); 237, 239 (Thalattosauria).  
 1912 A, 49 ("mosasaurier").  
 Stremme, H. 1909 A, 505 ("pythonomorphen").  
 Stromer, E. 1912 A, 76 (Mosasauria).  
 Thyng, F. W. 1906 A, 58 (Pythonomorpha).  
 Versluys, J. 1912 A, 491 ("mosasaurier").  
 1912 B, 631, 687 (Mosasauria).  
 Watson, D. M. S. 1919 A, 293 ("mosasaurs")
- Wegner, R. N. 1922 A, 489 (Mosasauria).  
 Williston, S. W. 1893 D, 110 ("mosasaurs").  
 1902 F, 261 (Mosasauria).  
 1903 A, 26 (Pythonomorpha).  
 1904 A, 43, 48 (Mosasauria).  
 1914 A, 17, 45, 148 ("mosasaurs").  
 1915 C, 371 ("mosasaurs").  
 1917 C, 412 (Mosasauria).  
 1918 A, 79 (Mosasauria).  
 1925 A, *passim* (Mosasauria).  
 1925 B, 212, 272 (Pythonomorpha).  
 Woodward, A. S. 1897 C, 380 (Pythonomorpha).  
 1898 E, 330 (Pythonomorpha).  
 1909 A, 327 (Mosasauria).  
 1910 B,\* 467 (Mosasauria).  
 1922 C, 4 (Mosasauria).  
 1923 A, 33 ("mosasaurians").  
 Zittel and Broili 1911 A, 21 (Mosasauria).  
 1923 A, 258 (Mosasauria).  
 Zittel and Eastman, etc. 1902 A, 152 (Pythonomorpha).

## MOSASAURIDÆ.

- Hay, O. P. 1902 A, 464.  
 Arltdt, T. 1907 D, 666.  
 Beard, J. C. 1901 B, 267.  
 Boulenger, G. A. 1891 D, 113, 116.  
 1893 B, 205.  
 Camp, C. L. 1923 A, 297, 301, 333.  
 Dames, W. 1883 C, 270.  
 Dollo, L. 1884 E, 68.  
 1923 A, 80 ("mosasauriens").  
 1924 A, 188.  
 Douglass, E. 1902 C, 212 ("mosasaurs").  
 Gervais, P. 1859 A, 461 ("mosasauridés").  
 Gilmore, C. W. 1926 L, 191.  
 Huene, F. 1922 D, 278 ("mosasauriden").
- Lucas, F. A. 1901 J, 50 ("mosasaurs").  
 Marsh, O. C. 1872 U, 20 ("Mosasaurus").  
 Matthew, W. D. 1921 D, 211.  
 Nopcsa, F. 1903 C, 39.  
 1908 A, 56 ("mosasauriden").  
 1926 A, 638.  
 1928 A, 177.  
 Sauvage, H. E. 1901 B, 9 ("mosasaurs").  
 Tornier, G. 1913 B, 345, 347.  
 Williston, S. W. 1925 A, 70.  
 Zittel and Broili 1911 A, 211.  
 1923 A, 258.  
 Zittel, Eastman, etc. 1902 A, 157.

## TYLOSAURINÆ Williston.

- Hay, O. P. 1902 A, 471.  
 Case, E. C. 1898 C, 719.  
 Dames, W. 1899 D, 552.  
 Dollo, L. 1924 A, 198.
- Sauvage, H. E. 1901 B, 11.  
 Williston, S. W. 1902 F, 263.  
 Zittel, Eastman, etc. 1902 A, 157.

TYLOSAURUS Marsh. Type *T. micromus* Marsh.

- Hay, O. P. 1902 A, 471.  
 Abel, O. 1912 F, 123, fig. 66.  
 1919 A, 677.  
 Bogolubow, N. 1910 A, 8 (Liodon).  
 Boule, M. 1902 B, 906, fig. 6.  
 Broili, F. 1926 C, 33.  
 Camp, C. L. 1923 A, 823.  
 Case, E. C. 1898 C, 719.  
 Dames, W. 1899 D, 552.  
 Darton, N. H. 1915 A, 47, pl. v.  
 Dollo, L. 1889 K, 275, 281.  
 1909 A, 106.  
 Drevermann, F. 1914 A, 41, fig. 6.  
 Fraas, E. 1905 B, 373.  
 Howes, G. B. 1902 A, 525.  
 Huene, F. 1910 D, 297.  
 1925 D, 234.  
 Janensch, W. 1906 A, 31.  
 Lee, Stone, Gale 1915 A, pl. v, fig. B.  
 Lucas, F. A. 1901 F, 435, 490, pl. iv.  
 Lull, R. S. 1919 A, 223.
- Nopcsa, F. 1903 C, 38, pl. v, fig. 9; pl. vi, figs. 3, 11.  
 1908 A, 56, fig. 2.  
 1923 E, 1051, fig. 8.  
 1923 H, 163.  
 1926 A, 657.  
 Osborn, H. F. 1917 B, 200, 209, 210, figs. 1913 D, 633.  
 1919 A, 71.  
 Osburn, R. C. 1906 A, 450.  
 Pompeckj, J. F. 1910 A, 133.  
 Rogers, A. F. 1924 A, 545.  
 Sauvage, H. E. 1901 B, 9, 10.  
 1902 B, 11.  
 Schuchert and Levene 1927 A, 305, fig.  
 Sternberg, C. H. 1881 B, 3 (Leiodon).  
 1899 C, 259.  
 1905 A, 126.  
 1917 A, 13, 160, fig. 5 ("tylosaur").  
 Williston, S. W. 1893 L, 32.  
 1902 F, 261, 263.

- Williston, S. W. 1907 A, 484.  
 1908 H, 163.  
 1911 B, 46.  
 1914 A, 153, 166, figs. 70, 72, 75, 78, 79.  
 1925 A, 67, 180, 193, 199, fig. 54.  
 1925 B, 272.

- Wiman, C. 1920 A, 12.  
 Zittel and Broili 1911 A, 217.  
 1923 A, 255, 265.

**Tylosaurus congrops (Cope).**

- Hay, O. P. 1902 A, 472.  
 Upper Cretaceous (Selma?); Alabama.

**Tylosaurus dyspeler (Cope).**

- Hay, O. P. 1902 A, 472.  
 Abel, O. 1909 F, 468, fig. 7.  
 1912 F, 123.  
 1919 A, 665, figs. 521, 523, 526, 531.  
 1920 A, 399, figs. 619, 620.  
 1922 C, 308, 313, figs. 260, 267, 263.  
 Camp, C. L. 1923 A, 413.  
 Fejérváry, G. J. 1918 A, 436, figs. 25, 27.  
 Gaupp, E. 1913 A, 97, fig. 53.  
 Huene, F. 1909 F, 586, fig. 4.  
 1910 D, 298, pls. i, ii; text-figs. 1-11.  
 1919 A, 133, pl. viii, fig. 1.  
 Lambe, L. M. 1914 H, 402.  
 Lucas, F. A. 1901 J, 52, fig. 9.  
 Merrill, G. P. 1907 A, 74 (Liodon); 80 (Tylosaurus).  
 Osborn, H. F. 1904 F, 31, 49.  
 Sauvage, H. E. 1902 B, 11.  
 Sternberg, C. H. 1898 C, 268 ("Tylosaurus").  
 1908 A, 111, fig.  
 1909 C, 49, figs. 8, 9.  
 Williston, S. W. 1910 E, 538.  
 Wiman, C. 1920 A, 14, pl. iv, fig. 6.  
 Upper Cretaceous (Niobrara); Kansas,  
 New Mexico.

**Tylosaurus laticaudus (Marsh).**

- Hay, O. P. 1902 A, 472.  
 Upper Cretaceous; New Jersey.

**MACROSAURUS Owen.**

- Hay, O. P. 1902 A, 471.

**Macrosaurus laevis Owen.**

- Hay, O. P. 1902 A, 471.  
 Upper Cretaceous (Tombigbee or Selma);  
 Mississippi.

**PLATECARPINÆ Williston.**

- Hay, O. P. 1902 A, 468.  
 Case, E. C. 1898 C, 719.  
 Dames, W. 1899 D, 552.

**PLATECARPUS Cope. Type *P. tympaniticus* Cope.**

- Hay, O. P. 1902 A, 469 (Platecarpus); 470 (Lestosaurus).  
 Abel, O. 1919 A, 675.  
 1922 C, 315.  
 Broili, F. 1926 B, 172, fig. 1.  
 Broili and Fischer 1917 A, 407, fig. 10.  
 Broom, R. 1921 A, 155, fig. 27.  
 Camp, C. L. 1923 A, 323.  
 Capps, S. R. 1907 A, 351.  
 Case, E. C. 1898 C, 720.

**Tylosaurus micromus Marsh.**

- Hay, O. P. 1902 A, 472.  
 Williston, S. W. 1902 E, 253 (Rhinosaurus).  
 Upper Cretaceous (Niobrara); Kansas.

**Tylosaurus nepæolicus (Cope).**

- Hay, O. P. 1902 A, 472.  
 Bogulubow, N. 1910 A, 11 (Liodon).  
 Upper Cretaceous (Niobrara); Kansas.

**Tylosaurus perlatus (Cope).**

- Hay, O. P. 1902 A, 472.  
 Upper Cretaceous (Selma?); Alabama.

**Tylosaurus proriger (Cope).**

- Hay, O. P. 1902 A, 472.  
 Ballou, W. H. 1897 A, 23, fig. 21 ("Nectoporus proriger").  
 Bogulubow, N. 1910 A, 10 (Liodon).  
 Cope, E. D. 1869 P, 122 (Macrasaurus proriger).  
 Gilmore, C. W. 1921 B, 274, figs. 1, 2.  
 Lambe, L. M. 1914 H, 402.  
 Merrill, G. P. 1907 A, 80.  
 Osburn, R. C. 1906 A, pl. viii, fig. 25.  
 Pompeckj, J. F. 1910 A, 137.  
 Seitz, A. L. L. 1907 A, 341.  
 Sternberg, C. 1831 B, 3 (Leiodon).  
 1907 C, 122 (Tylosaurus).  
 Stromer, E. 1912 A, 11.  
 Tornier, G. 1913 B, 353, fig. 32.  
 Williston, S. W. 1898 L, 28.  
 1910 E, 538.  
 Upper Cretaceous (Niobrara); Kansas.

**Tylosaurus rapax Hay.**

- Hay, O. P. 1902 A, 473.  
 Upper Cretaceous (Navesink?); New Jersey.

**Tylosaurus sectorius (Cope).**

- Hay, O. P. 1902 A, 473.  
 Upper Cretaceous (Navesink?); New Jersey.

**Type *M. laevis* Owen.**

**Macrosaurus mitchilli (DeKay).**

- Hay, O. P. 1902 A, 471.  
 Upper Cretaceous (Navesink?); New Jersey.

- Dollo, L. 1924 A, 198.  
 Sauvage, H. E. 1901 B, 11.  
 Zittel, Eastman, etc. 1902 A, 157.

- Dames, W. 1899 D, 552.  
 Dollo, L. 1889 K, 276, 282, 288, 297 (Platecarpus); 283, 288, 297 (Lestosaurus).  
 1909 A, 106.  
 Gadow, H. 1901 B, 490.  
 Huene, F. 1911 B, 48.  
 1912 G, 137.  
 Jaekel, O. 1905 C, 145, fig. 13.  
 Loomis, F. B. 1904 B, 254.  
 1915 A, 557 (Platycarpus).

- Lull, R. S. 1919 A, 223.  
 Moodie, R. L. 1923 B, 216, 262, pl. xh.  
 1926 A, 68, 84, 89, 94, pls. xiii, xiv; text-figs. 6, 9.  
 Nopcsa, F. 1903 C, 38, pl. v, fig. 5; pl. vi, fig. 10.  
 1923 E, 1051, figs. 8, 9.  
 1923 G, 111.  
 1923 H, 163.  
 Osborn, H. F. 1904 I, 35.  
 1917 B, 210.  
 1918 D, 683.  
 1919 A, 71.  
 Pompeckj, J. F. 1910 A, 128.  
 Sauvage, H. E. 1901 B, 9.  
 Schwartz, H. 1908 A, 326.  
 1908 B, 100.  
 Steinmann, G. 1908 A, 239, fig. 143.  
 Sternberg, C. H. 1899 C, 269.  
 1905 A, 126.  
 1909 C, 51.  
 Tornier, G. 1913 B, 347, fig. 20.  
 Williston, S. W. 1902 E, 247, 250.  
 1904 B, 177, text-fig. 7.  
 1907 A, 484.  
 1908 H, 163.  
 1910 E, 537.  
 1911 B, 46.  
 1914 A, 151, 166, figs. 69, 72, 73, 76, 77.  
 1918 A, 79, fig. 3.  
 1925 A, 71, 103, 151, 180, 193, 199, figs. 57, 80, 123, 147, 158.  
 1925 B, 272, 273, fig. 184.  
 Zittel and Broili 1911 A, 217.  
 1923 A, 261, 264, fig. 366.  
 Zittel and Eastman 1902 A, 157.
- Platecarpus brachycephalus Loomis.**  
 Loomis, F. B. 1915 A, 556, figs. 1-9.  
 Upper Cretaceous (Pierre); Wyoming.
- Platecarpus clidastoides (Merriam).**  
 Hay, O. P. 1902 A, 469 (Lestosauros).  
 Upper Cretaceous; Kansas.
- Platecarpus coryphæus Cope.**  
 Hay, O. P. 1902 A, 469 (Lestosauros).  
 Abel, O. 1922 C, 307, 312, figs. 259, 265.  
 Camp, C. L. 1923 A, 413.  
 Drevermann, F. 1914 A, 43, fig. 8.  
 Huene, F. 1911 B, 49.  
 1919 A, 183, pl. viii, fig. 2.  
 Kingsley, J. S. 1905 A, 63, fig. 3.  
 Lambé, L. M. 1914 H, 399, 401, 402, pl. i.  
 Merrill, G. P. 1907 A, 73 (Lestosauros).  
 Moodie, R. L. 1918 C, 234, figs. 15-19.  
 1923 B, 169, pls. xxxix, xl, xlviii.  
 Osborn, R. C. 1906 A, pl. viii, fig. 22.  
 Pompeckj, J. F. 1910 A, 137.  
 Seitz, A. L. L. 1907 A, 335.  
 Steinmann, G. 1907 A, 444, fig. 780.  
 1909 A, 83, fig. 15.  
 Sternberg, C. H. 1905 A, 127.  
 1907 C, 122.  
 1908 A, 113.  
 1909 C, 50, 204, fig. 10.  
 1911 A, 71.  
 1918 A, 205.  
 Williston, S. W. 1902 E, 248, pl. xii, fig. 1.
- Williston, S. W. 1910 E, 538.  
 Wiman, C. 1920 A, 10, pls. iii, iv, figs. 7, 8; text-fig. 2.  
 Woodward, A. S. 1922 C, 5, fig. 2.  
 Zittel and Broili 1911 A, 216, fig. 355.  
 1923 A, 260, 263, figs. 364, 371.  
 Zittel, Eastman, etc. 1902 A, 158, figs. 244, 249, 250.  
 Upper Cretaceous (Niobrara, Pierre?); Kansas.
- Platecarpus crassartus Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Pierre); Kansas.
- Platecarpus curtirostris Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus felix (Marsh).**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Williston, S. W. 1902 E, 253 (Syn.? of *P. coryphæus*).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus glandiferus Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara, Pierre?); Kansas.
- Platecarpus gracilis (Marsh).**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Williston, S. W. 1902 A, 253.  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus ictericus Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Camp, C. L. 1923 A, 413.  
 Osborn, R. C. 1906 A, pl. viii, fig. 28.  
 Pompeckj, J. F. 1910 A, 137.  
 Wiman, C. 1920 A, pl. iv, fig. 7.  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus latifrons (Marsh).**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus? latispinus Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Loomis, F. B. 1915 A, 557 (This genus?).  
 Upper Cretaceous (Pierre?); Wyoming.
- Platecarpus mudgei Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus oxyrhinus Merriam.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus planifrons Cope.**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Upper Cretaceous (Niobrara); Kansas.
- Platecarpus simus (Marsh).**  
 Hay, O. P. 1902 A, 470 (Lestosauros).  
 Frassetto, F. 1915 A, 7, fig. 3.  
 Koken, E. 1893 B, 431 (Lestosauros).

Williston, S. W. 1902 E, 253 (*Lestosaurus*.  
Syn. of *P. ictericus*).  
Zittel and Broili 1911 A, 215, fig. 353. .  
1923 A, 263, fig. 369.  
Upper Cretaceous (Niobrara); Kansas.

**Platecarpus tectulus** Cope.

Hay, O. P. 1902 A, 471 (*Lestosaurus*).  
Loomis, F. B. 1915 A, 557.  
Upper Cretaceous (Pierre); Kansas, Wyoming?.

**Platecarpus tympaniticus** Cope.

Hay, O. P. 1902 A, 469.  
Upper Cretaceous (Tombigbee sand?);  
Mississippi.

**Platecarpus** sp. indet.

Broom, R. 1913 C, 508, figs. 1, 2.  
Williston, S. W. 1902 E, 252, pl. xiii. Upper  
Cretaceous (Niobrara); North Dakota.

**HOLCODUS** Gibbes. Type *H. acutidens* Gibbes.

Hay, O. P. 1902 A, 469.

**Holcodus acutidens** Gibbes.

Hay, O. P. 1902 A, 469.  
Upper Cretaceous; Alabama, Mississippi?;  
South Carolina?

**ANCYLOCENTRUM** Schmidt. Type *Brachysaurus overtoni* Williston.

Schmidt, K. P. 1927 A, 59.  
Hay, O. P. 1902 A, 471 (*Brachysaurus*).  
Dames, W. 1899 D, 552 (*Brachysaurus*).  
Matthew, W. D. 1915 J, 153 (*Brachiosaurus*).  
Williston, S. W. 1897 D, 95 (*Brachysaurus*,  
preoccupied).  
1925 B, 273 (*Brachysaurus*).  
Zittel and Broili 1911 A, 217 (*Brachysaurus*).  
1923 A, 265 (*Brachysaurus*).  
Zittel, Eastman, etc. 1902 A, 159 (*Brachysaurus*).

**Ancylocentrum overtoni** (Williston).

Hay, O. P. 1902 A, 471 (*Brachysaurus*).  
Osborn, R. C. 1906 A, pl. viii, fig. 24 (*Brachysaurus*).  
Rogers, A. F. 1924 A, 545 (*Brachysaurus*).  
Schmidt, K. P. 1927 A, 59 (*Ancylocentrum*)  
Upper Cretaceous (Pierre); Kansas.

**HOLOSARUS** Marsh. Type *H. abruptus* Marsh.

Hay, O. P. 1902 A, 471.  
Dollo, L. 1889 K, 276, 283, 288, 298.  
Williston, S. W. 1902 E, 247, 248.  
1903 H, 163.  
1910 E, 537 (*Platecarpus*).  
Zittel and Broili 1911 A, 217.  
1923 A, 264.  
Zittel, Eastman, etc. 1902 A, 158.

**Holosaurus abruptus** Marsh.

Hay, O. P. 1902 A, 471.  
Abel, O. 1912 F, 161, figs. 105, 106 (*Platecarpus*).  
1919 A, 673, fig. 530 (*Platecarpus*).  
1922 C, 311, figs. 263, 264 (*Platecarpus*).  
Capps, S. R. 1907 A, 350, figs. 1-3.  
Huene, F. 1911 B, 50 (*Platecarpus*).  
Williston, S. W. 1904 A, 50.  
1910 E, 537, fig. 1 (*Platecarpus*).  
1914 A, 151, fig. 69 (*"Platecarpus"*).  
Upper Cretaceous (Niobrara); Kansas.

**MOSASAURINÆ** Williston.

Hay, O. P. 1902 A, 464.  
Case, E. C. 1898 C, 720.  
Dames, W. 1899 D, 552.

Dollo, L. 1924 A, 198.  
Sauvage, H. E. 1901 B, 11.  
Zittel, Eastman, etc. 1902 A, 159.

**MOSASAURUS** Conybeare. Type *M. belgicus* Holland.

Hay, O. P. 1902 A, 464.  
Abel, O. 1907 A, 227.  
1909 F, 467.  
1912 F, 123, 159, 427, 461, 686, fig. 70.  
1914 B, 20, fig. 3.  
1914 C, 371, fig. 8.  
1919 A, 672, 675.  
1922 C, 309, 315, fig. 261.  
Boule, M. 1891 A, 10.  
Boulenger, G. A. 1891 D, 114.  
Bronn, H. G. 1848 A, 745.  
1849 A, 693.  
Broom, R. 1921 A, 155, fig. 26.  
Camp, C. L. 1923 A, 322.

Camper, A. 1812 A, 215, pls. 1-11 (*"sauroides de Maestricht"*).  
Cope, E. D. 1880 U, 147.  
Cuvier, G. 1825 A, v, pt. 2, 310 (*"saurien"*).  
Dames, W. 1893 C, 270.  
1899 D, 552, 553.  
Dollo, L. 1889 K, 276, 282, 288, 294.  
1904 A, 212.  
1905 A, 129.  
1913 B, 615.  
1919 A, 16, fig.  
1924 A, 179, 184.  
Fraas, E. 1905 B, 373.  
Gadow, H. 1901 B, 489.

- Gervais, P. 1852 A, 261.  
1859 A, 461.
- Giebel, C. G. 1855 A, 92.
- Heilprin, A. 1887 A, 189.
- Hoernes, R. 1886 A, 609.
- Hoffmann, C. K. 1890 B, 1311, 1320.
- Holland, W. J. 1908 C, 162, figs. 1-4.
- Koken, E. 1893 B, 430.  
1901 B, 221.
- Lee, Stone, Gale 1915 A, 20.
- Lucas, F. A. 1902 B, 201.
- Lydekker, R. 1912 C, 102, 106.  
1914 A, 643.
- Mantell, G. A. 1844 A, 754.
- Newberry, J. S. 1878 C, 643.
- Osborn, H. F. 1917 B, 209.
- Owen, R. 1845 B, 258, pl. lxviii, figs. 1, 2.  
1868 A, 894.
- Perrier, E. 1920 A, 326.
- Pompeckj, J. F. 1910 A, 128.
- Pütter, A. 1923 A, 221.
- Reynolds, S. H. 1897 A, 204.
- Sauvage, H. E. 1901 B, 9, 10.
- Schlesinger, G. 1909 A, (141, 142).
- Sertz, A. L. L. 1907 A, 330.
- Serres, M. 1852 A, 114.
- Sternberg, C. H. 1917 A, 164 ("mosasaur").
- Tornier, G. 1913 B, 346, figs. 17, 19.
- Williston, S. W. 1902 F, 263.  
1904 A, 43.  
1906 A, 2.  
1909 A, 398 ("mosasaurs"); 399.  
1925 B, 272.
- Woodward, A. S. 1922 C, 4, fig. 1.
- Zittel and Broili 1911 A, 215.  
1923 A, 261, 264, figs. 365, 370, 372.
- Zittel, Eastman, etc. 1902 A, 159.
- Mosasaurus brumbyi** (Gibbes).  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous; Alabama.
- Mosasaurus carolinensis** Gibbes.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous (Black Creek?); South Carolina.
- Mosasaurus copeanus** Marsh.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus couperi** Gibbes.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous (Tuscaloosa, Eutaw, or Ripley); Georgia.
- Mosasaurus crassidens** Marsh.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous; North Carolina.
- CLIDASTES** Cope. Type *C. iguanavus* Cope.  
Hay, O. P. 1902 A, 466.  
Abel, O. 1912 F, 122, 160, fig. 65.  
1919 A, 675.  
1922 C, 308.

- Mosasaurus dekayi** Bronn.  
Hay, O. P. 1902 A, 465.  
Ballou, W. H. 1897 A, 23.  
Emmons, E. 1858 B, 217, figs. 36-a, 37 (*Mosaurus maximiliani*).  
Upper Cretaceous (Navesink); New Jersey; North Carolina?, South Carolina?.
- Mosasaurus depressus** Cope.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous (Navesink); New Jersey.
- Mosasaurus fulciatus** Cope.  
Hay, O. P. 1902 A, 465.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus horridus** Williston.  
Hay, O. P. 1902 A, 466.  
Beard, J. C. 1901 B, 267, fig.  
Osborn, R. C. 1906 A, pl. viii, fig. 27.  
Pompeckj, J. F. 1910 A, 137.  
Upper Cretaceous (Niobrara); Kansas.
- Mosasaurus maximus** Cope.  
Hay, O. P. 1902 A, 466.  
Sauvage, H. E. 1901 G, 78.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus miersii** Marsh.  
Hay, O. P. 1902 A, 466.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus minor** Gibbes.  
Hay, O. P. 1902 A, 466.  
Upper Cretaceous; Alabama.
- Mosasaurus missouriensis** (Harlan).  
Hay, O. P. 1902 A, 466.  
Dames, W. 1883 C, 271 (*M. maximiliani*).  
Hayden, F. V. 1857, Proc. Acad. Nat. Sci. Phila., 117, 119.  
1871 A, 87.  
Williston, S. W. 1914 A, 151 (*Ichthyosaurus*).  
Upper Cretaceous (Pierre); North Dakota.
- Mosasaurus oarthrus** Cope.  
Hay, O. P. 1902 A, 466.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus princeps** Marsh.  
Hay, O. P. 1902 A, 466.  
Upper Cretaceous (Navesink?); New Jersey.
- Mosasaurus?** sp. indet.  
Hay, O. P. 1902 A, 466.  
Gilmore, C. W. 1912 D, 2. Upper Cretaceous (Fox Hills?); Montana.  
Leonard, A. G. 1912 A, 2. Upper Cretaceous (Fox Hills?); Montana.  
Merrill, G. P. 1907 A, 74. Upper Cretaceous; Alabama.
- Boulenger, G. A. 1891 D, 118, fig. 6 (*Edestosaurus*).  
Camp, C. L. 1923 A, 322.  
Case, E. C. 1898 C, 720.

- Dames, W. 1899 D, 553.  
 Dollo, L. 1889 K, 276, 281, 288, 297 (*Clidastes*);  
 282, 288, 297 (*Edestosaurus*).  
 1909 A, 106.  
 1924 A, 206.  
 Gadow, H. 1901 B, 490.  
 Gaudry, A. 1896 A, 95.  
 Heilmann, G. 1926 A, 55.  
 Heilprin, A. 1887 A, 169.  
 Hoernes, R. 1886 A, 609.  
 Hoffmann, C. K. 1890 B, 1321 (*Edestosaurus*);  
 1322 (*Clidastes*).  
 Kingsley, J. S. 1925 A, 157, fig. 167.  
 Lull, R. S. 1917 B, 332, fig. 69.  
 1919 A, 223.  
 Moodie, R. L. 1923 B, 184, fig. 16.  
 1926 A, 68, 86, 94, pl. xiii; text-fig. 7.  
 Nopce, F. 1903 C, 38, pl. v, fig. 4; pl. vi,  
 fig. 2.  
 1923 G, 111.  
 1923 H, 75, 163.  
 Osborn, H. F. 1917 B, 210.  
 1918 D, 683.  
 1919 A, 71.  
 Perrier, E. 1920 A, 327.  
 Pompeckj, J. F. 1910 A, 128.  
 Steinmann, G. 1907 A, 443, fig. 777.  
 1908 A, 239, figs. 142, 144.  
 1909 A, 84, fig. 16.  
 Sternberg, C. H. 1899 C, 259.  
 1905 A, 126.  
 1917 A, 21.  
 Tornier, G. 1913 B, 346, figs. 17, 18, 24.  
 Williston, S. W. 1893 D, 110.  
 1907 A, 484.  
 1908 H, 163.  
 1911 B, 45.  
 1914 A, 147, 166, figs. 68, 71, 72, 74.  
 1925 A, 67, 71, 112, 180, 193, 199, figs. 54,  
 58, 86, 146, 158.  
 1925 B, 272.  
 Wiman, C. 1920 A, 12.  
 Zittel and Broili 1911 A, 216.  
 1923 A, 264.  
 Zittel, Eastman, etc. 1902 A, 159.

### ***Clidastes cinerearum* Cope.**

- Hay, O. P. 1902 A, 466.  
 Williston, S. W. 1902 E, 250 (*C. cinerianus*).  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes conodon* Cope.**

- Hay, O. P. 1902 A, 467.  
 Upper Cretaceous (Tinton sand?); New  
 Jersey.

### ***Clidastes dispar* (Marsh).**

- Hay, O. P. 1902 A, 467.  
 Anthony, R. 1913 A, 255, fig. 6 (*Edestosaurus*).  
 Frassetto, F. 1915 A, 7, fig. 2.  
 Juhn, M. 1923 A, 71.  
 Sauvage, H. E. 1902 B, 12 (*Tylosaurus*).  
 Williston, S. W. 1902 E, 250 (*Clidastes*); 253  
 (*Edestosaurus*).  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes iguanavus* Cope.**

- Hay, O. P. 1902 A, 467.  
 Ruschenberger and Tryon 1879 A, 93.  
 Upper Cretaceous (Matawan or Mon-  
 mouth?); New Jersey.

### ***Clidastes intermedius* Leidy.**

- Hay, O. P. 1902 A, 467.  
 Upper Cretaceous (Selma?); Alabama.

### ***Clidastes liodontus* Merriam.**

- Hay, O. P. 1902 A, 467.  
 Williston, S. W. 1902 E, 250.  
 Upper Cretaceous (Niobrara?); Kansas.

### ***Clidastes propyhton* Cope.**

- Hay, O. P. 1902 A, 467.  
 Cope, E. D. 1891 N, 50, fig. 26.  
 Fuchs, H. 1908 C, 213.  
 Zittel, Eastman, etc. 1902 A, 159, figs. 243, 251.  
 Upper Cretaceous (Selma?); Alabama.

### ***Clidastes pumilis* Marsh.**

- Hay, O. P. 1902 A, 467.  
 Abel, O. 1912 F, 162, fig. 107.  
 1919 A, 676, fig. 529.  
 1922 C, 310, fig. 262.  
 Rogers, A. F. 1924 A, 545 (*C. pumilus*).  
 Sternberg, C. H. 1881 B, 3.  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes stenops* Cope.**

- Hay, O. P. 1902 A, 467.  
 Fejérváry, G. J. 1918 A, 437, fig. 26.  
 Williston, S. W. 1902 E, 248, pl. xii, fig. 2.  
 Zittel and Broili 1911 A, 214, fig. 351.  
 1923 A, 262, fig. 367.  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes sternbergii* Wiman.**

- Wiman, C. 1920 A, 13, pl. iii; pl. iv, fig. 5;  
 text-figs. 4-9.  
 Abel, O. 1922 C, 315, fig. 270.  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes tortor* Cope.**

- Hay, O. P. 1902 A, 467 (*C. tortor*, *C. rex*).  
 Holland, W. J. 1908 C, 162, 166, fig. 5.  
 Pompeckj, J. F. 1910 A, 137.  
 Seitz, A. L. L. 1907 A, 337 (*Platecarpus*).  
 Sternberg, C. H. 1909 C, 44, figs. 6, 7.  
 Williston, S. W. 1902 E, 250, 253 (*C. rex* a syn.  
 of *C. tortor*).  
 1903 A, 30, text-fig. 4.  
 Upper Cretaceous (Niobrara); Kansas.

### ***Clidastes velox* (Marsh).**

- Hay, O. P. 1902 A, 468.  
 Abel, O. 1908 E, 406.  
 Camp, C. L. 1923 A, 413.  
 Gaudry, A. 1896 A, 96, figs. 74, 75.  
 Merriam, J. C. 1908 C, 44, fig. 51.  
 Merrill, G. P. 1907 A, 66 (*C. affinis*).  
 Osburn, R. C. 1906 A, 453, pl. viii, fig. 26.  
 Pompeckj, J. F. 1910 A, 137.  
 Rogers, A. F. 1924 A, 545.  
 Seitz, A. L. L. 1907 A, 339.



Sternberg, C. H. 1909 C, 51, fig. 11.  
 Williston, S. W. 1902 E, 249, 250 (Clidastes);  
 253 (Edestosaurus).  
 Wiman, C. 1920 A, pl. iv, fig. 8.  
 Zittel and Broili 1911 A, 215, fig. 352.  
 1923 A, 260, 262, figs. 363, 368.  
 Upper Cretaceous (Niobrara); Kansas.

**Clidastes westii** Williston and Case.

Hay, O. P. 1902 A, 468.  
 Camp, C. L. 1923 A, 413, fig. 22.  
 Pompeckj, J. F. 1910 A, 137.  
 Sternberg, C. H. 1909 C, 135.  
 Upper Cretaceous (Pierre); Kansas.

**Clidastes wymani** Marsh.

Hay, O. P. 1902 A, 468.  
 Williston, S. W. 1902 E, 250 (Edestosaurus).  
 Syn. of *C. velox*.  
 Upper Cretaceous (Niobrara); Kansas.

**Clidastes** sp. indet.

Hill, R. T. 1901 A, 328. Upper Cretaceous  
 (Eagle Ford); Texas.  
 Sternberg, C. H. 1907 C, 122. Upper Cretaceous  
 (Niobrara); Kansas.  
 1915 A, 132. Upper Cretaceous (Bear  
 Paw); Montana.

**NECTOPORTHEUS** Cope. Type *N. validus* Cope.

Cope, E. D. 1868 H, 181.  
 Hay, O. P. 1902 A, 467 (Clidastes?).

**Nectoporthes validus** Cope.

Hay, O. P. 1902 A, 467 (Clidastes?).  
 Upper Cretaceous (Navesink?); New Jersey.

**SIRONECTES** Cope. Type *S. anguliferus* Cope.

Hay, O. P. 1902 A, 468.  
 Dames, W. 1899 D, 553.  
 Dollo, L. 1889 K, 276, 283, 288, 298.  
 Williston, S. W. 1925 B, 273.

**Sironectes anguliferus** Cope.

Hay, O. P. 1902 A, 468.  
 Upper Cretaceous (Niobrara); Kansas.

**BAPTOSAURUS** Marsh. Type *Halisaurus platyspondylus* Marsh.

Hay, O. P. 1902 A, 468.  
 Dames, W. 1899 D, 553 (Baptosaurus).  
 Dollo, L. 1889 K, 275, 283, 288, 297.  
 1924 A, 211.  
 Williston, S. W. 1925 B, 273.

**Baptosaurus onchognathus** Merriam.

Hay, O. P. 1902 A, 468.  
 Upper Cretaceous (Niobrara); Kansas.

**Baptosaurus platyspondylus** Marsh.

Hay, O. P. 1902 A, 468.  
 Upper Cretaceous (Navesink); New Jersey.

**Baptosaurus fraternus** Marsh.

Hay, O. P. 1902 A, 468.  
 Upper Cretaceous (Navesink); New Jersey.

**DIPLOMOTODON** Leidy. Type *D. horrificus* Leidy.

Hay, O. P. 1902 A, 473.  
 Huene, F. 1909 B, 16.  
 Jordan, D. S. 1923 A, 98.  
 A genus regarded by Woodward as belonging  
 among the fishes.

**Diplotomodon horrificus** Leidy.

Hay, O. P. 1902 A, 473.  
 Woodward, A. S. 1901 A, 612.  
 Cretaceous (Mullica Hill); New Jersey.

**ELLIPTONODON** Emmons. Type *E. compressus* Emmons.

Hay, O. P. 1902 A, 473.

**Elliptonodon compressus** Emmons.

Hay, O. P. 1902 A, 473.  
 Gilmore, C. W. 1926 L, 191.  
 Upper Cretaceous (Peedee); North Carolina.

**POLYGONODON** Leidy. Type *P. vetus* Leidy.

Hay, O. P. 1902 A, 473.  
 This genus may not belong to this order. It  
 may belong among the fishes.

**Polygonodon vetus** Leidy.

Hay, O. P. 1902 A, 473.  
 Upper Cretaceous (Greensand); New Jersey.

**Polygonodon rectus** Emmons.

Hay, O. P. 1902 A, 473.  
 Upper Cretaceous (Black Creek); North  
 Carolina.

**GLOBIDENTIDÆ**, new form.

Dollo, L. 1924 A, 188, 199 (Globidentisidæ).  
 Gilmore, C. W. 1927 H, 452 (Globidentisidæ).

Williston, S. W. 1925 B, 273 (Globidentisidæ).

GLOBIDENS Gilmore. Type *G. alabamaensis* Gilmore.

- Gilmore, C. W. 1912 A, 479.  
 Abel, O. 1919 A, 672, fig. 527.  
     1922 C, 309, 312, fig. 266.  
     1928 A, 369.  
 Camp, C. L. 1923 A, 323.  
 Dollo, L. 1913 B, 610.  
     1919 A, 18.  
     1924 A, 168.  
 Huene, F. 1912 G, 137 (*Globideus*).  
 Lydekker, R. 1914 A, 642.  
 Moodie, R. L. 1913 A, 188.  
 Nopcsa, F. 1923 H, 76.  
 Williston, S. W. 1925 B, 259, 273.  
 Zittel and Broili 1923 A, 264.

**Globidens alabamaensis** Gilmore.

- Gilmore, C. W. 1912 A, 479, pls. xxxix, xl;  
 text-figs. 1-3.  
 Dollo, L. 1913 B, 614, pl. xxv, fig. 4.  
     1924 A, 168, 170, 176, 199, pl. v, figs. 1, 5.  
 Gilmore, C. W. 1921 B, 280.  
     1927 H, 452.  
 Williston, S. W. 1914 A, 167, fig. 80 (*G.*  
*alabamensis*).  
 Upper Cretaceous (Selma?); Alabama.

## MOSASAURIAN OF UNDETERMINED GENUS AND SPECIES

- Gilmore, C. W. 1926 L, 191, pl. lxii, figs. 5, 8;  
 pls. lxxi, lxxii. Upper Cretaceous (Rapley);  
 Tennessee.

## Order SERPENTES Linnæus.

- Unless otherwise indicated the authors  
 quoted employ for this order the name Ophidia.  
*Linnæus*, C. 1758 A, 194, 214 (*Serpentes*).  
 Hay, O. P. 1902 A, 478 (*Serpentes*).  
 Abel, O. 1909 F, 467 ("schlangen").  
     1912 F, 415.  
     1920 A, 400.  
 Agassiz, L. 1844 D, 137 ("ophidians").  
 Ahlborn, F. 1896 B, 8 ("schlangen").  
 Allis, E. P. 1919 D, 213.  
 Anthony, R. 1912 A ("ophidiens").  
 Arltdt, T. 1833 B, 1185.  
     1907 C, 677 ("schlangen").  
     1907 D, 669.  
 Arthaber, G. 1910 A, 554 ("schlangen").  
 Baird and Girard 1853 A, 1-172 ("serpents").  
 Baraldi, G. 1877 A, 8 ("serpents").  
 Bardeleben, K. 1901 A ("schlangen").  
     1896 A, 114 ("schlangen").  
 Beddard, F. E. 1904 C, 233.  
 Beer, G. R. 1926 A, 312, 330.  
 Beyer, H. 1907 A, 281 ("ophidier").  
 Blainville, H. M. D. 1835 A, 260.  
 Blanchard, E. 1861 A, 380 ("serpents").  
 Bluntschli, H. 1912 B, 383 ("schlangen").  
 Boas, J. E. V. 1914 B, 560 ("schlangen").  
 Bonaparte, C. L. 1832 A, 316 (*Serpentes*).  
     1833 B, 1185 (*Ophidii*).  
 Boulenger, G. A. 1891 D, 117.  
     1893 B, 205.  
     1917 A, 92 ("serpents").  
 Brandt, J. F. 1865 A, 19 ("schlangen").  
 Brauns, D. 1890 A, 147, 149, 202 ("schlangen,"  
 "ophidier").  
 Bronn, H. G. 1849 A, 780, seq. (*Ophidii*).  
 Broom, R. 1896 A, 480.  
     1901 A, 188.  
     1902 D, 554.  
     1903 I, 546.  
     1908 E, 114 ("snakes").  
     1911 A, 922 ("snakes").  
     1917 A, 977.  
     1924 B, 64, fig. 13.  
 Brown, A. E. 1904 A, 469.  
 Brown, B. 1908 A, 207 (*Serpentes*).  
 Camp, C. L. 1923 A, 301, 333, 418 (*Serpentes*).  
 Carlsson, A. 1886 A, 1-38, pls. i-iii ("schlang-  
 en").  
 Cartier, O. 1874 A, 192 ("schlangen").  
 Carus, V. 1875 A, 414.  
 Carus and Engelmann 1861 A, 1081-1086, 1562,  
 1674, 1781.  
 Case, E. C. 1898 C, 731.  
 Chaine, J. 1918 A, 734 ("serpents").  
 Chapman, H. C. 1894 A, 42 ("snakes")  
 Cleland, J. 1863 B, 309 ("serpents").  
 Cope, E. D. 1891 N, 45.  
 Cuvier, G. 1803 A, 168 ("ophidiens").  
     1805 A ("ophidiens").  
 Dana, J. D. 1863 C, 343 ("snakes").  
 Dendy, A. 1907 A, 292.  
 Döderlein, L. 1900 A, 335.  
     1902 A, 433 ("schlangen").  
 Dollo, L. 1883 G, 590.  
     1893 D, 15 ("ophidiens").  
     1903 B, 138 ("ophidiens").  
     1904 B, 218.  
     1923 A, 80 ("ophidiens").  
     1924 A, 211 ("ophidiens").  
 Dombrowski, B. A. 1925 A, 76 ("schlangen").  
 Duerden, J. E. 1924 A, 563 ("snakes").  
 Duncan, P. M. 1878 A, 752.  
 Ebner, V. 1889 A, 196 ("schlangen").  
 Edgeworth, F. H. 1907 A, 517.  
 Eichwald, E. 1832 A, 869 ("schlangen").  
 Eimer, G. H. T. 1901 A, 261 ("schlangen").  
 Fejérváry, G. J. 1918 A, 439.  
 Fleischmann, A. 1910 A, 685, 698.  
 Fraas, E. 1905 B, 372.  
 Fuchs, H. 1908 C, 191.  
     1909 B, 131, 149.  
     1911 B, 394 ("schlangen").  
     1911 C, 39 ("schlangen").  
     1913 A, 62 ("schlangen").  
     1914 A, 31 ("schlangen").  
 Fürbringer, M. 1904 A ("ophidier").  
 Gadow, H. 1901 A, 410 ("snakes").  
     1901 B, 581.

- Gadow, H. 1902 B, 353.  
 1905 A, 222.  
 1912 B, 216 ("snakes").  
 1913 A, 102 ("snakes").
- Gaupp, E. 1891 B, 108 ("ophidier").  
 1895 A, 57 ("schlangen").  
 1899 A, 1092.  
 1902 A, 215 ("schlangen").  
 1905 D, 1023 ("ophidier").  
 1906 A, 43 ("schlangen").  
 1906 B, 791 ("schlangen").  
 1908 B, 518 ("schlangen").  
 1908 C ("schlangen").  
 1910 A, 540 ("schlangen").  
 1911 A, 433 ("schlangen").  
 1911 B, 110.  
 1911 C, 444 ("schlangen"); 451 (Ophidia).  
 1913 A, 56.
- Gervais, P. 1852 A, 255 ("ophidiens").  
 1859 A, 452 ("ophidiens").
- Giebel, C. G. 1855 A, 96.
- Goodsir, J. 1857 A (Serpentes).
- Gray, J. E. 1825 A, 204 (Ophidii).  
 1837 D, 135 ("ophidians").
- Greene, J. R. 1861 A, 225.
- Gregory and Adams 1915 A, 763 ("snakes").
- Gregory and Noble 1924 A, 437 ("snakes").
- Haeckel, E. 1868 A, 453, 455.  
 1873 A, 512, 531.
- Hasse and Schwarck 1870 A, 51 ("schlangen").
- Hatschek, B. 1889 B, 118 ("schlangen").
- Hayek, H. 1924 A, 147 ("schlangen").
- Heilmann, G. 1914 A, 75.  
 1926 A, 94.
- Heilprin, A. 1887 A, 320.
- Henshaw, H. W. 1912 A, 318 ("snakes").
- Hoernes, R. 1886 A, 610.
- Holland, H. 1864 A, 13 ("ophidiens").
- Hommel, J. H. 1924 A, 36 (Ophidii).
- Howes and Swinnerton 1901 A, 55.
- Huene, F. 1914 G, pl. vii.
- Huxley, T. H. 1859 D, 401, 447.  
 1863 F, 477, 529, figs. 45, 48.  
 1876 F, 173.
- Jaekel, O. 1905 B, 81.  
 1910 C, 336 (Ophidii).  
 1911 A, 155.
- Janensch, W. 1906 A, 26 ("schlangen").
- Kerbert, C. 1876 A, 206 ("ophidier").
- Kesteven, H. L. 1918 A, 449 ("ophidians").
- Kingsley, J. S. 1902 B, 328.  
 1912 B, 94.  
 1925 A, 43, 44, 158.
- Klaauw, C. J. 1924 B, 595.
- Klein, E. E. 1868 A ("ophidier").
- Köstlin, O. 1844 A ("schlangen").
- Koken, E. 1898 A, 141.
- Laaser, P. 1903 A, 575 ("schlangen").
- Lavocat, A. 1884 A, 1126 ("serpents").  
 1885 A, 29, 36 ("ophidiens").  
 1839 A, 44 ("ophidiens").
- Lebedinsky, N. G. 1913 A, 767 ("ophidier").
- Leunis and Ludwig 1883 A, 572.
- Leydig, F. 1873 A, 753 ("ophidier").  
 1873 B, 1, pl. i ("schlangen").
- Lobley, J. L. 1908 A, 198.
- Lydekker, R. 1912 C, 3, 4, 42, 48, 111, 144.
- Mantell, G. A. 1844 A, 780 ("serpents").
- Matthew, W. D. 1921 D, 214.
- Mayer, C. 1824 A, 819 ("ophidier").
- Meckel, J. F. 1825 A ("ophidier").
- Menmuir, W. H. 1902 A, 274 ("serpents").
- Mivart, St. G. 1871 B, 380 ("serpents").
- Müller, J. 1832 A, 507 (Ophidii).  
 1841 C, 329 ("schlangen").
- Nitzsch, C. L. 1822 A, 83 ("schlangen").
- Nopcsa, F. 1922 A, 115 ("ophidier").  
 1923 G, 142 ("schlangen").  
 1923 H, 1, 2, 4, 72, 124.  
 1925 A, 5 ("schlangen").  
 1925 C, 164 ("schlangen").  
 1928 A, 178.
- Oken, L. 1819 A, 1529 ("schlangen").
- Osborn, H. F. 1903 D, 456.  
 1904 H, 114.  
 1905 C, 295.  
 1905 N, 239 ("snakes").  
 1917 B, 193, 201, 231.  
 1925 F, 962.
- Owen, R. 1842 F, 77.  
 1845 B, 219.  
 1848 B ("ophidians").  
 1868 A, 896.
- Palacky, J. 1894 A, 129 ("schlangen").  
 1898 A, 88 ("ophidiens").  
 1902 B, 141, 147 ("schlangen").
- Parker, W. K. 1864 B, 56.  
 1878 C, 214 ("snake").  
 1879 C, 342 ("snake").  
 1888 C, 397 ("serpents").  
 1888 D, 470.
- Parker and Haswell 1897 A, 312.
- Perna, G. 1906 A, 135 ("ophidier").
- Peters, W. 1867 A, 725 ("schlangen").  
 1868 B, 388, ("snakes").  
 1869 A, 6 ("schlangen").
- Peyer, B. 1912 A, 563 ("schlangen").
- Phisalix, M. 1912 A, 161 ("serpents").  
 1914 A, 1 ("serpents").
- Pinkus, F. 1904 A, 156.
- Reichert, K. B. 1849 A, 468 ("schlangen").
- Reynolds, S. H. 1897 A, 202, 273, 283, 548.
- Röse, C. 1892 G, 133 ("schlangen").
- Sarkar, S. C. 1923 A, 296.
- Schöne, G. 1902 A, 27 ("ophidier");  
 ("schlangen").
- Scott, W. B. 1917 A, 182 ("snakes").
- Seeley, H. G. 1865 B, 147.  
 1866 B, 352.  
 1872 B, 27 ("ophidians").  
 1876 C, 174, 194 ("serpents").  
 1882 A, 366.
- Serres, M. 1852 A, 144 ("ophidiens").
- Seydel, O. 1899 A ("ophidier").
- Sixta, V. 1900 B, 337 ("schlangen").
- Stannius, H. 1856 A, 5 seq.
- Stehli, G. 1910 A, 763 ("ophiden").
- Steinmann, G. 1907 A, 437.  
 1908 A, 213 ("schlangen").  
 1912 B, 781 (Serpentes).
- Stejneger, L. 1904 A, 925 (Serpentes).  
 1907 A, 254.
- Stejneger and Barbour 1917 A, 72 (Serpentes).
- Strecker, C. 1837 A, 307 ("ophidier").
- Stromer, E. 1912 A, 76.
- Taschenberg, O. 1894 A, 3580.

- Terra, P. 1911 A, 142, 228.  
 Thäter, K. 1910 A, 471 ("schlangen").  
 Thyng, F. W. 1906 A, 58.  
 Tomes, C. S. 1875 B, 95.  
 1876 B, 377.  
 Tormer, G. 1913 A, 334.  
 1913 B, 344, 374.  
 Versluys, J. 1910 B, 178 ("schlangen").  
 1912 A, 491 ("schlangen").  
 1912 B, 638, 687.  
 Virchow, H. 1914 A, 79 ("schlangen").  
 1914 C, 132 ("schlangen").  
 Vitali, G. 1909 A, 212 ("ofidi").  
 Wagner, R. 1843 A, 146.  
 Wallace, A. R. 1876 A, II, 372, 386, 387.

- Wallisch, W. 1922 A, 537, figs. 6-8 ("schlangen").  
 Werner, F. 1904 A, 337 ("schlangen").  
 West, G. S. 1895 A, 512 ("snakes").  
 1898 A, 520.  
 Williston, S. W. 1902 G, 315 ("snakes").  
 1904 A, 47, 48.  
 1914 A, 17, 45, 139, 168 (Serpentes, Ophidia).  
 1925 A, *passim*.  
 1925 B, 212, 275.  
 Woodward, A. S. 1898 B, 195.  
 Woodward, H. 1904 B, 145 ("snakes").  
 Ziegler, H. E. 1901 A, 231 ("schlangen").  
 Zittel and Broili 1911 A, 218.  
 1923 A, 266.  
 Zittel, Eastman, etc. 1902 A, 163.

## PALÆOPHIDÆ Lydekker.

- Hay, O. P. 1902 A, 478.  
 Abel, O. 1919 A, 682.  
 Janensch, W. 1906 B, 341, 345.

- Nopcea, F. 1923 G, 142 ("palæophiden").  
 1923 H, 124 (Palæophinæ).  
 1925 A, 6, 22.  
 1928 A, 178 (Palæophinæ).

PALÆOPHIS Owen. Type *P. toliapicus* Owen.

- Hay, O. P. 1902 A, 479.  
 Arldt, T. 1907 D, 274.  
 Cope, E. D. 1891 N, 51.  
 Hoffmann, C. K. 1890 C, 1812.  
 Janensch, W. 1906 B, 332, 339, 341.  
 Leriche, M. 1926 A, 13, pls. i, ii.  
 Miller, H. 1857 A, 110, fig. 66.  
 Nopcea, F. 1923 G, 122, 127.  
 1925 A, 22.  
 1925 C, 164.  
 1928 A, 178.  
 Owen, R. 1857 G, 196, pl. iv, fig. 1.  
 Seeley, H. 1865 B, 147.  
 Stefano, G. 1905 A, 81 (Dinophis).  
 Wieland, G. R. 1925 B, 559 (Paleophus).  
 Williston, S. W. 1925 B, 276 (Paleophis).  
 Zittel and Broili 1911 A, 220 (Titanophis).  
 1923 A, 268.

## Palæophis grandis (Marsh).

- Hay, O. P. 1902 A, 479.  
 Hoffmann, C. K. 1890 C, 1813.  
 Janensch, W. 1906 B, 337 (Dinophis); 343 (Palæophis).  
 Eocene (Shark River); New Jersey.

## Palæophis halidanus Cope.

- Hay, O. P. 1902 A, 479.  
 Cook and Stephenson 1928 A, 143.  
 Cope, E. D. 1891 N, 52, fig. 285.  
 Hoffmann, C. K. 1890 C, 1812.  
 Janensch, W. 1906 B, 337, 343.  
 Eocene (Shark River); New Jersey.

## Palæophis littoralis Cope.

- Hay, O. P. 1902 A, 479.  
 Cope, E. D. 1891 N, 52, fig. 28a.  
 Janensch, W. 1906 B, 337, 339, 343.  
 Eocene (Shark River); New Jersey.

PTEROSPHEENUS Lucas. Type *P. schucherti* Lucas.

- Hay, O. P. 1902 A, 479.  
 Abel, O. 1919 A, 638, fig. 534.  
 Andrews, C. W. 1906 A, xxv, 309.  
 1907 C, 305.  
 Janensch, W. 1906 B, 307, 339.  
 Nopcea, F. 1923 G, 122, 127.  
 1923 H, 78, pl. ii, fig. 6.  
 1925 A, 22.  
 1928 A, 178.  
 Osborn, H. F. 1907 K, 828.  
 Scharff, R. F. 1911 A, 278.  
 Stromer, E. 1906 A, 208.  
 1908 B, 143.

- Williston, S. W. 1925 B, 276.  
 Zittel and Broili 1911 A, 220.  
 1923 A, 268.

## Pterosphenus schucherti Lucas.

- Hay, O. P. 1902 A, 479.  
 Andrews, C. W. 1906 A, xxv.  
 Cook and Stephenson 1928 A, 143.  
 Janensch, W. 1906 B, 330, pl. xxvi, fig. 5.  
 Merrill, G. P. 1907 A, 76.  
 Sauvage, H. E. 1899 C, 150.  
 Eocene (Jackson); Alabama.

## BOIDÆ Bonaparte.

- Bonaparte, C. L. 1831 A, 67.  
 Hay, O. P. 1902 A, 479.  
 Abel, O. 1912 F, 415.  
 Andrews, C. W. 1906 A, 308.  
 Arldt, T. 1907 C, 677 (Boinae).  
 1907 D, 641 (Boinae).

- Beddard, F. E. 1904 C, 233.  
 1905 A, 630.  
 Beyer, H. 1907 A, 233, fig. 6 (Python).  
 Blainville, H. M. D. 1835 A, 263 ("boas").  
 Bonaparte, C. L. 1832 A, 318 (Boina).  
 Carlsson, A. 1886 A, 4 (Boa).

Carus, V. 1875 A, 422 (Boa).

Cope, E. D. 1891 N, 51.

Cuvier, G. 1805 A ("boas").

Gadow, H. 1901 B, 596.

1905 A, 222.

Gray, J. E. 1837 D, 135.

Hase, A. 1913 A, 150, fig. 75.

Leunis and Ludwig 1833 A, 585.

Lydekker, R. 1906 A, 473, fig. 2.

1912 C, 42, 111, 144 (Pythonidae).

Mayer, C. 1824 C, 823, pls. lxvi, lxvii (Boa).

Meckel, J. F. 1825 A (Boa).

Nopcea, F. 1923 G, 124, 148 ("boiden")

1923 H, 113 ("boiden").

1928 A, 178 (Pythoninae).

Owen, R. 1845 B, 221 ("boas").

1857 G, 196 (Boa).

Palacký, J. 1894 A, 134 ("boiden").

1898 A, 104 ("boides").

1902 B, 147 ("boiden").

Phisalix, M. 1912 A, 177, fig. 15.

1914 A, 86.

Scharff, R. F. 1911 A, 203.

Wieland, G. R. 1925 B, 558, 559 ("boids").

Williston, S. W. 1925 B, 276.

#### BOAVUS Marsh. Type *B. occidentalis* Marsh.

Hay, O. P. 1902 A, 479.

Nopcea, F. 1928 A, 178.

Wieland, G. R. 1925 B, 559.

Williston, S. W. 1925 B, 276.

#### **Boavus agilis** Marsh.

Hay, O. P. 1902 A, 479.

Middle Eocene (Bridger); Wyoming.

#### **Boavus brevis** Marsh.

Hay, O. P. 1902 A, 479.

Middle Eocene (Bridger); Wyoming.

#### **Boavus occidentalis** Marsh.

Hay, O. P. 1902 A, 479.

Middle Eocene (Bridger); Wyoming.

#### LITHOPHIS Marsh. Type *L. sargenti* Marsh.

Hay, O. P. 1902 A, 479.

Nopcea, F. 1928 A, 178.

Stefano, G. 1905 A, 61.

#### **Lithophis sargenti** Marsh.

Hay, O. P. 1902 A, 479.

Middle Eocene (Bridger); Wyoming.

#### LESTOPHIS Marsh. Type *L. crassus* Marsh.

Hay, O. P. 1902 A, 480.

Heilprin, A. 1887 A, 327 (Limnophis).

Schmidt, K. P. 1927 A, 58 (Paleoboa; type *Limnophis crassus* Marsh.).

Wallace, A. R. 1876 A, II, 376 (Limnophis).

Williston, S. W. 1925 B, 276 (Lestophis, Limnophis).

#### **Lestophis crassus** Marsh.

Hay, O. P. 1902 A, 480.

Middle Eocene (Bridger); Wyoming.

#### APHELOPHIS Cope. Type *A. talpivorus* Cope.

Hay, O. P. 1902 A, 480.

Hoffman, C. K. 1890 C, 1813.

Seeley, H. G. 1886 A, 513.

Williston, S. W. 1925 B, 276.

#### **Aphelophis talpivorus** Cope.

Hay, O. P. 1902 A, 480.

Oligocene (White River); Colorado.

#### CALAMAGRAS Cope. Type *C. murivorus* Cope.

Hay, O. P. 1902 A, 480.

Nopcea, F. 1928 A, 178.

Williston, S. W. 1925 B, 276.

#### **Calamagras murivorus** Cope.

Hay, O. P. 1902 A, 480.

Oligocene (White River); Colorado.

#### OGMOPHIS Cope. Type *O. angulatus* Cope.

Hay, O. P. 1902 A, 480.

Nopcea, F. 1928 A, 178.

Williston, S. W. 1925 B, 276.

#### **Ogmophis angulatus** Cope.

Hay, O. P. 1902 A, 480.

Lambe, L. M. 1908 A, 21.

Oligocene (White River); Colorado.

#### **Ogmophis arenarum** Douglass.

Douglass, E. 1903 A, 153, 171.

Lambe, L. M. 1908 A, 21.

Miocene (Flint Creek); Montana.

#### **Ogmophis compactus** Lambe.

Lambe, L. M. 1908 A, 9, 20, pl. i, figs. 26-30.

Oligocene (Cypress Hills); Saskatchewan.

#### **Ogmophis oregonensis** Cope.

Hay, O. P. 1902 A, 480.

Merriam and Sinclair 1907 A, 187.

Upper Oligocene (John Day); Oregon.

## COLUBRIDÆ Gray.

- Gray, J. E. 1825 A, 207.  
 Hay, O. P. 1902 A, 480.  
 Arldt, T. 1907 C, 677.  
 1907 D, 647.  
 1912 A, 712, 756 (Colubrinæ).  
 Blainville, H. M. D. 1835 A, 265 ("couleuvres").  
 Bonaparte, C. L. 1831 A, 69.  
 1832 A, 317 (Colubrina).  
 1833 B, 1185.  
 Brown, A. E. 1904 A, 469.  
 Carus, V. 1875 A, 427.  
 Cope, E. D. 1900 A, 697, 731 (Colubridæ); 697, 732, 778 (Colubrinæ); 698, 733 (Xenodontinæ); 698, 732, 956 (Natricinæ); 732, 733 (Dromicinæ).  
 Dunn, E. R. 1924 B, 3 (Colubrinæ).  
 Gadow, H. 1901 B, 606 (Colubridæ); 607 (Colubrinæ).  
 1905 A, 223.  
 Hay, O. P. 1923 A, 312.  
 Hoffmann, C. K. 1890 C, 1865.  
 Leunis and Ludwig 1883 A, 589.  
 Lobley, J. L. 1905 A, 202, 208.  
 Lydekker, R. 1912 C, 43, 106, 144.  
 Nopcsa, F. 1923 G, 124, 149, 151 ("colubriden").  
 1923 H, 78, 124 (Colubrinæ).  
 Owen, R. 1866 A, 395.  
 Palacky, J. 1894 A, 130 ("colubriden").  
 1898 A, 91 ("colubrides").  
 Phisalix, M. 1912 A, 181.  
 1914 A, 14.  
 Sarkar, S. C. 1923 A, 295.  
 Scharff, R. F. 1911 A, 305.  
 Stejneger, L. 1907 C, 262 (Natricidæ).  
 Stejneger and Barbour 1917 A, 74.  
 Terra, P. 1911 A, 229.  
 Wallace, A. R. 1876 A, II, 375.  
 West, G. S. 1895 A, 813.  
 1898 A, 517.  
 Williston, S. W. 1925 B, 277.

FARANCIA Gray. Type *Coluber abacura* Holbrook.

- Gray, J. E. 1842, Zool. Misc., 68.  
 Baird and Girard 1853 A, 123.  
 Boulenger, G. A. 290.  
 Cope, E. D. 1900 A, 740.  
 Stejneger and Barbour 1917 A, 75.  
**Farancia abacura** (Holbrook).  
*Holbrook, J. E.* 1838, N. Amer. Herpet. ed. 1, I, 119, pl. xxiii (Coluber).  
 Baird and Girard 1853 A, 123.  
 Boulenger, G. A. 1894 A, 291, fig. 20.  
 Cope, E. D. 1900 A, 741, fig. 154.  
 Hay, O. P. 1917 E, 44, 48.  
 1923 A, 382.  
 Holbrook, J. E. 1842, N. Amer. Herpet., ed. 2, III, 111, pl. xxvi (Helicops).  
 Stejneger and Barbour 1917 A, 75.  
 Recent; Gulf of Mexico north to southern Indiana and Virginia: Pleistocene; Florida.

COLUBER Linnæus. Type *C. constrictor* Linnæus.

- Linnæus, C. 1858 A, 216.  
 Hay, O. P. 1902 A, 480 (Coluber, Bascanion).  
 Arldt, T. 1907 D, 274, 276.  
 Batelli, A. 1880 A, 355.  
 Boulenger, G. A. 1893 A, 379 (Zamenis).  
 Bronn, H. G. 1848 A, 320.  
 Cope, E. D. 1900 A, 787 (Zamenis).  
 Duméril and Bibron 1854, Erp. Gén., VII, 683 (Zamenis).  
 Gadow, H. 1901 B, 611 (Zamenis).  
 Heilprin, A. 1887 A, 323, 324 (Bascanium).  
 Hoffmann, C. K. 1890 C, 1865.  
 Kerbert, C. 1876 A, 206.  
 Leunis and Ludwig 1883 A, 592.  
 Leydig, F. 1873 A, 756.  
 1873 B, 3.  
 Mayer, C. 1824 C, 822, 835.  
 Owen, R. 1845 B, 224.  
 1857 G, 196, pl. iv, fig. 7.  
 Stejneger and Barbour 1917 A, 78.  
 Wagler, J. G. 1830, Syst. Amph., 188 (Zamenis; type *Z. gemonensis*).  
 Werner, F. 1904 A, 334.  
 Williston, S. W. 1925 B, 277 (Coluber, Bascanion).  
**Coluber acuminatus** (Cope).  
 Hay, O. P. 1902 A, 480 (Bascanion).  
 Baker, F. C. 1920 A, 208, 213, 394 (Bascanion).  
 Hay, O. P. 1923 A, 312, 314.  
 Pleistocene (Port Kennedy); Pennsylvania.  
**Coluber constrictor** Linnæus.  
*Linnæus, C.* 1758 A, 216.  
 Baird and Girard 1853 A, 93 (Bascanion).  
 Cope, E. D. 1900 A, 791, fig. 171, with synonymy (Zamenis).  
 Peterson, O. A. 1926 A, 253 (This species?).  
 Recent; Eastern United States: Pleistocene?; Pennsylvania.  
**Coluber sp. indet.**  
 Hay, O. P. 1902 A, 480. Pleistocene (Port Kennedy); Pennsylvania.  
 1923 A, 314. Pleistocene (Port Kennedy); Pennsylvania.

DRYMARCHON Fitzinger. Type *D. corais* Boie.

- Fitzinger, L. J. 1843, Syst. Rept., 26.  
 Baird and Girard 1853 A, 92 (Georgia).  
 Boulenger, G. A. 1894 A, 18 (Phrynonax).  
 Cope, E. D. 1900 A, 857 (Compososoma).  
 Duméril and Bibron 1854, Erpet. Gén., 248 (Spilotes); 290 (Compososoma).  
 Stejneger and Barbour 1917 A, 84.  
**Drymarchon corais couperi** (Holbrook).  
*Holbrook, J. E.* 1842, N. Amer. Herp., ed. 2, III, 75, pl. xvi (Coluber couperi).  
 Baird and Girard 1853 A, 92 (Georgia couperi).  
 Cope, E. D. 1900 A, 858, figs. 199, 200 (Compososoma c. couperi).

Hay, O. P. 1917 E, 44 (D. corais).  
1923 A, 382.

Stejneger and Barbour 1917 A, 84.  
Recent; Carolinas to Texas: Pleistocene  
(Middle or Late); Florida.

#### NATRIX Laurenti. Type *Natrix natrix*.

Laurenti, J. C. 1768, Syn. Rept., 73.

Unless otherwise indicated the writers, as  
cited, use the name *Tropidonotus*.

Abel, O. 1919 A, 682.

Allis, E. P. 1919 A, 385.  
1919 D, 213.

Batelli, A. 1880 A, 355.

Baur, G. 1891 F, 333.

Beecker, A. 1903 A, 365.

Beer, G. R. 1926 A, 315, figs. 86, 87.

Bolk, L. 1915 C, 196.

Cartier, O. 1874 A, 196, pl. ni.

Corning, H. K. 1891 A, 613, pl. xxx.

Edgeworth, F. H. 1907 A, 512, figs. 36-39.

Fuchs, H. 1911 C, 613, figs. 4-25.

Gaupp, E. 1905 D, 1013, fig. 42.

1913 A, 57, figs. 27, 28.

Haller, G. 1924 A, 306, figs. 6, 8.

Hasse, C. 1873 C, 648, pl. xxx (Coluber).

Hayek, H. 1924 A, 141, pl. 1, fig. 2; pl. ii, fig. 2.

Heilprin, A. 1887 A, 433.

Huxley, T. H. 1859 D, 405 (Coluber).

Kerbert, C. 1876 A, 213.

Kingsley, J. S. 1912 B, 94.

1925 A, 158, fig. 168.

Lebedinsky, N. G. 1917 A, 318.

Leche, W. 1893 C, 793.

Leunis and Ludwig 1883 A, 589.

Leydig, F. 1873 A, 755.

1873 B, 3.

Lydekker, R. 1912 C, 144.

Palacký, J. 1894 A, 130.

1898 A, 97, 123.

Parker and Haswell 1897 A, 324, fig. 392.

Reynolds, S. H. 1897 A, 279, 280.

Sarkar, S. C. 1923 A, 297, figs. 1-4; 10-13.

Schmidt, W. J. 1910 A, 664.

Seydel, O. 1899 A, 498, fig. 22.

Shaner, R. F. 1926 A, 362.

Stannius, H. 1856 A, 6, 43.

Stejneger, L. 1907 C, 263 (*Natrix*).

Taschenberg, O. 1894 A, 3607.

Vitali, G. 1909 A, 212.

Wegner, R. N. 1922 A, 420.

Weiss, A. 1901 A, 496.

Werner, F. 1904 A, 334.

*Natrix* sp. indet.

Wheatley, C. M. 1871 A, 237 (*Tropidonotus*).

This genus?

1872 B, 384 (*Tropidonotus*. This genus?).

Pleistocene (Early); Pennsylvania.

#### THAMNOPHIS Fitzinger. Type *T. sauritus* (Linnaeus).

Fitzinger, L. 1843 A, 26.

Baird and Girard 1853 A, 24 (*Eutania*).

Cope, E. D. 1900 A, 1014, 1255 (*Eutania*).

Stejneger and Barbour 1917 A, 100.

**Thamnophis sirtalis** (Linnaeus).

Linnaeus, C. 1758 A, 222 (*Coluber*).

Baird and Girard 1853 A, 30 (*Eutania*).

Cope, E. D. 1900 A, 1064, 1069, 1256, figs. 298-303 (*Eutania*).

Hay, O. P. 1923 A, 311.

Leidy, J. 1889 H, 19 (*Eutania*).

Peterson, O. A. 1926 A, 253.

Stejneger and Barbour 1917 A, 103.

Recent; United States and Canada to Wisconsin; Pleistocene?; Pennsylvania.

#### CROTALIDÆ Gray.

Gray, J. E. 1825 A, 204.

Hay, O. P. 1902 A, 480.

Arlt, T. 1907 D, 648 (*Crotalidæ*); 756 (*Crotalidæ*).

Bonaparte, C. L. 1833 B, 1185 (*Viperidæ*).

Boulenger, G. A. 1901 B, 403 (*Crotalidæ*).

Brown, A. E. 1904 A, 473.

Carus, V. 1875 A, 418.

Gadow, H. 1905 A, 226 (*Crotalidæ*).

1913 A, 103 (*Crotalinae*).

Gray, J. E. 1837 D, 135.

Hoffman, C. K. 1890 C, 1866.

Leunis and Ludwig 1883 A, 576.

Lobley, J. L. 1908 A, 202, 208.

Lydekker, R. 1912 C, 43 (*Crotalidæ*).

Matthew, W. D. 1914 B, 387.

Nopcsa, F. 1923 G, 150 ("viperiden").

Owen, R. 1866 A, 55, 152.

Palacký, J. 1894 A, 131, 132 ("crotaliden").

1898 A, 103 ("crotaliden").

1902 B, 147 ("crotaliden").

Phisalix, M. 1912 A, 163, 191 (*Viperidæ*).

1914 A, 16 (*Viperidæ*).

Scharff, R. F. 1911 A, 131 ("rattlesnakes").

Stejneger, L. 1907 A, 448.

Terra, P. 1911 A, 231.

Williston, S. W. 1925 B, 276 (*Viperidæ*).

#### CROTALUS Linnaeus. Type *C. horridus* Linnaeus.

Hay, O. P. 1902 A, 481.

Bronn, H. G. 1848 A, 352.

Gadow, H. 1901 B, 648.

1905 A, 226.

Giebel, C. G. 1855 A, 97.

Heilprin, A. 1887 A, 322, 323.

Hoffmann, C. K. 1890 C, 1866.

Köstlin, O. 1844 A.

Leunis and Ludwig 1883 A, 577.

Lydekker, R. 1912 C, 153.

Mayer, C. 1824 C, 822, 835.

Meckel, J. F. 1825 A.

Mivart, St. G. 1879 B, 538, fig. 6 ("rattlesnake").

- Nopcsa, F. 1923 G. 150.  
 1923 H. 12, 13, 77, pl. ii, fig. 6.  
 Owen, R. 1845 B. 227, 229.  
 1857 G. 196, pl. iv, fig. 4.  
 1866 A. 55, fig. 47.  
 Palacký, J. 1898 A. 103.  
 Parker and Bettany 1877 A. 213.  
 Parker and Haswell 1897 A. 325, fig. 933.  
 Phisalix, M. 1912 A. 195.  
 1914 A. 1, 61.  
 Reynolds, S. H. 1897 A. 270, 230.  
 Scharff, R. F. 1911 A. 131, 253.  
 Stannius, H. 1856 A. 5, 48.  
 Stejneger and Barbour 1917 A. 108.  
 Taschenberg, O. 1894 A. 3599.  
 Terra, P. 1911 A. 142, figs. 34, 35 ("Kiapperschlange").  
 Tomes, C. S. 1876 B. 381, pl. xxxvii ("rattlesnake").  
 West, G. S. 1898 A. 523.  
 Williston, S. W. 1925 A. 72, fig. 59.  
 1925 B. 277.  
 Zittel and Broili 1911 A. 219.  
 1923 A. 267.  
**Crotalus adamanteus** Beauvois.  
*Beauvois*, — de 1799, Trans. Amer. Philos. Soc., iv, 368.  
 Cope, E. D. 1900 A. 1161, fig. 333.  
 Hay, O. P. 1917 E. 44.  
 1923 A. 382.  
 Stejneger and Barbour 1917 A. 108.  
 Recent; North Carolina to Florida, west to Louisiana and Arkansas: Pleistocene (Middle or Late); Florida.

## NEURODROMICUS Cope.

- Hay, O. P. 1902 A. 481.  
 Williston, S. W. 1925 B. 277.

PROTAGRAS Cope. Type *P. lacustris* Cope.

- Cope, E. D. 1872 PP. 3.  
 Hay, O. P. 1902 A. 479.  
 Williston, S. W. 1925 B. 276.

HELAGRAS Cope. Type *H. prisciformis* Cope.

- Hay, O. P. 1902 A. 481.  
 Hellprin, A. 1887 A. 327.  
 Williston, S. W. 1925 B. 277.  
 Zittel and Broili 1923 A. 268.

CONIOPHIS Marsh. Type *C. precedens* Marsh.

- Hay, O. P. 1902 A. 481.  
 Williston, S. W. 1902 K. 953.  
 1925 B. 277.

**Crotalus atrox?** Baird and Girard.

- Hay, O. P. 1920 B. 135, pl. x, fig. 2 (This species?).  
 Recent; Texas to Arizona, Lower California: Pleistocene (Middle?); Texas.

**Crotalus horridus** Linnaeus.

- Hay, O. P. 1902 A. 481.  
 Abel, O. 1919 A. 681, fig. 532.  
 Cope, E. D. 1900 A. 1135, fig. 342.  
 Gadow, H. 1901 B. 649.  
 Hay, O. P. 1920 B. 96.  
 1923 A. 343.  
 Owen, R. 1845 B. 229, pl. lxx, figs. 5-11.  
 1866 A. 56, 394.  
 Stejneger and Barbour 1917 A. 109.  
 Zittel and Broili 1911 A. 219, fig. 360.  
 1923 A. 267, fig. 376.  
 Recent; Maine to Georgia, west to Great Plains: Pleistocene; Pennsylvania, Maryland.

**Crotalus** sp. indet.

- Brown, B. 1908 A. 207, pl. xxii. Pleistocene; Arkansas.  
 Gidley, J. W. 1927 E. 274. Pleistocene; Florida.  
 Hay, O. P. 1923 A. 314, 353. Pleistocene; Pennsylvania, Virginia.  
 1927 D. 216, 274. Pleistocene; California, Florida.  
 Miller, L. H. 1912 A. 71 (*Crotalus* sp.). Pleistocene; California.  
 Sinclair, W. J. 1904 A. 18 (*Crotalus* sp.). Pleistocene; California.

Type *N. dorsalis* Cope.**Neurodromicus dorsalis** Cope.

- Hay, O. P. 1902 A. 481.  
 Oligocene (White River); Colorado.

**Protagras lacustris** Cope.

- Cope, E. D. 1872 PP. 3.  
 Hay, O. P. 1902 A. 479.  
 Merrill, G. P. 1907 A. 76.  
 Middle Eocene (Bridger); Wyoming.

**Helagras prisciformis** Cope.

- Hay, O. P. 1902 A. 481.  
 Gardner, J. H. 1910 A. 731.  
 Gilmore, C. W. 1920 A. 128.  
 Matthew, W. D. 1914 B. 333.  
 Reeside, J. B. 1924 A. 42.  
 Paleocene (Torrejon); New Mexico.

**Coniophis precedens** Marsh.

- Hay, O. P. 1902 A. 481.  
 Bowen, C. F. 1915 A. 128.  
 Merrill, G. P. 1907 A. 66.  
 Osborn, H. F. 1902 I. 13.  
 Upper Cretaceous (Lance); Wyoming.



## Class AVES Linnæus.

- Hay, O. P. 1902 A, 517.
- Abel, O. 1907 A, 227 ("vögel").  
 1910 B, (185) ("vögel").  
 1910 C, (230) ("vögel").  
 1911 A, 144 ("vögel").  
 1912 E, 218 ("vögel").  
 1912 F, 267, 279, 532 ("vögel").  
 1919 A, 686.  
 1920 A, 400.  
 1921 A, 143, 223, 251, 265 ("vögel").
- Adams, C. C. 1902 A, 115 ("birds").
- Adams, L. A. 1919 A, 99, 138.
- Adolphi, H. 1922 A ("vögel").
- Aeby, C. 1873 A, 699 ("birds").
- Agar, W. E. 1909 A, 378.
- Agassiz, L. 1836 B, 24 ("oiseaux").  
 1844 C, 253 ("oiseaux").  
 1845 B, 299 ("birds").
- Alexander, G. 1904 A ("vögel").
- Allen, J. A. 1871 A.  
 1905 A, 682 ("birds").
- Allis, E. P. 1919 D, 216.
- Altmann, F. 1925 A, 100 ("vögel").
- Anderson, R. J. 1902 C, 785 ("birds").  
 1914 A, 533 ("birds").
- Andreae, A. 1903 A, 149 ("vögel").
- Anthony, R. 1910 A, 779 ("oiseaux").  
 1912 A ("oiseaux").  
 1913 A, 243 ("oiseaux").
- Arlidt, T. 1907 C, 677 ("vögel").  
 1907 D, 640.
- Arthaber, G. 1910 A, 552 ("vögel").
- Aulmann, G. 1909 A ("vögel").
- Baird, S. F. 1876 A, 357 ("birds").
- Baker, F. C. 1921 A, 155 ("birds").
- Baraldi, G. 1877 A, *passim* ("uccelli").
- Bardeleben, K. 1903 A, 27 ("vögel").  
 1904 A, 110 ("vögel").
- Baur, G. 1885 N, 488 ("vögel").  
 1887 H, 47 ("sauropsiden").
- Beebe, C. W. 1906 A ("birds").  
 1915 A, 447 ("birds").  
 1915 B, 39 ("birds").
- Beecker, A. 1903 A, 582 ("vögel").
- Bender, O. 1907 A, 40 ("vögel").
- Bergmann, C. 1841 A, 202 ("vögel").
- Beyer, H. 1907 B, 298 ("vögel").  
 1908 B, 243 ("vögel").  
 1909 A, 30 ("vögel").
- Bignon, F. 1889 A ("oiseaux").
- Bittner, F. 1912 A, 1 ("vögel").
- Blainville, H. M. D. 1817 A, 107 ("oiseaux").  
 1821 A, 185 ("oiseaux").
- Blanford, W. T. 1876 A, 287.
- Blasius, W. 1884 B, 228 ("vögel").  
 1885 B, 409 ("vögel").
- Blendinger, W. 1904 A, 453 ("sauropsiden").
- Bluntschli, H. 1912 B, 384 ("vögel").
- Boas, J. E. V. 1914 B, 548, 566 ("vögel").
- Bojanus, L. H. 1819 A, 1363 ("vögel").  
 1821 A, 1159 ("vögel").
- Bonaparte, C. L. 1832 A, 294.
- Bonaparte, C. L. 1833 A, 1042 ("vögel").
- Bonsdorff, E. J. 1871 A, 297, 305 ("vögel").
- Branca, W. 1908 B ("vögel").
- Brandt, J. F. 1865 A, i ("vögel").
- Brauer, A. 1914 A ("vögel").
- Brauns, D. 1890 A, 149, 201, 202.
- Broom, R. 1901 A, 188.  
 1906 D, 362, 365.  
 1908 E, 114.  
 1912 A, 625 ("birds").  
 1913 G, 345 ("birds").  
 1913 O, 631 ("birds").  
 1914 G, 305 ("birds").  
 1917 A, 977.  
 1926 A, 257 ("birds").
- Bronn, H. G. 1849 A, 781 seq.
- Bruni, A. C. 1910 A, 750 ("uccelli").
- Burckhardt, R. 1902 A ("vögel").  
 1903 A, 78 ("vögel").  
 1906 A, 159 ("sauropsiden").
- Carter, J. T. 1905 A, 145 ("birds").
- Carus, V. 1875 A, 191.
- Carus and Engemann 1861 A, 112-1172, 1573, 1675-1680, 1702, 1709.
- Case, E. C. 1898 C, 816.
- Chandler, A. C. 1916 C ("birds").
- Chapman, F. M. 1904 A, 482 ("birds").
- Clark, H. L. 1901 A, 370 ("birds").
- Claus, C. 1895 A, 343 ("vögel").
- Cleland, J. 1863 A, 118 ("birds").  
 1863 B, 308 ("birds").  
 1887 A, 391 ("birds").
- Cope, E. D. 1885 BB, 70 ("birds").  
 1891 N, 7, 53 (Monocondylia, Aves).
- Cornay, J. E. 1847 A, 360 ("oiseaux").
- Cunningham, J. T. 1897 A, 486 (Sauropsida).
- Cutler, I. E. 1924 A, 144 ("birds").
- Cuvier, G. 1805 A.  
 1812 A, 123 ("oiseaux").  
 1815 A, 103 ("oiseaux").
- Dabelow, A. 1926 A, 95 ("sauropsiden").
- Dana, J. D. 1863 B, 315 ("birds").  
 1863 C, 334 ("birds").  
 1863 D, 131 ("birds").
- Davies, H. R. 1889 A, 560-645.
- Deninger, K. 1914 A, 192-214 ("vögel").  
 1915 A, 187 ("vögel").
- Dieck, R. 1867 A.
- Diener, C. 1909 A, 32 ("vögel").
- Diethelm, M. 1907 A ("vögel").
- Döderlein, L. 1900 B, 55 ("vögel").  
 1902 A, 398 ("vögel").
- Dollo, L. 1883 G, 582 ("birds").  
 1884 E, 66 (Sauropsida, in part).  
 1889 E, 146 ("oiseaux").  
 1893 D, 13 ("oiseaux").  
 1919 A, 34 ("oiseaux").
- Dombrowski, B. A. 1925 A, 69, fig. 2 ("vögel").
- Duerden, J. E. 1924 A, 557 ("birds").
- Du Toit, P. J. 1913 A, 230 ("vögel").  
 1914 A, 311 ("vögel").
- Edgeworth, F. H. 1907 A, 511, 546 (Sauropsida).
- Edwards, A. M. 1868 A.
- Eichwald, E. 1832 A, 866 ("vögel").
- Eimer, G. H. T. 1901 A, 263 ("vögel").
- Eisler, P. 1895 A ("vögel").
- Evans, A. H. 1899 A.
- Fejérváry, G. J. 1921 C, 10 ("vögel").
- Filatoff, D. 1906 A, 626 ("vögel").  
 1907 A, 311 ("vögel").

- Finn, F. 1894 A, 210 ("birds").  
1894 B, 453 ("birds").
- Fisher, G. J. 1888 A, 218 ("birds").
- Fleischmann, A. 1910 A, 684, 700.
- Foot, J. S. 1913 A ("birds").  
1916 A, 15, 59 ("birds").
- Forbes, W. A. 1881 A, 1.  
1882 E, 386 ("birds").
- Forster, A. 1905 A, 89-138.
- Fraas, E. 1913 D, lxiv ("vögel").
- Frech, F. 1906 A, 491 ("vögel").
- Froriep, A. 1905 B, 111 (Gallus).
- Fuchs, H. 1908 A, 352 ("sauropsiden").  
1909 B, 131 ("vögel").  
1910 B, 255 ("vögel").  
1910 C, 495 ("vögel").  
1912 B, 82 ("vögel").  
1912 D, 158.
- Fürbringer, M. 1902 B, 289, 588.  
1904 A ("vögel").
- Funcius, T. 1909 A, 370 ("vögel").
- Gadow, H. 1896 C, 204 ("birds").  
1901 A, 399 ("birds").  
1902 B, 352 ("birds").  
1912 B, 210 ("birds").  
1913 A, 104.  
1914 A, 504 ("birds").
- Garbowski, T. 1895 A, 444 ("vögel").
- Garrod, A. H. 1873 C, 33 ("birds").  
1873 D, 626-644.  
1874 A, 116.
- Gaskell, W. H. 1898 A, 553.
- Gaupp, E. 1895 A, 57, seq. ("vögel").  
1898 B, 854 ("vögel").  
1899 A, 1004, 1095 ("vögel").  
1901 B, 988 ("vögel").  
1902 A, 185 ("vögel").  
1905 D, 1024 ("vögel").  
1905 E, 161 ("vögel").  
1906 B ("vögel").  
1908 B ("vögel").  
1908 C ("vögel").  
1910 A, 541 ("vögel").  
1911 A, 423 ("vögel").  
1911 B, 112.  
1911 C, 443, 453.  
1911 D, 630 ("vögel").  
1913 A, 23 ("vögel").
- Gegenbaur, C. 1863 A, 450 ("vögel").  
1864 B, 8 ("vogel").  
1867 B, 369, 401 ("vögel").  
1870 C, 397 ("vögel").  
1871 A, 157 ("vögel").  
1879 A, 522 ("vögel").  
1880 A, 596 ("vögel").
- Gemminger, M. 1852 A, 215 ("vögel").
- Geoffroy St. Hilaire, E. F. 1807 C, 99 ("oiseaux").  
1807 E, 346 ("oiseaux").  
1817 A, 126 ("oiseaux").  
1817 B, 186 ("oiseaux").  
1824 D, 435 ("oiseaux").  
1832 A, 354 ("oiseaux").  
1853 B, 35 ("oiseaux").  
1856 A, 5 ("oiseaux").  
1859 A, 403, 424 ("oiseaux").
- Gervais, P. 1852 A, 223 ("oiseaux").
- Gessner, I. 1921 A, 271 ("vögel").
- Giebel, C. G. 1855 B, 29 ("vögel").
- Gill, T. 1873 E, 435.  
1895 A, 696 ("birds").  
1907 A, 491 ("birds").
- Goodrich, E. S. 1916 A, 284.
- Goodsir, J. 1857 A ("birds").
- Gregory, W. K. 1915 E, 446 ("birds").  
1916 C, 31 ("birds").  
1917 D, 624 ("birds").  
1920 A, 128.
- Gregory and Camp 1918 A ("birds").
- Grote, H. 1902 A, 59 ("vögel").
- Haeckel, E. 1868 A, 436, 457.
- Hanson, F. B. 1919 B, 76 ("birds").
- Harle and Harle 1912 A, 118 ("oiseaux").
- Harting, P. 1866 A, 23 ("vögel").
- Hase, A. 1913 A ("vögel").
- Hasse, C. 1871 A ("vögel").  
1873 D, 685 ("vögel").
- Hasse and Schwarck 1870 A, 40, 51 ("vögel").
- Hay, O. P. 1910 C, 23 ("birds").
- Hayek, H. 1924 A, 152 ("vögel").
- Heilmann, G. 1913 A, 1-72, figs. 1-50.  
1913 B, 51-109.  
1914 A, 1-96.  
1915 A, 92-160.  
1916 A, 73-144.  
1926 A, 1-203.
- Heilprin, A. 1901 A, 21473 ("birds").
- Henshaw, H. W. 1912 A, 318 ("birds").
- Herman, O. 1902 A, 1 ("vögel").
- Hertwig, O. 1892 A.
- Hesse, H. 1907 A, 185 ("vögel").
- Hilgard, T. C. 1859 A, 337 ("birds").  
1860 A, 679 ("birds").
- Hilzheimer, M. 1913 A, 516 ("vögel").
- Hoernes, R. 1886 A, 633.
- Holland, H. 1864 A, 13 ("oiseaux").  
1864 C, 360 ("oiseaux").
- Hombres, J. H. 1924 A, 14 ("birds").
- Houssay and Magnan 1912 A, 39 ("oiseaux").
- Howes, G. B. 1893 C, 587.  
1902 A, 523 ("birds").
- Howes and Swinnerton 1901 A, 2.
- Huene, F. 1907 A, 152-154 ("vögel").  
1908 B, 402 ("vögel").  
1908 F, 404 ("vögel").  
1908 H, 157-175 ("vögel").  
1910 F, 148-163 ("sauropsiden").  
1911 G, 147-161 ("sauropsiden").  
1913 E, 480 ("vögel").  
1914 G, 38 ("vögel").  
1922 E, 24.  
1922 F, 409 ("vögel").  
1926 A, 262 ("vögel").  
1927 E, 326 ("vögel").
- Huxley, T. H. 1855 A, 82.  
1859 D, 435, 450 ("birds").  
1863 E, 443.  
1863 F, 475, 529.  
1867 C, 238.  
1868 B, 357.  
1868 D, 303 ("birds").  
1869 F, 574 ("birds").  
1869 G, 445 ("birds").  
1869 J, 91 ("birds").  
1870 G, 465, 482.  
1870 H, 494 ("birds").

- Huxley, T. H. 1881 A, 454 ("birds").  
 Ihde, — 1912 A, 247 ("vögel").  
 Jacquemin, E. 1834 A, 277 ("oiseaux").  
 1836 A, 129 ("oiseaux").  
 1837 A, 565 ("oiseaux").  
 Jaeger, G. F. 1842 A, 441 ("vögel").  
 Jaekel, O. 1901 B, 52 ("vögel").  
 1903 F, 35 ("vögel").  
 1904 A, 33 ("vögel").  
 1906 D, 188 ("vögel").  
 1908 B, 467 ("vögel").  
 1909 A, 193, 211.  
 1909 C, 706 ("vögel").  
 1911 A, 167.  
 1912 A, 610 ("vögel").  
 1915 B, 1 ("vögel").  
 Johnson, A. 1883 A, 405 ("birds").  
 Jordan, D. S. 1905 B ("birds").  
 1905 C, 872 ("birds").  
 1922 C, 177 ("birds").  
 Julien, A. 1894 A, 173 ("oiseaux").  
 Kehler, F. A. 1896 A, 347 ("vögel").  
 Kerbert, C. 1876 A, 229 ("vögel").  
 Kerr, J. G. 1923 A, 114.  
 Kessler, K. T. 1841 A, 466, 626 ("vögel").  
 Keyes, C. A. 1922 A, pl. in.  
 Kingsley, J. S. 1901 A, 197 ("birds").  
 1912 B, 95.  
 1925 A, 46, 47, 56, 57, 169, 225, 255, 269, 287, 288.  
 Kjellberg, K. 1904 A, 159 ("sauropsiden," in part).  
 Kllaatsch, H. 1893 B, 651 ("sauropoden," in part).  
 Kllaauw, C. J. 1924 B, 596.  
 Klein, E. E. 1868 A ("vögel").  
 Knopfl, W. 1917 A, 49 ("vögel").  
 Köstlin, O. 1844 A, 168 ("vögel").  
 Koken, E. 1896 B, 427 ("vögel").  
 1899 A, 364 ("vögel").  
 Kulczycki, W. 1901 A, 589 ("vögel").  
 1908 A, 125 ("vögel").  
 Lambrecht, K. 1914 A, 58-84.  
 1916 B, 215-307.  
 1916 C, 482-501.  
 Larger, R. 1913 A, 702, 713 ("oiseaux").  
 Lavocat, A. 1883 A, 1316, 1318 ("oiseaux").  
 1884 A, 1126 ("oiseaux").  
 1885 A, 28, 40 ("oiseaux").  
 1889 A, 39, 43 ("oiseaux").  
 Lebedinsky, N. G. 1913 A, 647 ("vögel").  
 1913 B, 191 ("vögel").  
 1914 A, 84 ("vögel").  
 1918 A, 36 ("vögel").  
 1918 B, 129 ("vögel").  
 1921 A, 8 ("vögel").  
 Leche, W. 1887 A ("vögel").  
 LeDamany, P. 1902 A, 335 ("oiseaux").  
 1903 A, 273 ("oiseaux").  
 1903 B, 276 ("oiseaux").  
 1903 D, 355 ("oiseaux").  
 1903 E, 365 ("oiseaux").  
 1903 G, 127 ("oiseaux").  
 1906 B, 159 ("oiseaux").  
 Ledouble, A. F. 1903 A, 642 ("oiseaux").  
 L'Herminier, F. 1836 A, 107 ("oiseaux").  
 Leighton, V. L. 1894 A, 63 ("birds").  
 Lemoine, V. 1889 A, 233 ("oiseaux").  
 Leunis and Ludwig 1883 A, 298.  
 Lilenthal, G. 1917 A, 261 ("vögel").  
 Lindsay, B. 1885 A, 884 ("birds").  
 Lorenz, L. 1908 A, 325 ("vögel").  
 Lubosch, W. 1911 A, 325 ("vögel").  
 1911 B, 744 ("vögel").  
 1926 A, 104, fig. 1 ("vögel").  
 Lucas, F. A. 1894 A, 208 ("birds").  
 1894 B, 36 ("birds").  
 1902 H, 95 ("birds").  
 Lühder, W. 1871 A, 321 ("vögel").  
 Lull, R. S. 1906 B, 549 ("birds").  
 1917 B, 294, 337, 532.  
 1918 C, 128 ("birds").  
 Lurje, M. 1906 A, 1-61 ("vögel").  
 Lydekker, R. 1879 A, 1, 25.  
 1896 E, 398-416.  
 1901 A, 646 ("birds").  
 1903 D, 75 ("birds").  
 1912 C, 24 ("birds").  
 Mackie, S. J. 1883 C, 106 ("birds").  
 1883 E, 415 ("birds").  
 Magnan, A. 1922 A, 125-334.  
 Magnus, H. 1871 A.  
 Marsh, O. C. 1899 C, 71 ("birds").  
 Martins, C. 1857 A ("oiseaux").  
 1872 A, 308 ("oiseaux").  
 Matthew, W. D. 1915 A, 184, 292 ("birds").  
 Matthew and Granger 1917 A, 307 ("birds").  
 Mead, C. S. 1904 A, 53 ("birds").  
 Meckel, J. F. 1825 A ("vögel").  
 Mehnert, E. 1837 B, 212 ("vögel").  
 Merriam, C. H. 1906 A, 243 ("birds").  
 Meunier, S. 1903 A, 774 ("oiseaux").  
 Miller, L. H. 1913 A, 132 ("birds").  
 1923 A, 345 ("birds").  
 1928 A, 119 ("birds").  
 Miller, W. D. 1924 A, 1.  
 Mitchell, P. C. 1894 A, 211 ("birds").  
 Mivart, St. G. 1879 B, 537 ("birds").  
 Mivart and Clarke 1879 A, 526, text-fig. 9 ("birds").  
 Montgomery, T. H. 1901 A, 21732 ("birds").  
 Moodie, R. L. 1915 I, 139 ("birds").  
 Mook, C. C. 1913 A, 465.  
 Mudge, B. F. 1879 A, 224 ("birds").  
 Nauck, E. T. 1923 A, 4 ("vögel").  
 Newton, E. T. 1888 B, 439 ("birds").  
 Nitzsch, C. L. 1822 A, 70 ("vögel").  
 1862 A, 390 ("vögel").  
 Nopcsa, F. 1903 B, 487 ("vögel").  
 1907 A, 223, 232 ("birds").  
 1917 A, 204 ("vögel").  
 1923 C, 463 ("birds").  
 1923 H, 175, 178, 180, 184 ("vögel").  
 1926 A, 636 ("birds").  
 Norsa, E. 1895 A, 232 ("oiseaux").  
 O'Donoghue, C. H. 1913 A, 465 ("birds").  
 Oken, L. 1819 A, 1529 ("vögel").  
 1823 B, 444 ("vögel").  
 Osborn, H. F. 1904 L, 256 ("birds").  
 1904 M, 257.  
 1916 E, 511 ("birds").  
 1917 B, 308 ("birds").  
 1926 A, 186 ("birds").  
 1926 C, 339 ("birds").  
 Owen, R. 1848 B, 125, pl. ii, fig. 4.  
 1868 A, 862-866.

- Packard, A. S. 1904 A, 221 ("birds").  
 Palacký, J. 1902 B, 143 ("vögel").  
 Pander and Alton 1827 B, 1 ("vögel").  
 Parker, W. K. 1864 B, 56 ("birds").  
 1864 B, 56 ("birds").  
 1869 A, 501 ("birds").  
 1886 A, 270 ("birds").  
 1887 B, 52 ("birds").  
 1888 C, 397 ("birds").  
 1888 D, 465 ("birds").  
 Parker and Haswell 1897 A, 350.  
 Perrier, E. 1920 A ("oiseaux").  
 1867 A, 725 ("vögel").  
 Peters, W. 1867 A, 725 ("vögel").  
 1867 B, 779 ("vögel").  
 1867 C, 953 ("birds").  
 1868 A, 592 ("vögel").  
 1868 B, 388 ("birds").  
 Petronievics, B. 1921 A, 104, 195 ("oiseaux").  
 Pettigrew, J. B. 1872 A, 337 ("birds").  
 Pfeiffer, H. 1854 A, 20.  
 Pictet, F. J. 1853 A, 400 ("oiseaux").  
 Plieninger, F. 1906 A, 407 ("vögel").  
 Pompeckj, J. F. 1925 A, 6 ("vögel").  
 Puccioni, N. 1908 A, 56 ("uccelli").  
 Pyecraft, W. P. 1893 A, 361 ("birds").  
 1900 B ("birds").  
 1902 B, 312 ("birds").  
 1903 C, 221 ("birds").  
 1906 B, 531 ("birds").  
 1909 A, 204 ("birds").  
 1910 A ("birds").  
 Rabl, C. 1903 A, 166, 175 ("vögel").  
 Reichenbach, H. G. L. 1853 A.  
 Reichenow, A. 1913 A.  
 1914 A.  
 Reichert, K. B. 1837 A, 120.  
 1849 A, 468 ("vögel").  
 Retterer, E. 1908 A, 485 ("oiseaux").  
 Rex, H. 1911 A, 209 ("vögel").  
 Reynolds, S. H. 1897 A, 295-342.  
 Rice and Gregory 1906 A, 178 ("birds").  
 Ridgway, R. 1901 A, 2.  
 Römer, F. 1907 A, 67 ("vögel").  
 Röse, C. 1892 G, 139 ("vögel").  
 Rogenhofer, A. 1908 A, (42) ("vögel").  
 Romer, A. S. 1923 A, 141, fig. 1 ("birds").  
 1923 B, 533 ("birds").  
 Rosenberg, A. 1873 A, 139 ("vögel").  
 Ryder, J. 1887 A, 344 ("birds").  
 Sabatier, A. 1897 A, 806 ("oiseaux").  
 1902 A, 99 ("oiseaux").  
 Scharff, R. F. 1909 B, 21 ("birds").  
 1922 A, 69 ("birds").  
 Schauinsland, H. 1906 A, 514.  
 Schöne, G. 1902 A, 22 ("vögel").  
 Schoenichen, W. 1900 A, 501 ("vögel").  
 Schuchert and Barrell 1914 A, 24 ("birds").  
 Schwarck, W. 1872 A, 569, pl. xxvi.  
 Sclater, P. L. 1858 A, 130.  
 1886 A, 147 ("birds").  
 Scott, W. B. 1917 A, 174 ("birds").  
 Sedgwick, A. 1894 A, 42 ("birds").  
 Seebohm, H. 1888 A, 415 ("birds").  
 Seeley, H. G. 1866 B, 352 ("birds").  
 1872 A, 277 ("birds").  
 1872 B, 36 ("birds").  
 1876 C, 179 ("birds").  
 Seeley, H. G. 1887 E, 192.  
 Serres, M. 1832 A, 145 ("oiseaux").  
 1552 B, 179 ("oiseaux").  
 Sewertzoff, A. N. 1896 A, 274 ("vögel").  
 Sharpe, R. B. 1891 A.  
 Shuno, K. 1914 A, 378 ("vögel").  
 Shore, T. W. 1887 A, 363.  
 Shufeldt, R. W. 1882 A, 892 ("birds").  
 1882 B, 324 ("birds").  
 1886 D, 353.  
 1896 A, 357 ("birds").  
 1904 B, 533.  
 1904 C, 311.  
 1913 F, 306 ("birds").  
 1920 A, 634 ("birds").  
 Sieglbauer, F. 1911 A, 262 ("vögel").  
 Simpson, G. G. 1926 I, 453 ("birds").  
 Sippel, W. 1907 A, 490, 515 ("vögel").  
 Sixta, V. 1899 A, 330 ("vögel").  
 Sonies, F. 1907 A, 395 ("vögel").  
 Spencer, W. B. 1886 A, 220.  
 Spurrell, H. G. F. 1906 A, 123 ("birds").  
 Steiner, H. 1916 A, 488 ("vögel").  
 1918 A, 221-496.  
 1922 A, 307-360.  
 Steinmann, G. 1907 A, 456.  
 1908 A, 215, 221 ("vögel").  
 1910 A, 99 ("vögel").  
 1912 B, 717, 731 ("vögel").  
 1922 A, 239 ("vögel").  
 Stellwaag, F. 1912 A, 627 ("vögel").  
 Sterling, S. 1908 A, 333 ("vögel").  
 Strasser, H. 1885 A, 174 ("vögel").  
 1905 B, 194 ("vögel").  
 1905 C, 165 ("vögel").  
 Strecker, C. 1887 A, 308 ("vögel").  
 Stromer, E. 1912 A, 132.  
 Strong, R. M. 1921 A, 203 ("birds").  
 Sundevall, C. J. 1886 A, 339 ("birds").  
 Sushkin, P. P. 1899 B ("vögel").  
 1910 A, 244 ("vögel").  
 Taschenberg, O. 1899 A, 3649-4363.  
 Terra, P. 1911 A, 242 ("vögel").  
 Terry, R. J. 1909 A, 526 ("birds").  
 Tristram, H. B. 1888 A, 204 ("birds").  
 Trouessart, E. L. 1906 A, 66 ("oiseaux").  
 Van Bemmelen, J. F. 1928 A, 283 ("oiseaux").  
 Van den Broeck, E. 1900 A, 67 ("oiseaux").  
 Van Wijhe, J. W. 1905 A, 17 ("vögel").  
 1907 A, 14 ("birds").  
 1922 A, 292 ("vögel").  
 Versluys, J. 1903 A, 172 ("vögel").  
 1910 B, 178, 223 ("vögel").  
 1912 A, 492 ("vögel").  
 1912 B, 653, 687.  
 Vialleton, L. 1916 A, 5.  
 1919 A, 307 ("oiseaux").  
 Virchow, H. 1909 A, 424 ("vögel").  
 1914 A, 79 ("vögel").  
 1914 C, 130 ("vögel").  
 1921 A, 136 ("vögel").  
 Vitali, G. 1909 A, 214 ("uccelli").  
 Vogt, C. 1879 A, 244 ("oiseaux").  
 Voit, M. 1923 A, 68 ("vögel").  
 Wagner, R. 1843 A, 79.  
 Wallace, A. R. 1864 A, 36 ("birds").  
 1876 A, I, 490, 491; II, 562 ("birds").  
 1894 A, 433, 438 ("birds").

Wallisch, W. 1922 A, 533, fig. 1 ("vögel").  
 Wamich, P. 1913 A, 1 ("vögel").  
 Watson, D. M. S. 1917 A, 984 ("birds").  
 1917 B, 60 ("birds").  
 Weidenreich, F. 1922 B, 55 ("vögel").  
 1925 A, 37 ("vögel").  
 Weitzel, A. 1865 A, 317 ("vögel").  
 Wetmore, A. 1926 E, 525 ("birds").  
 1928 A, 145 ("birds").  
 Wilbrand, J. B. 1823 A, 509 ("vögel").  
 Williston, S. W. 1879 A, 457.  
 1885 A, 629 ("vögel").  
 1904 A, 44 ("birds").  
 1912 E, 260 ("birds").

Williston, S. W. 1917 C, 412 ("birds").  
 Woodward, A. S. 1898 E, 331 ("birds").  
 Woodward, H. 1904 B, 149.  
 Woodward and Sherborn 1891 A, 32.  
 Wray, R. S. 1887 A, 343 ("birds").  
 Wright, W. 1909 A, 674 ("birds").  
 Young, G. W. 1915 A, 248 ("birds").  
 Ziegler, H. E. 1901 A, 231, 235 ("vögel").  
 Zittel, K. A. 1897 A, 127 ("vögel").  
 1901 A, 418 ("birds").  
 Zittel and Lucas 1902 A, 256.  
 Zittel and Schlosser 1911 A, 308.  
 1923 A, 384-402.

### *Superorder SAURURÆ Huxley.*

Huxley, T. H. 1867 C, 241.  
 Hay, O. P. 1902 A, 518.  
 Abel, O. 1912 F, 301.  
 1919 A, 693.  
 Beddard, F. E. 1898 A, 529.  
 Carus, V. 1875 A, 367.  
 Cope, E. D. 1891 N, 53.  
 Evans, A. H. 1899 A, 23 (Archæornithes).  
 Fürbringer, M. 1902 B, 606.  
 Gadow, H. 1893 A, 86 (Archæornithes).  
 1910 B, 976 (Archæornithes).  
 Garbowski, T. 1895 A, 447 ("saururen").  
 Gegenbaur, C. 1879 A, 522 ("saururen").  
 Haeckel, E. 1868 A, 441, 458.  
 1873 A, 512.  
 Hoernes, R. 1886 A, 633.  
 Huxley, T. H. 1868 B, 357.  
 Ihde, — 1912 A, 259 ("saururen").  
 Jaekel, O. 1911 A, 170 (Archornithes).  
 Knowlton, F. H. 1909 B, 53 (Archæornithes).

Lambrecht, K. 1914 A, 61 (Archæornithes).  
 1921 A, 1.  
 Lydekker, R. 1879 A, 25.  
 Newton, A. 1885 A, 44.  
 Newton and Gadow 1896 A, 754, 814.  
 Parker and Haswell 1897 A, 382, 390 (Archæornithes).  
 Pycraft, W. P. 1910 A, 41 (Archornithes).  
 Ridgway, R. 1901 A, 3.  
 Shufeldt, R. W. 1903 B, 34 (Archornithes).  
 1904 B, 849 (Archornithes).  
 Steinmann, G. 1907 A, 460 (Saurura).  
 Stromer, E. 1912 A, 142.  
 Vialleton, L. 1916 A, 7.  
 Vogt, C. 1879 A, 247 (Saururi).  
 Wamich, P. 1913 A, 20 ("saururen").  
 Woodward, A. S. 1898 B, 232.  
 Zittel and Lucas 1902 A, 264.  
 Zittel and Schlosser 1911 A, 316 (Archæornithes).  
 1923 A, 391 (Archæornithes).

### Order ARCHÆOPTERYGOMORPHI, new name.

Hay, O. P. 1902 A, 518 (Ornithopappi).  
 Abel, O. 1919 A, 693 (Archæornithes).  
 Cope, E. D. 1891 N, 54 (Ornithopappi).  
 Fürbringer, M. 1888 A, 1565 (Archæopterygi-formes).  
 Lambrecht, K. 1921 A, 1 (Archæopterygi-formes).

Shufeldt, R. W. 1903 B, 34 (Archornithi-formes).  
 1904 B, 849 (Archornithi-formes).  
 Zittel and Lucas 1902 A, 264 (Archæornithes).  
 Zittel and Schlosser 1911 A, 316 (Archæornithes).  
 1923 A, 391 (Archæornithes).

### ARCHÆOPTERYGIDÆ.

Hay, O. P. 1902 A, 518.  
 Carus, V. 1875 A, 368 (Archornithidæ).  
 Huxley, T. H. 1868 D, 307 (Archæopteryx).

Shufeldt, R. W. 1903 B, 34 (Archæopteridæ).  
 1904 B, 849.

### ARCHÆOPTERYX Meyer.

Hay, O. P. 1902 A, 518.  
 Abel, O. 1911 A, 150.  
 1912 F, 343.  
 1919 A, 693.  
 1920 A, 401, figs. 621, 622.  
 Arthaber, G. 1921 B, 446.  
 Beddard, F. E. 1898 A, 536.  
 Beebe, C. W. 1906 A, 485, figs. 4-6.  
 1915 B, 39, 46.  
 Döderlein, L. 1900 B, 58.  
 Finn, F. 1894 B, 456.  
 Fuchs, H. 1909 B, 136.  
 Gadow, H. 1893 A, 86.

Gill, T. 1881 A, 379.  
 Heilmann, G. 1913 A, 1, figs. 1-4, 6-9, 11.  
 1926 A, 203, many figures.  
 Heinroth, O. 1923 A, 277, pl. iv, fig. 1; pl. v.  
 Huxley, T. H. 1867 A, 416, 418.  
 1868 E, 243.  
 1876 F, 180.  
 1880 C, 2.  
 Jaekel, O. 1911 A, 170, fig. 189.  
 1915 B, 15, fig. 6.  
 Knipe, H. R. 1912 A, 96, fig.  
 Knowlton, F. H. 1909 B, 53, fig. 19a.  
 Koken, E. 1899 A, 363.

- Lambrecht, K. 1914 A, 61, text-fig. 5.  
 1921 A, 1.  
 Lucas, F. A. 1906 C, 316.  
 1916 A, 5, 4 figs.  
 Lull, R. S. 1917 B, 695, pl. xiv.  
 1922 D, 382.  
 Montgomery, T. H. 1901 A, 21732 ("archeopteryx").  
 Newton and Gadow 1896 A, 1060.  
 Nopcsa, F. 1907 A, 232, fig. 81.  
 1923 C, 463, figs. 5-7.  
 Parker, W. K. 1884 B, 55.  
 Petronievics, B. 1921 A, 103, 195.  
 1923 A, 94.  
 Petronievics and Woodward 1916 A, 283.  
 1917 A, 1, pl. i.  
 Pycraft, W. P. 1894 B, 437, pl. iv, figs. 1-7.  
 1910 A, 41, 455, fig. 13.

- Reynolds, S. H. 1897 A, 532.  
 Rosenberg, A. 1873 A, 142.  
 Shufeldt, R. W. 1836 D, 352, 3 figs.  
 1907 B, 114.  
 Simpson, G. G. 1926 I, 453.  
 Steiner, H. 1916 A, 497.  
 1918 A, 273, 441, pls. ix, x.  
 1922 A, 309, 350, fig. 18.  
 Van Bemmelen, J. F. 1928 A, 285 ("archeopteryx").  
 Van den Broeck, E. 1900 A, 71 (Archeopteryx).  
 Vialleton, L. 1916 A, 18, fig. 8.  
 Vogt, C. 1879 A, 241, fig. 19.  
 Zittel and Schlosser 1911 A, 316, fig. 465.  
 1923 A, 385, fig. 498.  
 No American species of this genus has been recognized.

#### LAOPTERYX Marsh. Type *L. priscus* Marsh.

- Hay, O. P. 1902 A, 518.  
 Beddard, F. E. 1898 A, 541.  
 Burckhardt, R. 1902 A, 525.  
 Fürbringer, M. 1902 B, 623.  
 Heilmann, A. 1887 A, 330.  
 Lambrecht, K. 1916 C, 493.  
 Lucas, F. A. 1902 B, 177.  
 Shufeldt, R. W. 1903 B, 37.  
 Simpson, G. G. 1926 H, 204.  
 The systematic position of this genus is somewhat doubtful.

#### Laopteryx priscus Marsh.

- Hay, O. P. 1902 A, 518.  
 Abel, O. 1910 D, 7.  
 Lambrecht, K. 1921 A, 2.  
 Mook, C. C. 1916 A, 134.  
 Shufeldt, R. W. 1836 D, 356.  
 1903 B, 37.  
 1913 G, 410 (*L. prisca*).  
 Simpson, G. G. 1926 E, 3, 4.  
 Wetmore, A. 1928 A, 148.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

#### Superorder EURHIPIDURÆ Gill.

- Hay, O. P. 1902 A, 519 (Eurhipidura).  
 Abel, O. 1919 A, 695 (Ornithura).  
 Beddard, F. E. 1898 A, 167 (Ornithura).  
 Brauns, D. 1890 A, 202 (Euornithes).  
 Cope, E. D. 1891 N, 54.  
 Evans, A. H. 1899 A, 25 (Neornithes).  
 Fürbringer, M. 1902 B, 606 (Ornithura); 616 (Eurhipidura).  
 Gadow, H. 1910 B, 976 (Neornithes).  
 1893 A, 90 (Neornithes).  
 Jaekel, O. 1911 A, 170 (Neornithes).  
 Knowlton, F. H. 1909 B, 56 (Neornithes).  
 Lambrecht, K. 1914 A, 61 (Neornithes).

- Parker and Haswell 1897 A, 332, 392 (Neornithes).  
 Pycraft, W. P. 1910 A, 41 (Neornithes).  
 Reynolds, S. H. 1897 A, 298 (Neornithes).  
 Ridgway, R. 1901 A, 3 (Ornithura).  
 Shufeldt, R. W. 1903 B, 38.  
 1904 B, 847, 849 (Ornithura).  
 Stromer, E. 1912 A, 137 (Ornithura).  
 Wetmore and Miller 1926 A, 340 (Neornithes).  
 Woodward, A. S. 1898 B, 234 (Neornithes).  
 Zittel and Lucas 1902 A, 265 (Ornithura).  
 Zittel and Schlosser 1911 A, 317 (Ornithura).  
 1923 A, 394 (Ornithura).

#### Order HESPERORNITHOMORPHI, new name.

- Unless otherwise indicated the authors, as quoted, employ for this group the name Odontolæ.  
 Hay, O. P. 1902 A, 520 (Odontolæ); 521 (Dromæopappi).  
 Abel, O. 1919 A, 696.  
 Arldt, T. 1907 D, 669.  
 Baird, S. F. 1876 A, ccii.  
 Beddard, F. E. 1898 A, 392 (Hesperornithes).  
 Brauns, D. 1890 A, 149 (Odontolæ); 202 (Odontornithes).  
 Case, E. C. 1898 C, 819.  
 Cope, E. D. 1891 N, 54 (Odontolæ); 56 (Dromæopappi).  
 Delafontaine, M. 1875 A, 176 ("odontornithes").  
 Evans, A. H. 1899 A, 25, 45 (Odontolæ); 25 (Hesperornithes).

- Fürbringer, M. 1902 B, 608 (Odontolæ); 609 (Dromæopappi); 632 (Hesperornithes).  
 Gadow, H. 1893 A, 114 (Hesperornithes).  
 1910 B, 977.  
 Garbowski, T. 1895 A, 447 ("odontolæ").  
 Hilzheimer, M. 1913 A, 517.  
 Hoernes, R. 1886 A, 635.  
 Huxley, T. H. 1880 C, 3 ("toothed birds").  
 Jaekel, O. 1911 A, 174.  
 Knowlton, F. H. 1909 B, 56 (Hesperornithiformes).  
 Lull, R. S. 1917 B, 322.  
 Lydekker, R. 1891 A, 202.  
 Newton and Gadow 1896 A, 640, 954.  
 Parker and Haswell 1897 A, 385.  
 Reynolds, S. H. 1897 A, 299.  
 Ridgway, R. 1901 A, 8.

- Sharpe, R. B. 1899, Handlist of Birds, 116 (Hesperornithiformes).  
 Shufeldt, R. W. 1903 B, 33, 59 (Odontoholcæ); 59 (Hesperornithoidea).  
 1904 B, 848, 849 (Odontoholcæ, Hesperornithoidea).  
 Steinmann, G. 1922 A, 239 ("zahnvögel").  
 Terra, P. 1911 A, 243 ("odontolcen").
- Van den Broeck, E. 1900 A, 76.  
 Vialleton, L. 1916 A, 7.  
 Vogt, C. 1879 A, 247 ("odontornithes").  
 Wetmore, A. 1926 E, 525 (Odontornithes).  
 Zittel, Eastman, etc. 1902 A, 266.  
 Zittel and Schlosser 1911 A, 317 (Odontolcæ); 318 (Hesperornithes).  
 1923 A, 304 (Odontolcæ, Hesperornithes).

### HESPERORNITHIDÆ Marsh.

- Marsh, O. C. 1876 F, 509.  
 Hay, O. P. 1902 A, 521.  
 Arldt, T. 1907 D, 658.  
 Cope, E. D. 1891 N, 56.  
 Gadow, H. 1893 A, 117.  
 Heilmann, G. 1913 A, 41 (Hesperornidæ).
- Lambrecht, K. 1921 A, 18.  
 Lydekker, R. 1879 A, 25 (Hesperornidæ).  
 1891 A, 204.  
 Shufeldt, R. W. 1903 B, 59.  
 1904 B, 849.

### HESPERORNIS Marsh.

### Type *H. regalis* Marsh.

- Hay, O. P. 1902 A, 521.  
 Abel, O. 1912 F, 170, 676.  
 1920 A, 404.  
 1922 A, 144.  
 1922 C, 332, fig. 289.  
 Anonymous 1880 B, 458.  
 Arthaber, G. 1921 A, 34.  
 Baird, S. F. 1876 A, cciii.  
 Beddard, F. E. 1898 A, 541.  
 Beebe, C. W. 1915 B, 39.  
 Bigot, A. 1897 A, 467 (Hesperornis).  
 Boule, M. 1902 B, 910.  
 Brauns, D. 1890 A, 149.  
 Brown, B. 1909 A, 440.  
 1911 A, 401.  
 Burckhardt, R. 1902 A, 525.  
 Case, E. C. 1898 C, 819.  
 Chandler, A. C. 1916 C, 390, 391.  
 Dollo, L. 1896 A, 83.  
 Eastman, C. R. 1898 F, 138.  
 1904 D, 669.  
 Evans, A. H. 1899 A, 26.  
 Fejérváry, G. J. 1921 C, 11.  
 Fürbringer, M. 1888 A, pl. u, fig. 4.  
 1902 B, 608, 632.  
 Gadow, H. 1893 A, 114.  
 Gaudry, A. 1896 A, 175.  
 1898 A, 127.  
 Grinnell, G. B. 1923 A, 336.  
 Hay, O. P. 1909 F, 94.  
 Heilmann, G. 1913 A, 27, 71.  
 1913 B, 44, 48.  
 1915 A, 116.  
 1916 A, 75.  
 1926 A, 205.  
 Heilprin, A. 1887 A, 330.  
 Hoernes, R. 1886 A, 635.  
 Huxley, T. H. 1876 F, 179.  
 Ihde, — 1912 A, 251.  
 Jaekel, O. 1911 A, 174.  
 Kingsley, J. S. 1925 A, 48.  
 Knipe, H. R. 1912 A, 111, fig. .  
 Knowlton, F. H. 1909 B, 56.  
 Koken, E. 1893 B, 428.  
 Lambrecht, K. 1921 A, 19.  
 Larger, R. 1913 A, 714.  
 Lee, Stone, Gale 1915 A, pl. v, fig. A.  
 Lemoine, V. 1889 A, 258.  
 Lucas, F. A. 1901 F, 490 (Hesperonis).
- Lucas, F. A. 1901 J, 55, 83, fig. 16.  
 1902 B, 179.  
 1903 C, 195.  
 Lull, R. S. 1922 D, 383.  
 Lydekker, R. 1891 A, 205.  
 Marinelli, W. 1928 A, 156.  
 Matthew and Granger 1917 A, 309.  
 Mivart, St. G. 1888 A, 373.  
 Mudge, B. F. 1879 A, 226.  
 Newton, A. 1885 A, 43.  
 Newton, E. T. 1888 B, 439.  
 Newton and Gadow 1896 A, 1070.  
 Nopcsa, F. 1907 A, 229, 234.  
 1917 A, 206.  
 1924 B, 85.  
 Osborn, H. F. 1917 B, 230, fig.  
 Palacký, J. 1902 B, 143.  
 Parker, W. K. 1888 D, 469.  
 1888 B, 223.  
 1890 A, 2, 57.  
 Parker and Haswell 1897 A, 385, fig. 993.  
 Perrier, E. 1920 A, 223, 329.  
 Petronievics and Woodward 1916 A, 253.  
 Phenninger, F. 1907 A, 295.  
 Pycraft, W. P. 1900 A, 226, 260.  
 1900 B, 240.  
 1900 C, 1041.  
 1909 A, 204.  
 1910 A, 36, 385, fig. 11.  
 Reynolds, S. H. 1897 A, 299, 330, 333, 334, 338.  
 Schuchert and Levene 1927 A, 308.  
 Shufeldt, R. W. 1882 B, 326, fig. 6.  
 1903 B, 59, 60.  
 1904 A, 14, 34.  
 1909 A, 337.  
 1913 E, 394.  
 1915 A, 78.  
 1915 D, 11.  
 Simpson, G. G. 1926 I, 453.  
 Steinmann, G. 1907 A, 459, fig. 805.  
 1908 A, 216.  
 1909 A, 78.  
 Terra, P. 1911 A, 243, fig. 77.  
 Van Bemmelen, J. F. 1923 A, 291.  
 Van den Broeck, E. 1900 A, 76.  
 Vogt, C. 1879 A, 247.  
 Wallace, A. R. 1876 A, i, 164.  
 Wamich, P. 1913 A, 26.

Wetmore, A. 1925 A, 145.  
 Williston, S. W. 1879 A, 458.  
 1902 E, 252.  
 1925 A, 199.

Woodward, A. S. 1923 C, 86.  
 Woodward, H. 1904 B, 150.  
 Young, G. W. 1915 A, 263.  
 Zittel and Lucas 1902 A, 266.  
 Zittel and Schlosser 1911 A, 318.  
 1923 A, 385, 394.

### **Hesperornis crassipes Marsh.**

Hay, O. P. 1902 A, 521.  
 Evans, A. H. 1899 A, 46.  
 Fürbringer, M. 1888 A, 157.  
 Gadow, H. 1893 A, 114.  
 Heilmann, G. 1913 A, 29, fig. 25.  
 Lambrecht, K. 1921 A, 19.  
 Lydekker, R. 1891 A, 209.  
 Shufeldt, R. W. 1904 A, 34.  
 1915 F, 292 (Lestornis).  
 Upper Cretaceous (Niobrara); Kansas.

### **Hesperornis montanus Shufeldt.**

Shufeldt, R. W. 1915 F, 293, pl. xviii, figs. 4, 6, 8, 10, 12 (H. montana).  
 Lambrecht, K. 1921 A, 19 (H. montana).  
 Upper Cretaceous (Claggett); Montana.

### **Hesperornis regalis Marsh.**

Hay, O. P. 1902 A, 521.  
 Abel, O. 1912 F, 177, 424, 676, figs. 114, 302.  
 1922 C, 328, figs. 287, 288, 292.  
 Anonymous 1880 B, 458.  
 Baird, S. F. 1876 A, cciii.  
 Boule, M. 1891 A, 23, fig. 7.  
 Evans, A. H. 1899 A, 46, fig. 13.  
 Fürbringer, M. 1888 A, 56, pls. ii, iv, v.  
 Heilmann, G. 1913 A, 26, 41, figs. 20-24, 26-32, 38, 39.  
 1914 A, 48, fig. 140.

### **HARGERIA Lucas. Type *Hesperornis gracilis* Marsh.**

Lucas, F. A. 1903 A, 552.  
 Hay, O. P. 1902 A, 521 (Hesperornis, part).  
 Lambrecht, K. 1921 A, 19.  
 Zittel and Schlosser 1911 A, 319.

Heilmann, G. 1916 A, 57, fig. 189.  
 1926 A, 205, many figures.  
 Hutchinson, H. N. 1910 A, 217, fig. 81, pl. xxiv.  
 Jaekel, O. 1911 A, 174, fig. 191.  
 Knowlton, F. H. 1909 B, 57, figs. 20, 21.  
 1916 C, 493.  
 Lambrecht, K. 1921 A, 19.  
 Langer, R. 1913 A, 713.  
 Lewis, F. T. 1907 A, 658.  
 Lucas, F. A. 1902 B, 181 figures.  
 1903 A, 545, 548, figs. 3, 4.  
 1903 C, 95, pl. xxvii.  
 Lull, R. S. 1917 B, 537, pl. xv.  
 Lydekker, R. 1891 A, 205.  
 Merrill, G. P. 1907 A, 5.  
 Noack, T. 1880 A, 77.  
 1880 B, 89.  
 Schuchert, C. 1915 A, 907, figs. 490, 497.  
 Shufeldt, R. W. 1886 D, 356, 2 figs.  
 1903 B, 59.  
 1904 A, 32.  
 1915 A, 75, pl. ii.  
 1915 D, 21, pl. xv, fig. 129.  
 1915 F, 291, pl. xviii, figs. 3, 5, 7, 9, 11.  
 Steinmann, G. 1908 A, 224, fig. 133.  
 Sternberg, C. H. 1909 C, 265, fig. 41.  
 Williston, S. W. 1898 L, 30.  
 Woodward, A. S. 1923 C, 85, fig. 82.  
 Woodward, H. 1904 A, 146.  
 1904 D, 150.  
 Young, G. W. 1915 A, 250, fig. 19.  
 Zittel and Lucas 1902 A, 266, fig. 368.  
 Zittel and Schlosser 1911 A, 318, fig. 466.  
 1923 A, 385, fig. 499.  
 Upper Cretaceous (Niobrara); Kansas.

### **Hesperornis sp. indet.**

Gilmore, C. W. 1915 G, 16. Upper Cretaceous (Claggett); Montana.

### **BAPTORNIS Marsh. Type *B. advenus* Marsh.**

Hay, O. P. 1902 A, 522.  
 Beddard, F. E. 1898 A, 471.  
 Brown, B. 1909 A, 440.  
 1911 A, 401.  
 Fürbringer, M. 1902 B, 632.  
 Gadow, H. 1893 A, 118.  
 Newton and Gadow 1896 A, 280, 652.  
 Shufeldt, R. W. 1915 D, 11.  
 Van den Broeck, E. 1900 A, 76.  
 Zittel and Schlosser 1911 A, 318.  
 1923 A, 394.

### **Baptornis advenus Marsh.**

Hay, O. P. 1902 A, 522.  
 Abel, O. 1919 A, 703.  
 1922 C, 337.  
 Forbes, H. O. 1900 A, 26 (B. advenus).  
 Lambrecht, K. 1921 A, 18.  
 Lucas, F. A. 1903 A, 553, figs. 6-8.  
 Shufeldt, R. W. 1915 D, 976, pl. i, figs. 1-16; pl. ii, fig. 12.  
 Wetmore, A. 1928 A, 150.  
 Upper Cretaceous (Niobrara); Kansas.

### **CONIORNIS Marsh. Type *C. altus* Marsh.**

Hay, O. P. 1902 A, 522.  
 Forbes, H. O. 1900 A, 26 (Coniornis).  
 Fürbringer, M. 1902 B, 632.

Shufeldt, R. W. 1915 D, 13 (Syn. of Hesperornis).



**Coniornis altus Marsh.**

- Hay, O. P. 1902 A, 522.  
 Gilmore, C. W. 1915 G, 16.  
 Hatcher, J. B. 1905 B, 99.  
 Lambrecht, K. 1921 A, 19 (Hesperornis).

- Lydekker, R. 1896 E, 393.  
 Shufeldt, R. W. 1915 D, 13, 16, 76, pl. iii.  
 figs. 22-24 (Coniornis, Hesperornis).  
 1915 F, 292.  
 Upper Cretaceous (Claggett); Montana.

**Order RATITÆ Merrem.**

- Merrem, B. 1913, Tent. Syst. Aves., 259.  
 Hay, O. P. 1902 A, 522 (Dromæognathæ).  
 Anderson, R. J. 1909 B, 745.  
 Anthony, R. 1913 A, 252 ("ratites").  
 Arldt, T. 1907 D, 678.  
 Bardeleben, K. 1903 A, 28 ("ratiten").  
 Blatschke, F. 1904 A, 150 ("ratiten").  
 Burckhardt, R. 1902 A, 501 ("ratiten").  
 Chandler, A. C. 1916 C, 233.  
 Cope, E. D. 1891 N, 54.  
 Dabbene, R. 1910 A, figs. 35, 36 (Desmognathæ).  
 Eastman, C. R. 1898 F, 135.  
 Evans, A. H. 1899 A, 26.  
 Funn, F. 1894 A, 210 ("ratites").  
 1894 B, 453.  
 Fürbringer, M. 1902 B, 609.  
 Gadow, H. 1893 A, 90, 103.  
 Gegenbaur, C. 1871 A, 195 ("ratiten").  
 Gregory, W. K. 1916 C, 38 ("ratites").  
 Haeckel, E. 1868 A, 441.  
 1873 A, 512.  
 Heilmann, G. 1926 A, 207 ("ratites").  
 Howes and Swinnerton 1901 A, 2, 32.  
 Huene, F. 1926 B, 97 (Ratitidæ).  
 Huxley, T. H. 1867 C, 241.  
 1868 B, 357 (Ratitæ); 360 (Dromæognathæ).  
 1868 C, 312.  
 1868 D, 306.  
 Jaekel, O. 1911 A, 175.  
 Lambrecht, K. 1914 A, 61, 73.  
 Larger, R. 1913 A, 714 ("ratites").  
 Lebedinsky, N. G. 1914 A, 84 ("ratiten").  
 Lull, R. S. 1917 B, 294.  
 1922 D, 333.  
 Lydekker, R. 1879 A, 12, 26.  
 Matthew and Granger 1917 A, 312 (Desmognathæ).
- Newton, A. 1885 A, 43.  
 Newton and Gadow 1896 A, 1080.  
 Nopcsa, F. 1907 A, 233.  
 O'Donohue, C. H. 1913 A, 465 ("dromæognathous").  
 Pander and Alton 1827 B, 13.  
 Parker, W. K. 1875 A, 699, 719.  
 1878 C, 215.  
 1888 A, 124 (Desmognathæ).  
 1888 B, 323.  
 1888 C, 397.  
 1888 D, 477.  
 Parker and Haswell 1897 A, 332.  
 Petronievics and Woodward 1916 A, 283 (Desmognathæ).  
 Pycraft, W. P. 1900 A, 266.  
 1902 B, 326 (Palæognathæ).  
 1910 A, 41 (Ratitæ); 45, 46 (Palæognathæ).  
 Reichenow, A. 1913 A, 69.  
 Reynolds, S. H. 1897 A, 553.  
 Sieglbauer, F. 1911 A, 265 ("ratiten").  
 Steiner, H. 1916 A, 493.  
 1918 A, 428, 494.  
 Van Bemmelen, J. F. 1928 A, 290 ("ratites").  
 Vialleton, L. 1916 A, 5 ("ratites").  
 Virchow, H. 1916 A, 212 ("strauss").  
 Wamich, P. 1913 A, 25 ("ratiten").  
 Woodward, A. S. 1923 C, 89.  
 Woodward, H. 1904 B, 152.  
 Wray, R. S. 1887 A, 350.  
 Young, G. W. 1915 A, 252 ("ratites").  
 Zittel and Lucas 1902 A, 268 (Desmognathæ).  
 Zittel and Schlosser 1911 A, 319 (Desmognathæ).  
 1923 A, 391.  
 At present no North American fossil birds are referred to the Ratitæ.

**Order CARINATÆ Merrem.**

- Merrem, B. 1813, Tent. Syst. Aves., 258.  
 Hay, O. P. 1902 A, 523 (Euornithes).  
 Abel, O. 1920 A, 404.  
 Anthony, R. 1913 A, 255 (Carinates).  
 Arldt, T. 1907 D, 643.  
 Bardeleben, K. 1903 A, 23 ("carinaten").  
 Bittner, F. 1912 A, 4 ("carinaten").  
 Burckhardt, T. 1902 A, 509 ("carinaten").  
 Chandler, A. C. 1916 C, 233.  
 Cope, E. D. 1891 N, 55 (Euornithes).  
 Dabbene, R. 1910 A, 79.  
 Eastman, C. R. 1898 F, 135.  
 Evans, A. H. 1899 A, 46, 49 (Euornithes, Carinates).  
 Funn, F. 1894 A, 210 ("carinates").  
 Fürbringer, M. 1902 B, 607 (Euornithes).  
 Gadow, H. 1910 B, 977.  
 Garbowski, T. 1895 A ("carinaten").  
 Gegenbaur, C. 1871 A, 165 ("carinaten").  
 Gregory, W. K. 1916 C, 38 ("carinates").
- Haeckel, E. 1868 A, 441.  
 1873 A, 512.  
 Heilmann, G. 1926 A, 148 ("carinates").  
 Hoernes, R. 1886 A, 637 (Euornithes).  
 Huene, F. 1908 F ("carinaten").  
 Huxley, T. H. 1867 C, 241, 247.  
 1868 B, 357.  
 1868 C, 312.  
 1868 D, 312.  
 Lambrecht, K. 1914 A, 61.  
 Lebedinsky, N. G. 1913 B, 195 ("carinaten").  
 1914 A, 88 ("carinaten").  
 Lull, R. S. 1906 B, 550.  
 1917 B, 295.  
 1922 D, 333 ("carinate birds").  
 Lydekker, R. 1879 A, 13, 26.  
 Matthew and Granger 1917 A, 312 (Euornithes).  
 Newton, A. 1885 A, 43.  
 Newton and Gadow 1896 A, 1062.  
 Nopcsa, F. 1907 A, 235 ("carinate").

O'Donoghue, C. H. 1913 A, 465.

Parker, W. K. 1875 A, 599, 721.

1887 B, 55.

1888 B, 322.

1888 C, 397.

1888 D, 467.

1890 A, 10.

Parker and Haswell 1897 A, 384.

Pycraft, W. P. 1900 A, 266.

1902 B, 325 (Neognathæ).

1910 A, 47 (Neognathæ).

Reynolds, S. H. 1897 A, 360, 334, 336.

Selenka, E. 1869 A.

Sieglbauer, F. 1911 A, 266 ("carinaten").

Stromer, E. 1912 A, 137.

Van Bemmelen, J. F. 1923 A, 290 ("carinates").

Vialleton, L. 1916 A, 5 ("carinates").

Wamich, P. 1913 A, 25 ("carinaten").

Woodward, A. S. 1923 C, 84.

Zittel and Lucas 1902 A, 271 (Euornithes).

Zittel and Schlosser 1911 A, 322 (Euornithes).

1923 A, 391 (Carinatae); 397 (Euornithes).

### Suborder ICHTHYORNITHIFORMES Fürbringer.

Fürbringer, M. 1888 A, 1542.

Unless otherwise indicated the writers, as quoted, use for this group the name *Odontotormæ*.

Hay, O. P. 1902 A, 519 (Odontotormæ, Pteropappi).

Abel, O. 1919 A, 697.

Anonymous 1880 B, 458.

Arlt, T. 1907 D, 669 (Odontotormæ)

1912 A, 678.

Baird, S. F. 1876 A, ccii (Ichthyornithes, Odontotormæ).

Beddard, F. E. 1898 A, 469 (Ichthyornithes).

Boas, J. E. V. 1914 B, 573.

Branson, E. B. 1918 A, 92 ("toothed birds").

Case, E. C. 1898 C, 819.

Cope, E. D. 1891 N, 55 (Odontotormæ); 56 (Pteropappi).

Evans, A. H. 1899 A, 25, 48 (Ichthyornithes); 45 (Odontotormæ).

Fürbringer, M. 1888 A, 1141.

1902 B, 608, 627.

Gadow, H. 1893 A, 119, 299 (Ichthyornithes).

1910 B, 977 (Ichthyornithes).

Gill, T. 1881 A, 378.

Hoernes, R. 1886 A, 637.

Howes, G. B. 1894 A, 75.

1902 A, 524.

Huxley, T. H. 1880 C, 3 ("toothed birds").

Ihde, — 1912 A, 259 ("odontornithen").

Knowlton, F. H. 1909 B, 56 (Ichthyornithiformes).

Lambrecht, K. 1914 A, 62 (Ichthyornithes).

Lull, R. S. 1917 B, 322 (Ichthyornithes).

Lydekker, R. 1879 A, 25 (Odontotormæ, Odontotormæ).

\* 1891 A, 200.

Marsh, O. C. 1873 C, 162 (Ichthyornithes).

1875 D, 407 (Ichthyornithes).

1875 E, 630.

Newton and Gadow 1896 A, 1076.

Parker and Haswell 1897 A, 388.

Reynolds, S. H. 1897 A, 300.

Ridgway, R. 1901 A, 8.

Shufeldt, R. W. 1904 B, 850 (Ichthyornithiformes, Ichthyornithes).

Steiner, H. 1909 A, 339 (Ichthyornithiformes).

1918 A, 302, 492 (Ichthyornithes).

Steinmann, G. 1922 A, 239 ("zahnvögel").

Terra, P. 1911 A, 243 ("odontotormen").

Van den Broeck, E. 1900 A, 76.

Vialleton, L. 1916 A, 7.

Wamich, P. 1913 A, 20, 27 (Ichthyornithes).

Zittel and Lucas 1902 A, 267 (Odontotormæ, Ichthyornithes).

Zittel and Schlosser 1911 A, 318 (Odontotormæ).

1923 A, 394 (Odontotormæ).

### ICHTHYORNITHIDÆ Marsh.

Hay, O. P. 1902 A, 519 (Ichthyornithidæ); 520 (Apatornithidæ).

Arlt, T. 1907 D, 269.

Cope, E. D. 1891 N, 56.

Evans, A. H. 1899 A, 48.

Fürbringer, M. 1888 A, 1141.

Fürbringer, M. 1902 B, 629.

Lydekker, R. 1879 A, 25 (Ichthyornithidæ).

1891 A, 201.

Shufeldt, R. W. 1904 B, 850 (Ichthyornithidæ, Apatornithidæ).

1913 C, 286.

### ICHTHYORNIS Marsh. Type *I. dispar* Marsh.

Hay, O. P. 1902 A, 519.

Abel, O. 1920 A, 404.

1922 C, 335.

Anonymous 1880 B, 458.

Arthaber, G. 1921 A, 34.

Baird, S. F. 1876 A, cciii.

Beddard, F. E. 1898 A, 541.

Beebe, C. W. 1906 A, 3, 5, figs. 1, 2.

1915 B, 39.

Bigot, A. 1897 A, 467.

Boule, M. 1891 A, 24.

1902 B, 910.

Evans, A. H. 1899 A, 26.

Fürbringer, M. 1888 A, pl. iv.

1902 B, 608, 629.

Gaudry, A. 1896 A, 175.

1898 A, 127.

Grinnell, G. B. 1923 A, 336.

Heilmann, G. 1913 A, 21, 71.

1915 A, 118.

1916 A, 75.

1926 A, 205, fig. 104.

Heilprin, A. 1887 A, 330.

Hutchinson, H. N. 1910 A, 219, fig. 82.

Huxley, T. H. 1876 F, 179.

Ihde, — 1912 A, 251.

Knowlton, F. H. 1909 B, 59.

Koken, E. 1893 B, 423.

Lambrecht, K. 1916 C, 493.

Lankester, E. R. 1905 A, 237, fig. 173.

- Lemoine, V. 1889 A, 258.  
 Leunis and Ludwig 1883 A, 325.  
 Lucas, F. A. 1902 B, 184.  
 Lull, R. S. 1922 D, 383.  
 Lydekker, R. 1879 A, 9.  
 Matthew and Granger 1917 A, 309.  
 Mudge, B. F. 1879 A, 226.  
 Newton, A. 1885 A, 43.  
 Newton and Gadow 1896 A, 1071.  
 Nopcsa, F. 1907 A, 234.  
 Osborn, H. F. 1917 B, 230.  
 Parker, W. K. 1888 B, 323.  
     1888 D, 469.  
     1890 A, 3, 57.  
 Pycraft, W. P. 1900 A, 260.  
     1900 B, 183.  
     1909 A, 204, fig.  
     1910 A, 36, fig. 36.  
 Reynolds, S. H. 1897 A, 330, 332, 335, 341.  
 Schuchert and Levene 1927 A, 307.  
 Shufeldt, R. W. 1903 B, 59.  
     1915 D, 39.  
 Simpson, G. G. 1926 I, 453.  
 Steiner, H. 1918 A, 318, 323, 441.  
 Steinmann, G. 1907 A, 457, fig. 802.  
     1908 A, 216, 223, fig. 132.  
 Sternberg, C. H. 1909 C, 269.  
 Van den Broeck, E. 1900 A, 76.  
 Wallace, A. R. 1876 A, 1, 164.  
 Wamich, P. 1913 A, 26.  
 Woodward, A. S. 1923 C, 86.  
 Wetmore, A. 1928 A, 150.  
 Zittel and Schlosser 1911 A, 319.  
     1923 A, 394.
- Ichthyornis agilis Marsh.**  
 Hay, O. P. 1902 A, 519.  
 Lambrecht, K. 1921 A, 48.  
 Shufeldt, R. W. 1915 D, 20, 76, pl. xiii, fig. 91  
     (Graculavus; indeterminable).  
     Upper Cretaceous (Niobrara); Kansas.
- Ichthyornis anceps Marsh.**  
 Hay, O. P. 1902 A, 519.  
 Lambrecht, K. 1921 A, 49.  
 Shufeldt, R. W. 1915 D, 19, 76, pl. xiii, fig. 93  
     (Graculavus; indeterminable).  
     Upper Cretaceous (Niobrara); Kansas.
- Ichthyornis dispar Marsh.**  
 Hay, O. P. 1902 A, 520.  
 Fürbringer, M. 1888 A, pl. iv.
- Ichthyornis tener Marsh.**  
 Hay, O. P. 1902 A, 520.  
 Lambrecht, K. 1921 A, 49.  
     Upper Cretaceous (Niobrara); Kansas.
- Ichthyornis validus Marsh.**  
 Hay, O. P. 1902 A, 520.  
 Steiner, H. 1918 A, 302, fig. 25.  
     Upper Cretaceous (Niobrara); Kansas.
- Ichthyornis victor Marsh.**  
 Hay, O. P. 1902 A, 520.  
 Abel, O. 1922 C, 335, fig. 293.  
 Boule, M. 1891 A, 25, fig. 8.  
 Fürbringer, M. 1888 A, pl. vii.  
 Heilmann, G. 1913 A, 22, figs. 14-16, 19.  
     1926 A, 43, fig. 26.  
 Knowlton, F. H. 1909 B, 59, fig. 22.  
 Lambrecht, K. 1921 A, 49.  
 Seeley, H. G. 1887 G, 209.  
 Shufeldt, R. W. 1886 D, 357, fig.  
 Snow, F. H. 1887 A, 4.  
 Wetmore, A. 1928 A, 150.  
 Woodward, A. S. 1923 C, 86, fig. 83.  
 Woodward, H. 1904 B, 151.  
 Young, G. W. 1915 A, 250, fig. 20.  
 Zittel and Lucas 1902 A, 267, fig. 369.  
 Zittel and Schlosser 1911 A, 319, fig. 467.  
     1923 A, 394, fig. 500.  
     Upper Cretaceous (Niobrara); Kansas.
- Ichthyornis sp. indet.**  
 Snow, F. H. 1887 A, 4, fig. 1 (This genus?).  
     Upper Cretaceous (Dakota); Kansas.

**APATORNIS Marsh. Type *Ichthyornis celer* Marsh.**

- Hay, O. P. 1902 A, 520.  
 Anonymous 1880 B, 458.  
 Beddard, F. E. 1898 A, 535.  
 Fürbringer, M. 1888 A, 157, pls. iv, vii.  
     1902 B, 608, 629.  
 Heilmann, G. 1913 A, 25, fig. 18.  
     1913 B, 12, fig. 56.  
     1915 A, 116.  
     1916 A, 88.  
     1926 A, 203.  
 Reynolds, S. H. 1897 A, 330.
- Shufeldt, R. W. 1915 D, 8, 39.  
 Van den Broeck, E. 1900 A, 76.
- Apatornis celer Marsh.**  
 Hay, O. P. 1902 A, 520.  
 Evans, A. H. 1899 A, 49.  
 Lambrecht, K. 1921 A, 50.  
 Shufeldt, R. W. 1915 D, 8 (Apatornis); 76  
     (Ichthyornis).  
 Wetmore, A. 1928 A, 150.  
     Upper Cretaceous (Niobrara); Kansas.

## Suborder DIATRYMATIFORMES, new name.

Matthew and Granger 1917 A, 321 (*Diatryma*). Zittel and Schlosser 1923 A, 397 (*Diatryma*).  
Sinclair, W. J. 1923 A, 65 (*Diatryma*).

## Family DIATRYMATIDÆ, new form.

Matthew and Granger 1917 A, 321 (*Diatryma*). Sinclair, W. J. 1923 A, 65 (*Diatrymidæ*).  
dæ).

DIATRYMA Cope. Type *D. giganteum* Cope.

Hay, O. P. 1902 A, 522.  
Andrews, C. W. 1917 A, 489.  
Anonymous 1923 B, 413.  
Cockerell, T. D. A. 1923 C, 1.  
Eastman, C. R. 1898 F, 136, 140.  
Eastman, Gregory and Matthew 1917 A, 119.  
Fürbringer, M. 1888 A, 1424, 1466.  
1902 B, 616, 623, 631.  
Gadow, H. 1910 B, 977.  
Heilprin, A. 1887 A, 331.  
Joleaud, L. 1920 A, 496.  
Lambrecht, K. 1916 C, 494.  
1921 A, 4.  
Lucas, F. A. 1903 A, 556.  
1908 A, 311.  
Lydekker, R. 1896 E, 399.  
Matthew, W. D. 1923 B, 109.  
1923 C, 409.  
Matthew and Granger 1917 A, 309, 321.  
1917 B, 417.  
Miller, L. H. 1912 A, 100.  
Newton and Gadow 1896 A, 281, 908.  
Perrier, E. 1920 A, 339.  
Shufeldt, R. W. 1909 A, 337.  
1913 C, 286.  
1913 G, 411.  
Sinclair, W. J. 1923 A, 51.  
Zittel and Lucas 1902 A, 269, 273.  
Zittel and Schlosser 1911 A, 323.  
1923 A, 397.

*Diatryma ajax* Shufeldt.

Shufeldt, R. W. 1913 C, 287, pl. lii, figs. 4, 5;  
pl. liii, figs. 8, 9; pl. liv, figs. 13, 14.  
Lambrecht, K. 1916 C, 495.  
1921 A, 4.  
Lydekker, R. 1914 A, 638.  
Matthew and Granger 1917 A, 307, 322.  
Shufeldt, R. W. 1913 G, 415, pl. ii.  
1914 A, 248.  
1915 D, 37, 38.  
Lower Eocene (Wasatch); Wyoming.

*Diatryma? filiferum* Cockerell.

Cockerell, T. D. A. 1923 C, 4, fig. 1 (*D. filifera*).  
Anonymous 1923 B, 413 (*D. filifera*).  
Eocene (Green River); Colorado.

*Diatryma giganteum* Cope.

Hay, O. P. 1902 A, 522.  
Abel, O. 1906 B, 457.  
Andrews, C. W. 1917 A, 489.  
Lambrecht, K. 1921 A, 4 (*D. gigantea*).  
Lucas, F. A. 1903 A, 556.  
Matthew and Granger 1917 A, 307, 322 (*D. gigantea*).  
1917 B, 417 (*D. gigantea*).  
Merrill, G. P. 1907 A, 5.  
Shufeldt, R. W. 1909 A, 337 (*D. gigantea*).  
1913 C, 287, 288, 303, pl. li; pl. lii, figs. 6, 7; pl. liii, figs. 11, 12; pl. liv, figs. 15, 16.  
1913 G, 411, pls. i, ii (*D. gigantea*).  
1914 A, 248 (*D. gigantea*).  
1915 D, 34, pl. ii, fig. 16; pl. v, fig. 30 (*D. gigantea*).  
Sinclair, W. J. 1923 A, 57.  
Lower Eocene (Lower Wasatch); New Mexico.

*Diatryma steini* Matthew and Granger.

Matthew and Granger 1917 A, 310, 322, pls. xx-xxiii; text-fig. 1.  
Anonymous 1916 B, 475, fig. 1 ("gigantic bird").  
1917 B, 379.  
1921 A, 324, fig.  
Cockerell, T. D. A. 1923 C, 2.  
Heilmann, G. 1926 A, 173, fig. 125.  
Joleaud, L. 1920 A, 495, fig. 11.  
Lambrecht, K. 1921 A, 4.  
Matthew, W. D. 1918 B, 388 ("Diatryma").  
1924 F, 119 ("Diatryma").  
Matthew and Granger 1917 B, 417, 2 figs.  
Sinclair, W. J. 1923 A, 51, 57.  
Wetmore, A. 1926 E, 525.  
1928 A, 151.  
Lower Eocene (Lower Wasatch); Wyoming.

OMORHAMPHUS Sinclair. Type *O. storchii* Sinclair.

Sinclair, W. J. 1923 A, 51.

*Omorhamphus storchii* Sinclair.

Sinclair, W. J. 1923 A, 52, pls. i, ii; text-figs. 1-3.  
Lower Eocene (Lower Gray Bull); Wyoming.

BARORNIS Marsh. Type *B. regens* Marsh.

Hay, O. P. 1902 A, 522.  
Burkhardt, R. 1902 A, 525.  
Lambrecht, K. 1916 C, 493.  
Lydekker, R. 1896 E, 399.

Shufeldt, R. W. 1913 G, 414.  
1915 D, 35 (Syn. of *Diatryma*).  
Zittel and Schlosser 1923 A, 397 (Syn. of *Diatryma*).

**Barornis regens** Marsh.

Hay, O. P. 1902 A, 522.

Abel, O. 1906 B, 457.

Lambrecht, K. 1921 A, 4 (Diatryma).

Matthew and Granger 1917 A, 307, 322 (Barornis?).

Shufeldt, R. W. 1913 G, 416.

1915 D, 35, 76, pl. i, figs. 7-9; pl. v, fig. 32; pl. ix, fig. 68 (Diatryma).

Eocene?; New Jersey.

## Suborder GAVIIFORMES.

Adolphi, H. 1922 A, 21 (Colymbiformes).

Gadow, H. 1910 B, 977 (Colymbi).

Pycraft, W. P. 1900 C, 1022 (Colymbi).

1906 A, 401 (Colymbi).

Sharpe, R. B. 1899, Hand-list of genera and species of birds, i, 115 (Colymbiformes).

Wetmore and Miller 1926 A, 340.

## GAVIIDÆ Allen.

Allen, J. A. 1897 A, 312.

A. O. U. 1910 A, 24.

Bonaparte, C. L. 1838 B, 119 (Colymbinæ).

Brandt, J. F. 1840 A, 157 (Urinatores).

Carus, V. 1875 A, 365 (Colymbinæ).

Coues, E. 1884 A, 789 (Colymbidæ).

Fürbringer, M. 1888 A (Colymbidæ).

1902 B, 635 (Colymbidæ).

Gadow, H. 1893 A, 122 (Colymbidæ).

Huxley, T. H. 1867 A, 458 (Colymbidæ).

Huxley, T. H. 1867 B, 274 (Colymbidæ).

Knowlton, F. H. 1909 B, 100 (Gavidæ).

Owen, R. 1866 B, 25 ("loons").

Pycraft, W. P. 1900 C, 1019, 1042 (Colymbidæ, "divers").

Sharpe, R. B. 1891 A, 71 (Colymbiformes).

Shufeldt, R. W. 1904 A, 14 (Colymbidæ).

Stener, H. 1916 A, 493 (Colymbidæ).

1918 A, 490 (Colymbidæ).

Wetmore and Miller 1926 A, 340.

GAVIA J. R. Forster. Type *Colymbus immer* Gunnerus.

Forster, J. R. 1788, Enchirid. Hist. Nat., 38.

Adolphi, H. 1922 A, 21, 22, figs. 12, 13 (Colymbus).

Aeby, C. 1873 A, 702 (Colymbus).

Allen, J. A. 1897 A, 312.

A. O. U. 1910 A, 24.

Coues, E. 1884 A, 789 (Colymbus).

Foote, J. S. 1916 A, 71, pl. vii.

Fürbringer, M. 1888 A, pls. ii, iii, v, vi, vii (Colymbus).

Heilmann, G. 1926 A, 204, figs. 34, 35, 39-43 (Colymbus).

Knowlton, F. H. 1909 B, 101.

Magnan, A. 1922 A, pl. ix.

Miller, L. H. 1914 A, 33.

1925 B, 90.

Owen, R. 1866 B, fig. 34 (Colymbus).

Pycraft, W. P. 1900 C, 1019, 1020, pl. lxxii, fig. 2; text-fig. 1 (Colymbus septentrionalis).

Ridgway, R. 1887 A, 6, pl. ii (Urinator).

Selenka, E. 1869 A, pl. xiii, fig. 5 (Colymbus).

Steiner, H. 1918 A, 306 (Colymbus).

Sundevall, C. J. 1886 A, 406 (Colymbus).

Taschenberg, O. 1899 A, 4004 (Colymbus).

**Gavia immer** (Brünnich).

Brünnich, M. T. 1764, Ornith. borealis, 33 (Colymbus).

A. O. U. 1910 A, 24.

Coues, E. 1884 A, 789, figs. 529, 530 (Colymbus torquatus).

Gegenbaur, C. 1871 A, 178 (Colymbus).

Hay, O. P. 1927 D, 172.

Knowlton, F. H. 1909 B, 102, fig. 31.

Miller, L. H. 1914 A, 33 (This species?).

Recent; Northern part of northern hemisphere: Pleistocene (San Pedro); California.

**Gavia pusilla** Shufeldt.

Shufeldt, R. W. 1915 D, 70, pl. xiii, fig. 106.

Lambrecht, K. 1921 A, 21.

Geological level unknown; Wyoming.

**Gavia** sp. indet.

Hay, O. P. 1927 D, 172. Pleistocene; California.

Lambrecht, K. 1921 A, 21.

Miller, L. H. 1914 A, 33. Pleistocene (San Pedro); California.

1921 C, 130. Pleistocene (Early); California.

## Suborder COLYMBIFORMES, name with new signification.

Hay, O. P. 1902 A, 523 (Cecomorphæ, in part; Colymboidea).

Abel, O. 1919 A, 703 (Colymbiformes).

A. O. U. 1910 A, 21 (Pygopodes).

Ardt, T. 1907 D, 675 (Podicipitiformes).

Beddard, F. E. 1896 A, 540 (Colymbi).

Carus, V. 1875 A, 362 (Urinatores, in part).

Chandler, A. C. 1916 C (Colymbiformes).

Clark, H. L. 1901 A, 375 ("colymbiform").

Coues, E. 1888 A, 10 (Pygopodes).

1884 A, 787 (Pygopodes).

Dabbene, R. 1910 A, 485 (Podicipediformes).

Evans, A. H. 1899 A, 49 (Colymbiformes).

Fürbringer, M. 1888 A (Podicipitiformes).

1902 B, 633, 649 (Podicipediformes).

Gadow, H. 1893 A, 120 (Colymbiformes).

1910 B, 977 (Podicipedes).

Illiger, C. 1811 A, 281 (Pygopodes).

Jaekel, O. 1911 A, 178 (Colymbomorphæ).

Knowlton, F. H. 1909 B, 100 (Colymbiformes).

Lambrecht, K. 1914 A, 62, 73.

Lydekker, R. 1891 A, 19 (Pygopodes).

Newton, A. 1885 A, 45 (Pygopodes).

Newton and Gadow 1896 A, 1080 (Pygopodes).

- Parker, W. K. 1888 D, 469 ("pygopods").  
 Pycraft, W. R. 1900 A, 226 (Pygopodes).  
 1900 C, 1018 (Pygopodes).  
 Seebohm, H. 1888 A, 422 (Colymbo-Podicipes).  
 Sharpe, R. B. 1899, Hand-list gen. spec. birds.  
 I, 113 (Podicipediformes).  
 Shufeldt, R. W. 1894 A, 34 (Pygopodes).  
 1903 B, 59 (Pygopoformes).  
 Shufeldt, R. W. 1904 A, 13 (Pygopodes); 14  
 (Podicipitiformes); 13, 45 (Podicipoidea).  
 1904 B, 849 (Pygopoformes); 850 (Colym-  
 bo-Podicipitiformes, Podicipoidea).  
 Steiner, H. 1918 A, 304, 441, 460.  
 Vialleton, L. 1916 A, 7 (Pygopodes).  
 Wetmore and Miller 1926 A, 340.  
 Zittel, K. A. 1890 A, 538 (Podicipitiformes).

## COLYMBIDÆ Vigors.

- Vigors, N. A. 1825 A, 498.  
 Hay, O. P. 1902 A, 523.  
 Allen, J. A. 1893 B, 105 (Podicipidæ).  
 Arldt, T. 1907 D, 269, 317 (Colymbidæ); 673  
 (Podicipidæ).  
 1912 A, 756.  
 Beddard, F. E. 1896 A, 542 (Podicipidæ).  
 Bonaparte, C. L. 1832 A, 312 (Podicipinæ).  
 1838 B, 119 (Podicipinæ).  
 Brandt, J. F. 1840 A, 198, 211 (Podicipidæ).  
 Carus, V. 1875 A, 365 (Podicipinæ).  
 Coues, E. 1884 A, 792 (Podicipidæ).  
 Evans, A. H. 1899 A, 49 (Podicipidæ).  
 Fürbringer, M. 1902 B, 635 (Podicipidæ).  
 Gadow, H. 1893 A, 123 (Podicipidæ).  
 Garrod, A. H. 1873 C, 38 (Podicipidæ).  
 1874 A, 117, 122 (Podicipidæ).  
 Hesse, H. 1907 A, 200.  
 Huxley, T. H. 1867 A, 430, 458.  
 Knowlton, F. H. 1909 B, 103 (Podicipidæ).  
 Lebedinsky, N. G. 1913 A (Podicipidæ).  
 Leunis and Ludwig 1883 A, 513.  
 Lohley, J. L. 1908 A, 202.  
 Newton and Gadow 1896 A, 381, 917 (Podici-  
 pidæ).  
 Parker, W. K. 1888 D, 469 ("grebes").  
 1890 A, 2, 57 (Podicipidæ).  
 Pycraft, W. P. 1900 C, 1042 (Podicipidæ).  
 1910 A, 48.  
 Rosenberg, F. T. 1911 A, 199.  
 Seebohm, H. 1888 A, 433 (Podicipes).  
 Shufeldt, R. W. 1904 B, 850 (Podicipidæ).  
 1905 A, 14.  
 Steiner, H. 1918 A, 493 (Podicipidæ).  
 1918 A, 490 (Podicipidæ).  
 1922 A, 327.  
 Wallace, A. R. 1876 A, II, 366 (Podicipidæ).  
 Wetmore and Miller 1926 A, 340.

COLYMBUS Linnæus. Type *C. cristatus* Linnæus.

- Linnaeus, C.* 1758 A, 135.  
 Hay, O. P. 1902 A, 523.  
 Allen, J. A. 1893 B, 99, 105.  
 A. O. U. 1910 A, 21.  
 Beddard, F. E. 1898 A, 545 (Podicipes).  
 Bittner, F. 1912 A, 5 (Podiceps).  
 Brandt, J. F. 1840 A, 92, 154, 157, 177, 197, 199,  
 203, pl. xi (Podiceps).  
 Brauns, D. 1890 A, 201.  
 Diethelm, M. 1807 A, 41 (Podiceps).  
 DuToit, P. J. 1913 A, 250 (Podiceps).  
 Eimer, G. H. T. 1901 A, 232 (Podiceps).  
 Evans, A. H. 1899 A, 52 (Podiceps).  
 Eyton, T. C. 1867 A, 214, pl. ii L; pl. xi, fig. 1  
 (Podiceps).  
 Gegenbaur, C. 1871 A, 178 (Podiceps).  
 Giebel, C. G. 1855 B, 33.  
 Heilmann, G. 1913 A, 32, fig. 28 (Podicipes).  
 1914 A, 69 (Podicipes).  
 Hesse, H. 1907 A, 201, pl. x, figs. 12, 18.  
 Kessler, K. T. 1841 A, 668, 688 (Podiceps).  
 Knowlton, F. H. 1909 B, 106 (Lophæthya).  
 Lambrecht, K. 1914 A, 62, pl. viii, fig. 2.  
 Leunis and Ludwig 1883 A, 514 (Podiceps).  
 Lühder, W. 1871 A, 324 (Podiceps).  
 Magnan, A. 1922 A, 170, pl. x.  
 Meckel, J. F. 1825 A (Podiceps).  
 Newton and Gadow 1896 A, 1079 (Podiceps).  
 Owen, R. 1868 A, 902 (Podiceps).  
 Parker, W. K. 1888 D, 469 (Podiceps).  
 Pycraft, W. P. 1900 C, 1018, 1038, 1043, pl.  
 lxxii, figs. 1, 4, 5; text-figs. 1-3.  
 Ridgway, R. 1887 A, 5.  
 Rosenberg, F. T. 1911 A, 201, figs. 1, 5, 6.  
 Selenka, E. 1869 A, 28 (Podiceps).  
 Steiner, H. 1918 A, 306, fig. 26 (Podiceps).  
 1922 A, 310.  
 Sundevall, C. J. 1886 A, 400 (Podiceps).  
 Wagner, R. 1843 A (Podiceps).  
 Weitzel, A. 1865 A, 339.  
 Wyman, J. 1867 B, 270, fig. 13 ("grebe").  
*Colymbus auritus* Linnæus.  
*Linnaeus, C.* 1758 A, 135.  
 Hay, O. P. 1902 A, 523.  
 A. O. U. 1910 A, 22.  
 Brandt, J. F. 1840 A, 161, pl. xiv (Podiceps).  
 Coues, E. 1884 A, 795 (Podiceps).  
 Evans, A. H. 1899 A, 53 (Podiceps).  
 Hay, O. P. 1927 D, 244.  
 Knowlton, F. H. 1909 B, 105, fig. 32.  
 Miller, L. H. 1912 A, 80, 112.  
 Ridgway, R. 1887 A, 5.  
 Rosenberg, F. T. 1911 A, 203.  
 Shufeldt, R. W. 1904 A, 24, fig. 2.  
 1913 B, 128, 135, pl. xiv, fig. 115; pl. xxxviii,  
 figs. 441, 448.  
 Recent; northern part of northern hemis-  
 phere: Pleistocene (Fossil Lake); Oregon.  
*Colymbus holboellii* (Reinh.).  
*Reinhardt, J. T.* 1853, Vidensk. Medd., 76.  
 Hay, O. P. 1902 A, 523.  
 A. O. U. 1910 A, 22.  
 Coues, E. 1884 A, 795 (Podiceps griseigena h.).  
 Hay, O. P. 1927 D, 244.  
 Miller, L. H. 1912 A, 80, 112.  
 Ridgway, R. 1887 A, 5.  
 Shufeldt, R. W. 1904 A, 14.  
 1913 B, 128, pl. ix, fig. 8; pl. x, fig. 34;  
 pl. xiii, figs. 97, 101; pl. xiv, figs. 110  
 (This species?), 113, 114, 116, 127, 128;  
 pl. xv, figs. 129-148.  
 Recent; North America and eastern Asia:  
 Pleistocene (Fossil Lake); Oregon.

**Colymbus nigricollis californicus** (Heermann).

Heermann, A. L. 1854, Proc. Acad. Nat. Sci. Phila. 1854, 179 (*Podiceps californicus*).

Hay, O. P. 1902 A, 523 (*C. nigricollis*).

A. O. U. 1910 A, 22.

Coues, E. 1884 A, 796 (*Podiceps auritus* c.).

Evans, A. H. 1899 A, 53 (*Podiceps nigricollis*).

Hay, O. P. 1927 D, 244.

Knowlton, F. H. 1909 B, 105 (Dytes).

Miller, L. H. 1912 A, 80, 112.

Rosenberg, F. T. 1911 A, 201 (*Colymbus nigricollis*).

Shufeldt, R. W. 1904 A, 21, fig. 1.

1913 B, 128, 135, pl. xxxviii, figs. 442-447, 450-457, 463.

Recent; western North America: Pleistocene (Fossil Lake); Oregon.

**Colymbus oligoceanus** Shufeldt.

Shufeldt, R. W. 1915 D, 54.

Lambrecht, K. 1921 A, 20 (*C. oligoceanus*).

Oligocene? (John Day); Oregon.

**Colymbus parvus** Shufeldt.

Shufeldt, R. W. 1913 B, 136, pl. xxxix, figs. 474-477, 481-483.

Lambrecht, K. 1921 A, 20.

Shufeldt, R. W. 1913 F, 307.

Pleistocene (Fossil Lake); Oregon.

**Colymbus** sp. indet.

Hay, O. P. 1927 D, 136, 135. Pleistocene; Arizona, California.

Miller, L. H. 1925 B, 71 (This genus?). Pleistocene (La Brea); California.

Wetmore, A. 1924 A, 2. Pliocene? (San Pedro Valley); Arizona.

**ÆCHMOPHORUS** Coues. Type *Podiceps occidentalis* Lawrence.

Hay, O. P. 1902 A, 524.

Allen, J. A. 1893 B, 105, 130.

A. O. U. 1910 A, 21.

Beddard, F. E. 1896 A, 538, fig. 1.

1898 A, 535.

Newton and Gadow 1896 A, 1079 (*Podicipes*).

Pycraft, W. P. 1900 C, 1020, 1043.

Ridgway, R. 1887 A, 4, pl. i.

Shufeldt, R. W. 1882 B, 327, fig. 3 (*Podiceps*).

1904 A, 18.

**Æchmophorus lucasi** L. H. Miller.

Miller, L. H. 1911 A, 83, figs. 1-3.

Hay, O. P. 1927 D, 244.

Miller, L. H. 1912 A, 81, 112.

Shufeldt, R. W. 1913 B, 133, pl. ix, figs. 10, 15; pl. x, figs. 32, 33; pl. xviii, figs. 182, 183.

Pleistocene (Fossil Lake); Oregon.

**Æchmophorus occidentalis** (Lawrence).

Lawrence, G. N. 1858, Rep. Surv. R. R. Pacif., ix, 894 (*Podiceps*).

Hay, O. P. 1902 A, 524.

A. O. U. 1910 A, 21.

Chandler, A. C. 1916 C, 300.

Cope, E. D. 1878 II, 125 (*Podicipes*).

Hay, O. P. 1927 D, 207, 208, 209, 244.

Lawson, A. 1914 A, 15 (*Æchmophorus*).

Merriam, J. C. 1914 D, 15 (*Æchmophorus*).

Miller, L. H. 1912 A, 80, 82, 85, 112.

Osborn, H. F. 1910 B, 460 (*Podiceps*).

Ridgway, R. 1887 A, 4.

Shufeldt, R. W. 1904 A, 18.

1913 B, 128, pl. ix, fig. 14; pl. x, fig. 35;

pl. xi, fig. 53; pl. xii; pl. xiii (fig. 92

This species?); pl. xiv, figs. 103-109, 111,

112, 117, 118-124, 126, 128; pl. xv, figs.

129-148; pls. xvi, xvii; pl. xviii, fig. 181.

Recent; western North America: Pleistocene (Fossil Lake); Oregon: (Rodeo): California.

**PODILYMBUS** Lesson. Type *Colymbus podiceps* Linnæus.

Hay, O. P. 1902 A, 524.

Allen, J. A. 1893 B, 99.

A. O. U. 1910 A, 23.

Beddard, F. E. 1896 A, 540 (*Podicipes*).

Chandler, A. C. 1916 C, 300.

Dabbene, R. 1910 A, 200.

Lebedinsky, N. G. 1913 B, 193 (*Podiceps*).

Owen, R. 1866 B (*Podiceps*).

Parker, W. K. 1888 D, 469.

Ridgway, R. 1887 A, 4, 6, pl. i.

Selenka, E. 1869 A, pl. ix, figs. 4, 5; pl. xiii, fig. 6; pl. xv, fig. 11; pl. xvii, fig. 17 (*Podiceps*).

Weitzel, A. 1865 A, 339 (*Podiceps*).

**Podilymbus magnus** Shufeldt.

Shufeldt, R. W. 1913 B, 136; pl. xxxviii, figs. 439, 440, 449.

1913 F, 307.

Pleistocene (Fossil Lake); Oregon.

**Podilymbus podiceps** (Linnæus).

Hay, O. P. 1902 A, 524.

A. O. U. 1910 A, 23.

Chandler, A. C. 1916 C, 300.

Cope, E. D. 1878 II, 125.

Dabbene, R. 1910 A, 200 (*Podilymbus*).

Hay, O. P. 1927 D, 198, 244.

Miller, L. H. 1912 A, 80, 112.

1925 A, 312.

Osborn, H. F. 1925 D, 542.

Ridgway, R. 1887 A, 6.

Shufeldt, R. W. 1904 A, 14, 19.

1913 B, 128, 135, pl. xxxviii, figs. 458, 462.

Recent; North and South America: Pleistocene (Fossil Lake); Oregon.

## Suborder PROCELLARIIFORMES Fürbringer.

- Fürbringer, M. 1888 A, 1544.  
 Adolphi, H. 1922 A, 33.  
 Allen, J. A. 1893 B, 106 (Tubinares).  
 A. O. U. 1910 A, 48 (Tubinares).  
 Arldt, T. 1907 D, 687 (Tubinares).  
 1912 A, 686, 687.  
 Brandt, J. F. 1840 A, 154, 168 (Tubinares).  
 Carus, V. 1875 A, 357 (Longipennes).  
 Chandler, A. C. 1916 C.  
 Coues, E. 1884 A, 773 (Tubinares).  
 Dabbene, R. 1910 A, 486.  
 Evans, A. H. 1899 A, 59 (Procellariiformes, Tubinares).  
 Forbes, W. A. 1881 B, 671 (Tubinares).  
 1882 C, 548 (Tubinares).  
 1882 D, 1, 4, 54 (Tubinares).  
 Fürbringer, M. 1888 A, 1162 (Tubinares).  
 1902 B, 644.  
 Gadow, H. 1893 A, 129.  
 1910 B, 977.  
 Illiger, C. 1811 A, 273 (Tubinares).  
 Knowlton, F. H. 1909 B, 107.  
 Lambrecht, K. 1914 A, 64, 73.  
 Lebedinsky, N. G. 1913 A.  
 1918 A, 40.  
 Lebedinsky, N. G. 1913 B, 145.  
 Leunis and Ludwig 1883 A, 502 (Longipennes).  
 Loomis, L. M. 1923 A, 600 (Tubinares).  
 Lull, R. S. 1917 B, 322 (Tubinares).  
 Lydekker, R. 1891 A, 184 (Tubinares).  
 Mivart, St. G. 1892 A, 276 (Tubinares).  
 Newton and Gadow 1896 A, 1086 (Tubinares).  
 Parker, W. K. 1875 A, 700, 712, 713 (Dysporomorphæ).  
 Pycraft, W. P. 1899 A, 381 (Tubinares).  
 1900 C, 1023 (Tubinares).  
 Reinhardt, J. 1874 B, 139 (Tubinares).  
 Seeborn, H. 1888 A, 422, 423, 431 (Tubinares).  
 Sharpe, R. B. 1891 A, 71.  
 Shufeldt, R. W. 1888 E (Tubinares).  
 1904 B, 350 (Procellariiformes, Tubinares).  
 1907 A, 109, 122 (Procellariiformes, Tubinares).  
 Steiner, H. 1916 A, 493 (Tubinares).  
 1918 A, 311, 441, 490.  
 1922 A, 327 (Tubinares).  
 Stejneger, L. 1907 B, 281 (Tubinares).  
 Sundevall, C. J. 1886 A, 405 (Gaviæ).  
 Wetmore and Miller 1926 A, 340.  
 Zittel, K. A. 1890 A, 843 (Tubinares).

## Superfamily PROCELLARIOIDÆ, new form.

- Hay, O. P. 1902 A, 526 (Procellarioidea).  
 Brandt, J. F. 1840 A, 154, 168 (Tubinares).  
 Huxley, T. H. 1867 A, 457 (Cecomorphæ, in part).  
 Parker, W. K. 1875 A, 699 (Cecomorphæ, in part).  
 Reichenow, A. 1913 A, 93 (Procellariidæ).  
 Steiner, H. 1916 A, 493 (Tubinares).  
 Vialleton, L. 1916 A, 7 (Tubinares).

## DIOMEDEIDÆ Shufeldt.

- Shufeldt, R. W. 1904 B, 850.  
 A. O. U. 1910 A, 48.  
 Carus, V. 1875 A, 360 (Diomedeinæ).  
 Coues, E. 1884 A, 774 (Diomedeinæ).  
 Forbes, W. A. 1881 B, 671 (Diomedeinæ).  
 1882 C, 548 (Diomedeinæ).  
 Fürbringer, M. 1888 A, 1163 (Diomedeinæ).  
 1902 B, 645.  
 Gadow, H. 1893 A, 129 (Diomedeinæ).  
 Gray, G. R. 1840 A, 78 (Diomedinæ).  
 Knowlton, F. H. 1909 B, 107.  
 Loomis, L. M. 1923 A, 600.  
 Reichenow, A. 1913 A, 95 (Diomedinæ).  
 Ridgway, R. 1887 A, 50.  
 Stejneger, L. 1885 A, 85 (Diomedidæ).  
 Wetmore and Miller 1926 A, 340.

DIOMEDEA Linnæus. Type *D. exulans* Linnæus.

- Linnæus, C. 1758 A, 132.  
 Abel, O. 1922 C, 328.  
 Adolphi, H. 1922 A, 33, fig. 14.  
 Aaby, C. 1873 A, 702.  
 Andrews, C. W. 1916 B, 524, fig. 4.  
 Bignon, F. 1889 A, 275, pl. xii.  
 Brandt, J. F. 1840 A, 85, 86, 168, 195, pl. i, figs. 1-4.  
 Coues, E. 1884 A, 774.  
 Cuvier, G. 1805 A.  
 Döderlein, L. 1923 A, 142, 162.  
 Forbes, W. A. 1882 C, 548.  
 1882 D, 5, 12, 44, pls. ii-iv.  
 Fürbringer, M. 1888 A, pls. ii, v, vii.  
 1902 B, 645.  
 Gadow, H. 1893 A, 129.  
 Heilmann, G. 1926 A, 204, fig. 76 (Diomeda).  
 Hesse, H. 1907 A, 201, pl. vi, fig. 3.  
 Huxley, T. H. 1867 A, 431, fig. 13.  
 1867 C, 253, fig. 13.  
 Knowlton, F. H. 1909 B, 109.  
 Köstlin, O. 1844 A.  
 Leunis and Ludwig 1883 A, 503.  
 Lilienthal, G. 1917 A, 271 ("albatross").  
 Loomis, L. M. 1923 A, 600.  
 Lüdher, W. 1871 A, 325.  
 Lydekker, R. 1891 A, 189.  
 Magnan, A. 1922 A, 177, pls. ii, ix, xii, xiv.  
 Magnus, H. 1871 A, 60.  
 Newton, E. T. 1891 A, 85, pl. ix, figs. 1, 2.  
 Newton and Gadow 1896 A, 1066.  
 Owen, R. 1866 B.  
 1878 E, 125, pl. vi.  
 1880 B, 25.  
 Pycraft, W. P. 1900 C, 1025.  
 Reichenow, A. 1913 A, 96.  
 Reinhardt, J. 1874 B, 139, figs. 1, 2.  
 Ridgway, R. 1887 A, 50, pl. xiii.  
 Schaumsland, H. 1903 A, 56, pls. xxxii-xxxv.  
 Selenka, E. 1869 A, pls. iii, viii.  
 Steiner, H. 1918 A, 311.  
 Stejneger, L. 1885 A, 86.



Sundevall, C. J. 1886 A, 405.  
Weitzel, A. 1865 A, 341, 356.

**Diomedea nigripes** Audubon.

Audubon, J. J. L. 1839, Ornith. Biog., v, 327.  
A. O. U. 1910 A, 48.  
Coues, E. 1884 A, 775.

Hay, O. P. 1927 D, 172.  
Miller, L. H. 1914 A, 34 (This species?).  
Stejneger, L. 1885 A, 86.  
Recent; Alaska to western Mexico: Pleistocene (San Pedro); California.  
Not included in L. H. Miller's later lists.

**PROCELLARIIDÆ Bonaparte.**

Bonaparte, C. L. 1840 A, 277 (Procellariidæ).  
Hay, O. P. 1902 A, 526.  
A. O. U. 1910 A, 50.  
Ardt, T. 1907 D, 676.  
1912 A, 710 (Procellariidæ).  
Boie, F. 1826 A, col. 980 (Procellariidæ).  
Cuvier, G. 1805 A (Procellaria).  
Dabbene, R. 1910 A, 486.  
Edgeworth, F. H. 1907 A, 546 (Procellaria).  
Evans, A. H. 1899 A, 59.  
Forbes, W. A. 1881 B, 671.  
1882 D, 42, 47, 55.  
Fürbringer, M. 1902 B, 644.  
Gadow, H. 1893 A, 129 (Procellariinæ).  
Garrod, A. H. 1873 C, 38.  
1873 D, 641.  
1874 A, 117, 120.  
Gervais, P. 1856 A, 13 ("procellariidés").  
Giebel, C. G. 1855 A, 33 (Procellaria).  
Hesse, H. 1907 A, 201.  
Hoernes, R. 1886 A, 641.  
Huxley, T. H. 1867 A, 455, 458.

Huxley, T. H. 1867 C, 251, 271, 274.  
Kessler, K. T. 1841 A, 666 (Longipennes).  
Knowlton, F. H. 1909 B, 110.  
Lebedinsky, N. G. 1913 A.  
Leunis and Ludwig 1883 A, 503.  
Lobley, J. L. 1908 A, 202, 207.  
Loomis, L. M. 1923 A, 600.  
Lühder, W. 1871 A, 324 (Procellariidæ).  
Lydekker, R. 1891 A, 185.  
Newton and Gadow 1896 A, 708.  
Parker, W. K. 1888 D, 470 (Procellariidæ).  
1890 A, 3.  
Pycraft, W. P. 1900 C, 1026 (Procellaria).  
Reichenow, A. 1913 A, 104 (Hydrobatinæ).  
Reinhardt, J. 1874 B, 139.  
Ridgway, R. 1887 A, 50, 53 (Procellariidæ).  
Shufeldt, R. W. 1904 B, 850.  
1907 A, 122.  
Steiner, H. 1918 A, 311, 490 (Procellariinæ).  
Taschenberg, O. 1899 A, 4251.  
Wallace, A. R. 1876 A, ii, 365.  
Wetmore and Miller 1926 A, 340 (Hydrobatidæ).

**PUFFININÆ Bonaparte.**

A. O. U. 1910 A, 50 (Fulmarinæ); 52 (Puffinæ).  
Carus, V. 1875 A, 361 (Puffinæ).  
Knowlton, F. H. 1909 B, 116.

Shufeldt, R. W. 1907 A, 113, 122 (Puffinidæ);  
122 (Puffininæ).  
Wetmore and Miller 1926 A, 340.

**PUFFINUS Brisson. Type *Procellaria puffinus* Brünnich.**

Brisson, M. J. 1780, Ornith., vi, 130.  
Hay, O. P. 1902 A, 526.  
A. O. U. 1910 A, 52.  
Brandt, J. F. 1840 A, 85, 87, 169, 195, pl. i, figs. 5-7.  
Evans, A. H. 1899 A, 66.  
Forbes, W. A. 1882 D, 5, 43, pl. ii.  
Fürbringer, M. 1888 A, pl. iii.  
Giebel, C. G. 1855 B, 32.  
Knowlton, F. H. 1909 B, 117.  
Leunis and Ludwig 1883 A, 505.  
Lydekker, R. 1891 A, 185.  
Magnan, A. 1922 A, 167.  
Newton and Gadow 1896 A, 1080.  
Pycraft, W. P. 1900 C, 1021.  
Reichenow, A. 1913 A, 101, fig. 78.  
Ridgway, R. 1887 A, 55, 58, pl. xvi.  
Shufeldt, R. W. 1907 A, 113, 115, fig. 1.  
Taschenberg, O. 1899 A, 4259.  
Weitzel, A. 1865 A, 341.

**Puffinus conradi** Marsh.

Hay, O. P. 1902 A, 526.  
Case, E. C. 1904 D, 60, pl. xxvi, figs. 3, 4.  
Lambrecht, K. 1921 A, 42.

Shufeldt, R. W. 1915 D, 62, 76, pl. viii, figs. 63, 64.  
Wetmore, A. 1926 D, 463.  
Lower Miocene (Chesapeake); Maryland.

**Puffinus diatomicus** Miller.

Miller, L. H. 1925 C, 111, pls. 1, 2, 7a.  
Wetmore, A. 1928 A, 153.  
Miocene (Temblor); California.

**Puffinus opisthomelas** Coues.

Coues, E. 1864, Proc. Acad. Nat. Sci. Phila., 1864, 139.  
Hay, O. P. 1927 D, 172.  
Knowlton, F. H. 1909 A, 117.  
Miller, L. H. 1914 A, 35.  
1928 A, 120.  
Recent; Pacific Ocean: Pleistocene (San Pedro); California.

**Puffinus** sp. indet.

Marsh, O. C. 1870 A, 213 (P. conradi, part; right ulna). Miocene; Maryland.  
Miller, L. H. 1921 C, 129 ("shearwater"). Miocene (Lompoc diatom bed); California.  
Wetmore, A. 1928 D, 462. Miocene; Maryland.

**FULMARUS** Stephens. Type *Procellaria glacialis* Linnæus.

- Stephens, J. F. 1826, Gen. Zool., XIII, pt. 1, 233.  
 A. O. U. 1910 A, 50.  
 Forbes, W. A. 1882 D, 5, 48, pl. vii.  
 Fürbringer, M. 1888 A, pls. ii-v (*Fulmaria*).  
 Knowlton, F. H. 1909 B, 114.  
 Leunis and Ludwig 1883 A, 504.  
 Loomis, L. M. 1923 A, 600.  
 Newton and Gadow 1896 A, 295.  
 Reichenow, A. 1913 A, 99.  
 Taschenberg, O. 1899 A, 4064.

**Fulmarus glacialis** Linnæus.

- Linnæus, C. 1761, Fauna Suecica, d. 2, 61.  
 Miller, L. H. 1928 A, 120.  
 Wetmore, A. 1926 D, 465 (This species?).  
 Miocene; Maryland.

**Fulmarus glacialis glupischa** Stejneger.

- Stejneger, L. 1884, Auk., 1, 234.  
 A. O. U. 1910 A, 50.  
 Hay, O. P. 1927 D, 172 (*F. glacialis*).  
 Miller, L. H. 1914 A, 35 (*F. glacialis*).  
 Pleistocene (San Pedro); California.

**Fulmarus** sp. indet.

- Wetmore, A. 1926 D, 464. Miocene; Maryland.

## Suborder PELECANIFORMES Sharpe.

- Sharpe, R. B. 1891 A, 76.  
 Lebedinsky, N. G. 1913 A.  
 Reichenow, A. 1913 A, 120 (*Steganopides*).  
 Shufeldt, R. W. 1904 B, 850.

- Wetmore, A. 1928 E, 4.  
 Wetmore and Miller 1926 A, 340.  
 See citations under *Pelecanoidæ*.

*Superfamily* PELECANOIDÆ, new form.

Unless otherwise indicated the writers, as quoted below, employ for this group the name *Steganopodes*.

- Hay, O. P. 1902 A, 532.  
 Adolphi, H. 1922 A, 37.  
 Allen, J. A. 1893 B, 106.  
 A. O. U. 1910 A, 59.  
 Arldt, T. 1907 D, 682.  
 1912 A, 686, 687.  
 Beddard, F. E. 1898 A, 402.  
 Blainville, H. M. D. 1821 A, 212 ("palmpèdes").  
 Brandt, J. F. 1836 A, 403 ("stéganopodes").  
 Carus, V. 1875 A, 353.  
 Chandler, A. C. 1916 C, 307.  
 Cope, E. D. 1891 N, 57, 60.  
 Evans, A. H. 1899 A, 70.  
 Finn, F. 1894 A, 210.  
 1894 B, 455.  
 Forbes, W. A. 1881 B, 671.  
 Fürbringer, M. 1888 A (*Steganopodes*).  
 1902 B, 642.  
 Gadow, H. 1893 A, 132.  
 Garrod, A. H. 1873 D, 635.  
 1874 A, 122.  
 Heilmann, G. 1913 A, 63.  
 Hilzheimer, M. 1913 A, 517.  
 Huxley, T. H. 1867 A, 461 (*Disporomorphæ*).  
 1867 C, 278 (*Dysporomorphæ*).  
 Illiger, C. 1811 A, 278.

- Knowlton, F. H. 1909 B, 121.  
 Lambrecht, K. 1914 A, 64.  
 Leunis and Ludwig 1883 A, 498.  
 Lull, R. S. 1917 B, 322.  
 Lydekker, R. 1891 A, 36.  
 Miller, W. D. 1924 A, 1 (*Steganopodes*).  
 Newton and Gadow 1896 A, 1084.  
 Pycraft, W. P. 1900 C, 1033.  
 1902 A, 282.  
 1902 B, 324.  
 1903 A, 6.  
 1910 A, 48, 49.  
 Ridgway, R. 1887 A, 73.  
 Sharpe, R. B. 1894 D, 160 (*Pelecanoidea*).  
 Shufeldt, R. W. 1894 A, 23.  
 1902 A, 113.  
 1904 C, 315.  
 1907 A, 122.  
 1909 A, 133, 348.  
 1915 C, 733.  
 Steiner, H. 1916 A, 493.  
 1918 A, 313, 441, 490 (*Steganopodes*).  
 Vialleton, L. 1916 A, 7.  
 Wetmore, A. 1917 A, 556.  
 Wetmore and Miller 1926 A, 340 (*Pelecani*, *Pelecanides*).  
 Zittel and Lucas 1902 A, 275.  
 Zittel and Schlosser 1911 A, 323.  
 1923 A, 400.

## PELECANIDÆ Vigors.

- Vigors, N. A. 1825 A, 498.  
 Hay, O. P. 1902 A, 532.  
 A. O. U. 1910 A, 64.  
 Arldt, T. 1907 D, 672.  
 1912 A, 710, 756.  
 Beebe, C. W. 1906 A, 492 ("pelicans").  
 Bonaparte, C. L. 1831 A, 35 (*Pelecanidæ*, *Pelecaninæ*).  
 1832 A, 311 (*Steganopodes*, *Pelecaninæ*).  
 Brandt, J. F. 1836 A, 403 ("pélicans").

- Brandt, J. F. 1840 A, 183 (*Onocrotali*).  
 Carus, V. 1875 A, 355.  
 Chandler, A. C. 1916 C.  
 Dabbene, R. 1910 A, 238.  
 Evans, A. H. 1899 A, 83.  
 Finn, F. 1894 A, 210 ("pelicans").  
 Fürbringer, M. 1902 B, 643.  
 Gadow, H. 1893 A, 132.  
 Garrod, A. H. 1874 A, 117.  
 Gegenbaur, C. 1871 A, 179 ("pelicaniden").

Grote, H. 1902 A, 60 ("pelekane").  
 Hesse, H. 1907 A, 203.  
 Huxley, T. H. 1867 C, 257, 279.  
 Knowlton, F. H. 1909 B, 124.  
 Lebedinsky, N. G. 1913 A.  
 L'Herminier, F. 1836 A, 113 ("pélicans").  
 Lobley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 324.  
 Lydekker, R. 1879 A, 13.  
 1891 A, 37.  
 Magnus, H. 1871 A, 68 ("pelekanen").

Owen, R. 1866 B, 26, 53.  
 Reichenow, A. 1913 A, 129.  
 Ridgway, R. 1887 A, 73, 81.  
 Shufeldt, R. W. 1902 A, 113.  
 1904 B, 850.  
 Steiner, H. 1918 A, 316.  
 Wagner, R. 1843 A ("pelekanen").  
 Wallace, A. R. 1876 A, II, 365.  
 Wetmore, A. 1917 A, 557 ("pelicans").  
 Wetmore and Miller 1926 A, 340.  
 Wray, R. S. 1887 A, 348 ("pelicans").

#### PELECANUS Linnaeus. Type *P. onocrotalus* Linnaeus.

Linnaeus, C. 1758 A, 132.  
 Hay, O. P. 1902 A, 532.  
 Abel, O. 1912 F, 170, fig. 113.  
 Adolphi, H. 1922 A, 39, fig. 18.  
 Aebly, C. 1873 A, 702.  
 Allen, J. A. 1893 B, 99.  
 Allis, T. H. 1835 A, 155 ("pelicans").  
 A. O. U. 1910 A, 64.  
 Arldt, T. 1907 D, 672.  
 Beddard, F. E. 1898 A, 544.  
 Bignon, F. 1889 A, 277, pl. xii.  
 Bonsdorff, E. J. 1871 A, 305.  
 Brandt, J. F. 1840 A, 110, 141, 172, 185, 193,  
 pls. vii, viii.  
 Brauns, D. 1890 A, 201.  
 Bronn, H. G. 1849 A, 696.  
 Chandler, A. C. 1916 C, 257.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 484.  
 Eaton, G. F. 1910 A, 4 ("pelican").  
 Eimer, G. H. T. 1901 A, 14, 156 ("pelikane").  
 Evans, A. H. 1899 A, 93.  
 Eytton, T. C. 1867 A, 219 (Pelicanus).  
 Foote, J. S. 1916 A, 63.  
 Fürbringer, M. 1888 A, pls. ii-v.  
 Giebel, C. G. 1865 B, 33.  
 1865 A, 250.  
 Heilprin, A. 1887 A, 332 ("pelecan").  
 Hesse, H. 1907 A, 203, pl. vi, fig. 2.  
 Huxley, T. H. 1867 C, 253, fig. 20.  
 Kessler, K. T. 1841 A, 669, 690.  
 Knowlton, F. H. 1909 B, 126.  
 Köstlin, O. 1844 A.  
 Lebedinsky, N. G. 1918 A, 37.  
 Leunis and Ludwig 1883 A, 499.

Lilienthal, G. 1917 A, 271 ("pelikan").  
 Lucas, F. A. 1894 B, 36.  
 Lydekker, R. 1891 A, 37.  
 Mackie, S. J. 1863 C, 109 (Pelicanus).  
 Magnus, H. 1871 A.  
 Martin, W. 1835 A, 155 ("pelican").  
 Meckel, J. F. 1825 A.  
 Miller, L. H. 1925 B, 90.  
 Newton and Gadow 1896 A, 1077.  
 Owen, R. 1868 A, 898.  
 Parker, W. K. 1875 A, 713.  
 Reynolds, S. H. 1897 A, 337, fig. 63.  
 Ridgway, R. 1887 A, 81, pl. xxi.  
 Sundevall, C. J. 1836 A, 401, 405.  
 Wagner, R. 1843 A ("pelekan").  
 Wallace, A. R. 1876 A, II, 365.  
 Wertzel, A. 1865 A, 340.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 400.

#### *Pelecanus erythrorhynchos* Gmelin.

Gmelin, J. F. 1789, Syst. Nat. I, II, 571.  
 Hay, O. P. 1902 A, 532 (This species?).  
 A. O. U. 1910 A, 65.  
 Chandler, A. C. 1916 C, 313, pl. xix, fig. 17.  
 Evans, A. H. 1899 A, 83.  
 Foote, J. S. 1916 A, 63, pl. v.  
 Giebel, C. G. 1865 A, 251.  
 Hay, O. P. 1927 D, 244.  
 Miller, L. H. 1912 A, 80, 112.  
 Shufeldt, R. W. 1913 B, 155 (*P. erythrorhynchus*?).

Recent; Temperate North America: Pleistocene (Fossil Lake); Oregon.

#### CYPHOENITHIDÆ Wetmore.

Wetmore, A. 1928 E, 4.

#### CYPHORNIS Cope. Type *C. magnus* Cope.

Hay, O. P. 1902 A, 532.  
 Ami, H. M. 1901 D, 331.  
 Fürbringer, M. 1902 B, 643.  
 Lambrecht, K. 1916 C, 494.  
 Lucas, F. A. 1902 D, 657.  
 Lydekker, R. 1896 E, 399.  
 Wetmore, A. 1928 E, 1.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 400.

#### *Cyphornis magnus* Cope.

Hay, O. P. 1902 A, 532.  
 Ami, H. M. 1901 D, 332.  
 Lambe, L. M. 1904 C, 27, 38, 49.  
 1912 A, 12.  
 Lambrecht, K. 1921 A, 41.  
 Miller, L. H. 1911 D, 117.  
 1912 A, 65, 66.  
 Wetmore, A. 1928 E, 1, fig. 1.  
 Oligocene (White River); British Columbia.

PALÆOCHENOIDES Shufeldt. Type *P. mioceanus* Shufeldt.

Shufeldt, R. W. 1916 C, 347.

Wetmore, A. 1917 A, 556.

1928 E, 4.

**Palæochenoides mioceanus** Shufeldt.

Shufeldt, R. W. 1916 C, 347, pl. xv.

Lambrecht, K. 1921 A, 10 (*P. mioceanus*).

Wetmore, A. 1917 A, 555.

1928 E, 4.

Upper Miocene?; South Carolina.

*Superfamily SULOIDÆ*, new name.Gadow, H. 1910 B, 977 (*Steganopodes*).Wetmore and Miller 1926 A, 341 (*Sulides*).

## SULIDÆ Baird.

Baird, S. F. 1858, *Birds N. Amer.*, 871.

Hay, O. P. 1902 A, 532.

A. O. U. 1910 A, 60.

Arlt, T. 1907 D, 683.

1912 A, 710, 756.

Carus, V. 1875 A, 356.

Chandler, A. C. 1916 C.

Evans, A. H. 1899 A, 73.

Fürbringer, M. 1902 B, 642 (*Sulidæ*, *Sulinæ*).

Gadow, H. 1893 A, 132.

Knowlton, F. H. 1909 B, 133.

Lebedinsky, N. G. 1913 A, 694.

Leunis and Ludwig 1883 A, 500.

Reichenow, A. 1913 A, 122.

Ridgway, R. 1887 A, 73, 74.

Shufeldt, R. W. 1902 A, 113, 132.

1904 B, 850.

1913 E, 395 ("gannets").

Steiner, H. 1918 A, 316.

Wetmore, A. 1917 A, 557.

1928 E, 4.

Wetmore and Miller 1926 A, 341.

Zittel and Lucas 1902 A, 275.

MORIS Leach. Type *Pelecanus bassanus* Linnæus.Leach, W. E. 1816, *Syst. Cat. indig. Mamm.*  
*Birds*, Brit. Mus., 35.Hay, O. P. 1902 A, 532 (*Sula*).Aeby, C. 1873 A, 702 (*Sula*).Allen, J. A. 1893 B, 99 (*Sula*).A. O. U. 1910 A, 60 (*Sula*).Andrews, C. W. 1916 B, 524 (*Sula*).Beddard, F. E. 1898 A, 547 (*Sula*).Bignon, F. 1889 A, 275, pl. xiii (*Sula*).Brandt, J. F. 1840 A, *passim*, pl. vi (*Dysporus*,  
*Sula*).Brissou, M. J. 1780, *Ornith.*, vi, 494.Cuvier, G. 1805 A (*Sula*).Dabbene, R. 1910 A, 489 (*Sula*).Diethelm, M. 1907 A, 41 (*Sula*).Evans, A. H. 1899 A, 73 (*Sula*).Eyton, T. C. 1867 A, 220, pls. vi, 1 (*Sula*).Fürbringer, M. 1888 A, pls. ii-v, vii (*Sula*).Gaupp, E. 1905 D, 1028 (*Sula*).Giebel, C. G. 1855 B, 33 (*Sula*).Heilmann, G. 1913 B, 73, 78, fig. 101 (*Sula*).

1926 A, 205 ("gannet").

Kessler, K. T. 1841 A, 671 (*Sula*).Knowlton, F. H. 1909 B, 135 (*Sula*).Köstlin, O. 1844 A (*Sula*).Leunis and Ludwig 1883 A, 500 (*Sula*).Lindsay, B. 1885 A, 691 (*Sula*).Lydekker, R. 1891 A, 46 (*Sula*).Magnan, A. 1922 A, 161, text-fig. 12 (*Sula*).Mathews, G. M. 1915, *Austral. Avian Rec.*, ii,  
123 (*Sulita*).Meckel, J. F. 1825 A (*Sula*).Newton and Gadow 1896 A, 1084 (*Sula*).Oberholzer, H. C. 1919, *Auk*, xxxvi, 417.Owen, R. 1866 B, 23, 54 (*Sula*).Parker, W. K. 1875 A, 713 (*Sula*).Parker and Bettany 1877 A, 263 (*Sula*).Reynolds, S. H. 1897 A, 339, fig. 64 (*Sula*).Ridgway, R. 1887 A, 75, pl. xix (*Sula*).

Seeley, H. G. 1887 G, 209 ("gannet").

Shufeldt, R. W. 1882 B, 327, fig. 2 (*Sula*).Steiner, H. 1918 A, 313, fig. 27 (*Sula*).Taschenberg, O. 1899 A, 4317 (*Sula*).Weitzel, A. 1865 A, 340 (*Sula*).

Wetmore, A. 1926 D, 466.

Zittel and Schlosser 1911 A, 324 (*Sula*).1923 A, 400 (*Sula*).**Moris lom pocana** Miller.Miller, L. H. 1925 C, 114, pls. iv, vii a, ix  
(*Sula*).

Miocene (Temblor); California.

**Moris loxostyla** (Cope).Hay, O. P. 1902 A, 532 (*Sula*).Case, E. C. 1904 D, 53, pl. xxvi, fig. 2 (*Sula*).Lambrecht, K. 1916 C, 494 (*Sula*).1921 A, 40 (*S. loxostyla*, *S. atlantica*).Shattuck, G. B. 1904 A, xciv (*Sula*).Shufeldt, R. W. 1915 D, 62 (*S. loxostyla*); 62,pl. xv, fig. 123 (*S. atlantica*).

Wetmore, A. 1926 D, 465.

Lower Miocene; New Jersey, Maryland.

**Moris sp. indet.**Miller, L. H. 1921 C, 129 ("gannet"). Miocene  
(Lompoc diatom bed); California.MIOSULA Miller. Type *M. media* Miller.

Miller, L. H. 1925 C, 114.

**Miosula media** Miller.

Miller, L. H. 1925 C, 114, pl. v.

Miocene (Temblor); California.

SULA Brisson. Type *Pelecanus piscator* Linnæus.

Brisson, M. J. 1870, Ornith., vi, 494.

For literature of Sula see under Moris.

**Sula willetti** Miller.

Miller, L. H. 1925 B, 112, pls. iii-viii, fig. 1.

Wetmore, A. 1928 A, 153.

Miocene (Temblor); California.

## PHALACROCORACIDÆ Bonaparte.

Hay, O. P. 1902 A, 533.

A. O. U. 1910 A, 62.

Arlt, T. 1907 D, 672.

1912 A, 710, 756.

Brandt, J. F. 1840 A, 91, 127, 192, 196 ("steganopoden").

Carus, V. 1875 A, 356.

Chandler, A. C. 1916 C.

Dabbene, R. 1910 A, 484.

Evans, A. H. 1899 A, 75.

Fürbringer, M. 1902 B, 642.

Gadow, H. 1893 A, 132.

Garrod, A. H. 1874 A, 117.

Hesse, H. 1907 A, 202.

Knowlton, F. H. 1909 B, 127.

Lebedinsky, N. G. 1913 A.

Leunis and Ludwig 1883 A, 501.

Lydekker, R. 1891 A, 46.

Reichenow, A. 1913 A, 125.

Ridgway, R. 1887 A, 73, 77.

Steiner, H. 1918 A, 316.

Shufeldt, R. W. 1902 A, 113, 165.

1904 B, 850.

1913 E, 393.

Wetmore, A. 1917 A, 557.

Zittel and Lucas 1902 A, 275.

PHALACROCORAX Brisson. Type *Pelecanus carbo* Linn.

Brisson, M. J. 1780, Ornith., vi, 511.

Hay, O. P. 1902 A, 533.

Adolphi, H. 1922 A, 9, 37, fig. 17.

Allen, J. A. 1893 B, 99.

A. O. U. 1910 A, 62.

Andrews, C. W. 1916 B, 524.

Beddard, F. E. 1898 A, 544.

Bignon, F. 1889 A.

Bonsdorff, E. J. 1871 A, 311, pl. iii.

Brandt, J. F. 1840 A, 93, 127, 175, pls. ia-iii (Carbo).

Chandler, A. C. 1916 C (Phalacrocorax).

Cuvier, G. 1805 A.

Dabbene, R. 1910 A, 484, fig. 39.

Doderlein, L. 1923 A, 162.

Eaton, G. F. 1910 A, 11, pl. v, figs. 13, 14.

Evans, A. H. 1899 A, 75.

Eyton, T. C. 1869 A, pl. i.

Finn, F. 1894 A, 210.

Fürbringer, M. 1888 A, pls. iii-v, vii.

Gadow, H. 1902 C, 169, pls. xiv, xv.

Heilmann, G. 1913 A, 35, figs. 31, 32.

1913 B, 73, fig. 101.

1926 A, 51, 52, figs. 36, 38.

Hesse, H. 1907 A, 202, pl. x, fig. 15.

Huxley, T. H. 1867 C, 259, fig. 21.

Knowlton, F. H. 1909 B, 128.

Lambrecht, K. 1914 A, 83, pl. viii.

Lebedinsky, N. G. 1921 A, 13.

Leunis and Ludwig 1883 A, 501.

Lucas, F. A. 1903 A, 552, fig. 5.

Lühder, W. 1871 A, 323.

Mackie, S. G. 1863 C, 109.

Magnan, A. 1922 A, 167.

Newton and Gadow 1896 A, 1078.

Owen, R. 1866 B, 61 (Carbo).

Parker, W. K. 1875 A, 713.

1888 D, 478 ("ormorant").

Pycraft, W. P. 1900 C, 1033.

Reichenow, A. 1913 A, 125, fig. 86.

Ridgway, R. 1887 A, 77, pls. xx, xxii.

Seeböhm, H. 1888 A, 418.

Shufeldt, R. W. 1882 B, 330, fig. 7.

1913 E, 393, pl. lxi.

Shufeldt, R. W. 1915 D, 17.

Steiner, H. 1918 A, 313, fig. 27.

Zittel and Schlosser 1911 A, 323.

1923 A, 400.

**Phalacrocorax idahensis** (Marsh).

Hay, O. P. 1902 A, 533.

1923 A, 8 (Graculus idahoensis).

1927 D, 265, 268.

Lambrecht, K. 1921 A, 38.

Merriam, J. C. 1917 A, 432 (Graculus idahoensis).

Shufeldt, R. W. 1915 D, 68, 76, pl. vi, fig. 44.

Pleistocene (Idaho); Idaho.

**Phalacrocorax macropus** Cope.

Hay, O. P. 1902 A, 533.

1927 D, 244.

Lambrecht, K. 1916 C, 495.

1921 A, 38.

Miller, L. H. 1912 A, 80, 112.

Neues Jahrb. Min. Geol. Pal., 1923, 1, 307 (P. maximus).

Osborn, H. F. 1910 B, 460 ("Phalacrocorax").

Shufeldt, R. W. 1913 B, 137, pl. xx, figs. 260,

261; pls. xxi, xxii; pl. xxiii, figs. 284, 285, 287,

288; pl. xxxii, fig. 405; pl. xxxix, fig. 486.

1915 G, 485, pl. xxx.

Pleistocene (Fossil Lake); Oregon.

**Phalacrocorax marinavis** Shufeldt.

Shufeldt, R. W. 1915 D, 56, pl. xlv, figs. 113-122.

Lambrecht, K. 1921 A, 36.

Upper Oligocene (John Day); Oregon.

**Phalacrocorax mediterraneus** Shufeldt.

Shufeldt, R. W. 1915 D, 58, pl. xv, fig. 138.

Lambrecht, K. 1921 A, 31.

Oligocene (White River); Colorado.

**Phalacrocorax penicillatus** (Brandt).

Brandt, J. F. 1837, Bull. Sci. Acad. imp. Sci. St. Petersburg, III, 55 (Carbo).

- Chandler, A. C. 1916 C, 307.  
 Hay, O. P. 1927 D, 172.  
 Miller, L. H. 1914 A, 35 (This species?).  
 Recent; Pacific coast of United States.  
 Pleistocene (San Pedro); California.

### GRACULAVUS Marsh. Type *G. velox* Marsh.

- Hay, O. P. 1902 A, 533.  
 Arldt, T. 1907 D, 87.  
 Furbringer, M. 1888 A, 1141.  
 1902 B, 629.  
 Heilprin, A. 1887 A, 330.  
 Shufeldt, R. W. 1915 D, 16 (Graculavis); 19  
 (Limosavis).  
 Young, G. W. 1915 A, 250.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 399, 400.

#### *Graculavus pumilis* Marsh.

- Hay, O. P. 1902 A, 533.  
 Lambrecht, K. 1921 A, 53.  
 Shufeldt, R. W. 1915 D, 19, 76, pl. vii, fig. 53.  
 Upper Cretaceous (Hornerstown); New Jersey. Kansas, *vide* Shufeldt.

#### *Phalacrocorax perspicillatus* Pallas.

- Hay, O. P. 1902 A, 533.  
 Evans, A. H. 1899 A, 77.  
 Lydekker, R. 1901 C, 254.  
 Lucas, F. A. 1894 B, 36.  
 Bering Island. Recently extinct, but not known from Pleistocene deposits.

#### *Graculavus velox* Marsh.

- Hay, O. P. 1902 A, 533.  
 Lambrecht, K. 1921 A, 55 (Limosavis).  
 Shufeldt, R. W. 1915 D, 17, 76, pl. vi, fig. 33;  
 pl. vii, fig. 49.  
 Upper Cretaceous (Hornerstown); New Jersey.

#### *Graculavus* sp. indet.

- Lambrecht, K. 1921 A, 53.  
 Shufeldt, R. W. 1915 D, 20, pl. xv, figs. 125, 126 (New Jersey).  
 Upper Cretaceous (Hornerstown); New Jersey.

### Suborder CICONIIFORMES Garrod.

- Garrod, A. H. 1874 A, 117, 122.  
 Abel, O. 1919 A, 703.  
 Adolphi, H. 1922 A, 37.  
 Arldt, T. 1907 D, 646.  
 Bittner, F. 1912 A, 2 (Ciconiæ).  
 Evans, A. H. 1899 A, 70.  
 Furbringer, M. 1888 A, 1548, 1565.  
 1902 B, 637, 649.  
 Gadow, H. 1893 A, 131.  
 1910 B, 977.  
 Huxley, T. H. 1867 A, 460, 461 (Amphimorphæ, Pelargomorphæ, Disporomorphæ).

- Knowlton, F. H. 1909 B, 121.  
 Lambrecht, K. 1914 A, 64, 73.  
 Lydekker, R. 1891 A, 61 (Ciconiæ).  
 Parker, W. K. 1875 A (Pelargomorphæ).  
 Pycraft, W. P. 1910 A, 448.  
 Reichenow, A. 1913 A, 237 (Gressores).  
 Sharpe, R. B. 1891 A, 75 (Pelargoformes).  
 Steiner, H. 1916 A, 499 (Ciconiæ).  
 1918 A, 313, 490.  
 Wetmore and Miller 1926 A, 341.

### Superfamily ARDEOIDÆ, new form.

- Hay, O. P. 1902 A, 531 (Herodii, Ardeidea).  
 Adolphi, H. 1922 A, 41 (Ardeæ).  
 Allen, J. A. 1871 A (Herodiones).  
 Arldt, T. 1912 A, 686, 687 (Ardeæ).  
 Beddard, F. E. 1898 A, 419 (Herodiones).  
 Bonaparte, C. L. 1832 A, 308 (Herodii).  
 Chandler, A. C. 1916 C (Ardeæ).  
 Cope, E. D. 1891 N, 58, 60 (Herodii, in part).  
 Dabbene, R. 1910 A, 468 (Ardeiformes).  
 Finn, F. 1894 B, 454 ("herons").  
 Furbringer, M. 1888 A (Herodii).  
 1902 B, 638 (Pelargo-Herodii).  
 Gadow, H. 1893 A, 137 (Ardeæ).  
 1910 B, 977 (Ardeæ).  
 Garrod, A. H. 1874 A, 117 (Herodiones).  
 Gervais, P. 1856 A, 12 ("herodiens").  
 Hilzheimer, M. 1913 A, 517 (Pelargomorphes).  
 Huxley, T. H. 1867 C, 278 (Herodiæ).  
 Illiger, C. 1811 A, 255 (Herodii).  
 Jaekel, O. 1911 A, 177 (Pelargomorphæ).  
 Knowlton, F. H. 1909 B, 139 (Ardeæ).  
 Lambrecht, K. 1914 A, 64 (Ardeæ).  
 Lebedinsky, N. G. 1913 A (Ardeiformes).

- Lull, R. S. 1917 B, 322 (Herodiones).  
 Lydekker, R. 1879 A, 27 (Pelargomorphæ).  
 1891 A, 59 (Herodiones).  
 Magnus, H. 1871 A, 86 (Herodii).  
 Meckel, J. F. 1825 A ("sumpfvögel").  
 Miller, W. D. 1924 A, 2 ("herons").  
 Newton, A. 1885 A, 47 (Herodiones).  
 Newton and Gadow 1896 A, 1070 (Herodii).  
 Pycraft, W. P. 1902 B, 324 ("herons").  
 Sharpe, R. B. 1891 A, 75.  
 Shufeldt, R. W. 1894 A, 23 (Ardeæ).  
 1901 A, 153 (Herodii).  
 1904 B, 853 (Herodiones).  
 1907 A, 122 (Herodiones).  
 1909 A, 252 (Herodii).  
 Steiner, H. 1916 A, 493 (Herodii).  
 1918 A, 317, 490 (Ardeæ).  
 Wetzels, A. 1865 A, 335, 345 ("sumpfvögel").  
 Wetmore and Miller 1926 A, 341 (Ardeæ).  
 Wray, R. S. 1887 A, 348 (Herodiones).  
 Zittel and Lucas 1902 A, 274 (Herodii).  
 Zittel and Schlosser 1911 A, 323 (Herodii).  
 1923 A, 399 (Herodii).

## ARDEIDÆ Vigors.

- Vigors, N. A. 1825 A, 488.  
 Hay, O. P. 1902 A, 531.  
 Arldt, T. 1907 D, 639.  
 1912 A, 710, 756.  
 Bittner, F. 1912 A, 2 ("ardeiden").  
 Bonaparte, C. L. 1831 A, 34.  
 1832 A, 308.  
 Carus, V. 1875 A, 344.  
 Dabbene, R. 1910 A, 468.  
 Evans, A. H. 1899 A, 87.  
 Forbes, W. A. 1882 D, 63.  
 Fürbringer, M. 1902 B, 638, 639.  
 Gadow, H. 1893 A, 137.  
 1914 A, 504.  
 Garrod, A. H. 1873 D, 637.  
 1874 A, 120.  
 Gegenbaur, C. 1871 A, 188 ("ardeiden").  
 Hesse, H. 1907 A, 214.  
 Huxley, T. H. 1867 C, 257.  
 Knowlton, F. H. 1909 B, 139.
- Lebedinsky, N. G. 1913 A.  
 Leunis and Ludwig 1883 A, 478.  
 L'Hermulier, F. 1836 A, 112 ("hérons").  
 Lobley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 324 (Herodiniæ).  
 Lydekker, R. 1879 A, 13.  
 Miller, L. H. 1925 B, 75.  
 Newton and Gadow 1896 A, 1070 ("herons").  
 Parker, W. K. 1869 A, 504.  
 1875 A, 713.  
 1890 A, 22 ("hérons").  
 Reichenow, A. 1877 A, 113, 232.  
 1913 A, 250.  
 Ridgway, R. 1887 A, 122, 126.  
 Shufeldt, R. W. 1894 A.  
 1904 B, 853.  
 1907 A, 123.  
 1909 A, 250.  
 Wallace, A. R. 1876 A, 11, 359.  
 Wetmore and Miller 1926 A, 341.

## ARDEINÆ Bonaparte

- Bonaparte, C. L. 1840 A, 275.  
 A. O. U. 1910 A, 95.  
 Gray, G. R. 1840 A, 66.
- Ridgway, R. 1887 A, 126.  
 Sundevall, C. J. 1886 A, 404 (Ardeæ).  
 Wetmore and Miller 1926 A, 341.

ARDEA Linnæus. Type *A. cinerea* Linnæus.

- Linnæus, C. 1758 A, 141.  
 Hay, O. P. 1902 A, 531.  
 Adolphi, H. 1922 A, 41.  
 Aeby, C. 1873 A, 701, pl. xii.  
 Allen, J. A. 1893 B, 99.  
 Allis, T. H. 1835 A, 155.  
 Anthony, R. 1913 A, 268, fig. 10.  
 Arldt, T. 1907 D, 156.  
 Beddard, F. E. 1898 A, 422, 432, fig. 202.  
 Beebe, C. W. 1906 A, 490 ("heron").  
 Bignon, F. 1889 A.  
 Bittner, F. 1912 A, 9, 15.  
 Bonsdorff, E. J. 1871 A, 310, pl. iii.  
 Bronn, H. G. 1849 A, 697.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 20, 97, 223.  
 Diethelm, M. 1907 A, 41.  
 Evans, A. H. 1899 A, 91.  
 Eyton, T. C. 1867 A, 195.  
 Fürbringer, M. 1888 A, pls. ii-iv, vi.  
 Gaillard, C. 1908 A, 86.  
 Gegenbaur, C. 1871 A, 175.  
 Giebel, C. G. 1855 B, 34.  
 Harting, P. 1866 A, 24.  
 Heilmann, G. 1913 B, 71, figs. 99, 102.  
 1926 A, 97, fig. 79.  
 Hesse, H. 1907 A, 214, pl. vii, fig. 2.  
 Kessler, K. T. 1841 A, 650, 686.  
 Knowlton, F. H. 1909 B, 140.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 64.  
 Leunis and Ludwig 1883 A, 479.  
 Lühder, W. 1871 A, 329.  
 Lydekker, R. 1879 A, 13, pl. ii, fig. 3.  
 Mackie, S. J. 1863 C, 109.  
 Magnan, A. 1922 A, 166, pls. ii, viii.  
 Magnus, H. 1871 A.  
 Martin, W. 1835 A, 155.
- Meckel, J. F. 1825 A.  
 Newton and Gadow 1896 A, 1060.  
 Owen, R. 1866 B, 22, 39.  
 Parker, W. K. 1875 A, 713.  
 Reichenow, A. 1877 A, 123, 252.  
 1913 A, 256.  
 Ridgway, R. 1887 A, 126, 128, pls. xxxiv, xxxvi.  
 Shufeldt, R. W. 1901 A, 162.  
 1909 A, 68.  
 Steiner, H. 1918 A, 317, fig. 28.  
 Sundevall, C. J. 1886 A, 401.  
 Sushkin, P. P. 1899 B, 153.  
 Virchow, H. 1914 A, 79.  
 1914 D, 321, figs. 3, 4.  
 Wetzell, A. 1865 A, 336.
- Ardea herodias** Linnæus.  
*Linnæus, C.* 1758 A, 143.  
 Abel, O. 1912 F, 22.  
 Chandler, A. C. 1916 C, 321, pl. xx, fig. 20.  
 Eyton, T. C. 1873 A, 5, 17, pls. xi, xiK.  
 Hay, O. P. 1923 A, 382.  
 1927 D, 185, 198.  
 Miller, L. H. 1909 B, 306.  
 1910 A, 448.  
 1910 C, 11.  
 1912 A, 78, 113.  
 1925 A, 317.  
 1925 B, 76.  
 Osborn, H. F. 1910 B, 473.  
 1925 D, 542.  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 153, pl. xxxix, figs. 466, 467.  
 1913 F, 307.  
 1916 E, 18.  
 1917 B, 39, pl. ii, fig. 17.  
 Pleistocene (Fossil Lake); Oregon: (La Brea); California, Florida.

**Ardea paloccidentalis** Shufeldt.

Hay, O. P. 1902 A, 531.

1927 D, 244.

Lambrecht, K. 1921 A, 27.

Miller, L. H. 1912 A, 81, 113.

Shufeldt, R. W. 1913 B, 157.

Pleistocene (Fossil Lake); Oregon.

**Ardea sellardsi** Shufeldt.

Shufeldt, R. W. 1916 E, 19.

Hay, O. P. 1923 A, 382.

Shufeldt, R. W. 1917 B, 38, pl. ii, fig. 15.

Pleistocene (Middle?); Florida.

**Ardea sp. indet.**

Hay, O. P. 1923 A, 382.

Shufeldt, R. W. 1917 B, 36, pl. i, fig. 5 (This genus?). Pleistocene (Early); Florida.

Miller, L. H. 1925 A, 317 ("heron"). Pleistocene (McKittrick); California.

**HERODIAS** Boie. Type *Ardea egretta* (Gray).

Boie, F. 1822, Isis von Oken, x, 559.

A. O. U. 1910 A, 96.

Coues, E. 1884 A, 658.

Dabbene, R. 1910 A, 478.

Fürbringer, M. 1888 A.

Knowlton, F. H. 1909 B, 143.

Leunis and Ludwig 1883 A, 479 (Herodius).

Reichenow, A. 1913 A, 259.

**Herodias egretta** (Gmelin).

Gmelin, J. F. 1789, Syst. Nat. I, II, 629 (Ardea).

A. O. U. 1910 A, 96.

Coues, E. 1884 A, 658.

Hay, O. P. 1923 A, 382.

Knowlton, F. H. 1909 B, 143, fig. 45.

Shufeldt, R. W. 1916 E, 19 (This species?).

1917 B, 37, pl. i, figs. 5, 6, 9-11 (This species?).

Recent; North and South America: Pleistocene; Florida.

**BOTAURINÆ.**

A. O. U. 1910 A, 94.

Ridgway, R. 1887 A, 126.

Wetmore and Miller 1926 A, 341.

**BOTAURUS** Stephens. Type *Ardea stellaris* Linnæus.

Stephens, J. F. 1819, Gen. Zool., xi, pt. 2, 592.

A. O. U. 1910 A, 94.

Arlt, T. 1907 D, 156.

Beddard, F. E. 1898 A, 430, 431.

Chandler, A. C. 1916 C, 323, pl. xx, fig. 21.

Coues, E. 1884 A, 664.

Dabbene, R. 1910 A, 15, 225.

Eyton, T. C. 1887 A, 196.

Fürbringer, M. 1888 A, pl. ii.

Heilmann, G. 1926 A, 93.

Knowlton, F. H. 1909 B, 145.

Lambrecht, K. 1914 A, 83, pl. viii.

Magnan, A. 1922 A, 166.

Marinelli, W. 1928 A, 155.

Newton and Gadow 1896 A, 1061.

Parker, W. K. 1875 A, 713.

Reichenow, A. 1877 A, 241, 247.

1913 A, 251, fig. 128.

Ridgway, R. 1887 A, 126, pl. xxxiii.

**Botaurus lentiginosus** (Montagu).

Montagu, G. 1813, Suppl. Orn. Dict., text and plate.

Coues, E. 1884 A, 664 (B. mugitans).

Hay, O. P. 1927 D, 185.

Knowlton, F. H. 1909 B, 146.

Miller, L. H. 1921 C, 130.

1925 B, 76.

Shufeldt, R. W. 1913 A, 39.

1913 B, 152, pl. xiv, fig.; pl. xxxix, figs. 468, 471.

1913 F, 307.

Recent; whole of North America: Pleistocene (Fossil Lake); Oregon: (La Brea); California.

**BOTAUROIDES** Shufeldt. Type *B. parvus* Shufeldt.

Shufeldt, R. W. 1915 D, 33.

Lambrecht, K. 1921 A, 28.

Zittel and Schlosser 1923 A, 399.

**Botauroides parvus** Shufeldt.

Shufeldt, R. W. 1915 D, 33.

Lambrecht, K. 1921 A, 28.

Middle Eocene? (Bridger?); Wyoming.

**EOCEORNIS** Shufeldt. Type *E. ardetta* Shufeldt.

Shufeldt, R. W. 1915 D, 39.

Lambrecht, K. 1921 A, 28.

**Eoceornis ardetta** Shufeldt.

Shufeldt, R. W. 1915 D, 39, pl. xiii, fig. 102.

Lambrecht, K. 1921 A, 28.

Middle Eocene (Bridger); Wyoming.

**Superfamily CICONIOIDÆ, new form.**

Adolphi, H. 1922 A, 45 (Ciconiæ).

A. O. U. 1910 A, 93 (Ciconiæ).

Carus, V. 1875 A, 342 (Ciconiæ).

Chandler, A. C. 1916 C, 318, pl. xx, figs. 23-27 (Ciconiæ).

Cope, E. D. 1891 N, 60 (Herodii, in part).



Gadow, H. 1893 A, 141 (Ciconiæ).

1910 B, 977 (Ciconiæ).

Knowlton, F. H. 1909 B, 153 (Ciconiæ).

Sharpe, R. B. 1891 A, 75 (Ciconiæ).

Shufeldt, R. W. 1894 A, 23 (Ciconiæ).

Steiner, H. 1918 A, 317, 441, 490 (Ciconiæ).

Wetmore and Miller 1926 A, 341 (Ciconiæ, Ciconiides).

### CICONIIDÆ.

Abel, O. 1926 B, 239 ("storche").

Adolphi, H. 1922 A, 45.

Arlt, T. 1907 D, 646.

Bonaparte, C. L. 1840 A, 275 (Ciconinæ).

Carus, V. 1875 A, 346.

Chandler, A. C. 1916 C, 331.

Coues, E. 1884 A, 652.

Dabbene, R. 1910 A, 472.

Forbes, W. A. 1882 D, 63.

Fürbringer, M. 1888 A, 1184-1187.

1902 B, 639, 649.

Gadow, H. 1893 A, 142.

Garrod, A. H. 1873 D, 637.

Hesse, H. 1907 A, 212.

Huxley, T. H. 1867 A, 439.

1867 C, 257.

Knowlton, F. H. 1909 B, 153.

Lambrecht, K. 1914 A, 64.

Leunis and Ludwig 1883 A, 481.

Lobley, J. L. 1908 A, 202, 207.

Lydekker, R. 1879 A, 13 (Ciconidæ).

1891 A, 61.

Miller, L. H. 1910 A, 440.

Newton and Gadow 1896 A, 1063 (Ciconiæ).

Pycraft, W. P. 1902 B, 324 ("storks").

1910 A, 402, 443 ("storks").

Reichenow, A. 1877 A, 113, 159 (Ciconidæ, Ibdæ).

1913 A, 244.

Ridgway, R. 1887 A, 122, 124.

Shufeldt, R. W. 1894 A, 24 (Ciconidæ).

Stejneger, L. 1885 A, 162.

Wetmore and Miller 1926 A, 341.

### CICONIINÆ Bonaparte.

Bonaparte, C. L. 1838 B, 119 (Ciconinæ).

A. O. U. 1910 A, 93.

Sundevall, C. J. 1886 A, 404 (Ciconiæ).

Wetmore and Miller 1926 A, 341.

### CICONIA Brisson.

Brisson, M. J. 1760, Ornith., 361.

Adolphi, H. 1922 A, 13, figs. 3, 9, 20.

Allis, T. H. 1835 A, 155.

Bignon, F. 1889 A, 300, pl. xi.

Bonsdorff, E. J. 1871 A, 311.

Carus, V. 1875 A, 346.

Cuvier, G. 1805 A.

Fürbringer, M. 1888 A, pls. ii, iii, iv, vi.

Gadow, H. 1891 A.

1893 A, 141.

Gegenbaur, C. 1871 A, 176.

Giebel, C. G. 1855 B, 34.

Heilmann, G. 1926 A, 181, fig. 131.

Kessler, K. T. 1841 A, 651, 688.

Knowlton, F. H. 1909 B, 153.

Köstlin, O. 1844 A.

Lambrecht, K. 1914 A, 83, pl. viii.

Leunis and Ludwig 1883 A, 481.

Lüther, W. 1871 A, 326, 329.

Meckel, J. F. 1825 A.

Newton and Gadow 1896 A, 1063.

Owen, R. 1848 B, 158.

1886 B, 23.

Parker, W. K. 1875 A, 713.

1875 D, 115.

Reichenow, A. 1877 A, 121, 168.

1913 A, 247.

Selenka, E. 1869 A, pl. iii, figs. 1, 2; pl. viii, fig. 14; pl. x, fig. 7; pl. xv.

Steiner, H. 1918 A, 317.

Sundevall, C. J. 1886 A, 400, 401.

Wagner, R. 1843 A ("storch").

Weitzel, A. 1865 A, 337.

### *Ciconia maltha* L. H. Miller.

Miller, L. H. 1910 A, 440, figs. 1-7.

Hay, O. P. 1927 D, 185.

Lambrecht, K. 1921 A, 26 (C. malta).

Miller, L. H. 1912 A, 78, 97, 113.

1921 A, 567 ("Ciconia").

1923 A, 352 ("stork").

1925 A, 317.

1925 B, 74, figs. 1-5.

Oshorn, H. F. 1925 D, 542.

Pleistocene (Early); California.

### *Ciconia* sp. indet.

Hay, O. P. 1927 D, 198. Pleistocene; California.

Merriam and Stock 1925 B.

### JABIRU Hellmayr. Type *Ciconia mycteria* Lichtenstein.

Hellmayr, C. E. 1906, Abh. k. Bayer, Akad. Wiss., phys. Kl., xxii, 711.

Allen, J. A. 1908 A, 38.

Beddard, F. E. 1898 A, 427 (Mycteria).

Beebe, C. W. 1906 A, 72 ("jabiru").

Dabbene, R. 1910 A, 482 (Mycteria).

Eyton, T. C. 1867 A, 194 (Mycteria).

Newton and Gadow 1896 A, 1075 (Mycteria).

Owen, R. 1866 B, 147, fig. 65 (jabiru").

Reichenow, A. 1877 A, 121, 166 (Mycteria).

Ridgway, R. 1887 A, 125, pl. xxxii (Jabiru).

Sellards, E. H. 1916 C, 146.

Sushkin, P. P. 1899 B, 153.

Wagner, J. A. 1837 B, 493, pl. iv, figs. 5-7 (Mycteria).

### Jabiru mycteria (Lichtenstein).

Lichtenstein, M. H. C. 1819, Abh. k. Akad. Wiss., Berlin, phys. Kl., for 1816-17, 163 (Ciconia).

Allen, J. A. 1908 A, 38.

Hay, O. P. 1927 D, 185, 198.

- Miller, L. H. 1910 A, 446.  
 1912 A, 78, 97, 113.  
 1921 A, 567 ("Jabiru").  
 1922 A, 123 (*Ciconia maltha*).  
 1925 A, 317.  
 1925 B, 74 (This species?).  
 Newton and Gadow 1896 A, 462, fig. (*Mycteria americana*).  
 Osborn, H. F. 1925 D, 542.  
 Wagner, J. A. 1837 B, 493, pl. iv, figs. 5-7 (*Mycteria americana*).  
 Wetmore, A. 1928 B, 2.  
 Recent; southern Mexico to Argentina:  
 Pleistocene (La Brea), California.

**Jabiru weillsi** Sellards.

- Sellards, E. H. 1916 C, 146, 148, pl. xxvi, figs. 1-4; text-fig. 15 (This genus?).  
 Hay, O. P. 1923 A, 382.  
 Sellards, E. H. 1916 E, 23 (This genus?).  
 1917 A, 249.  
 1917 C, 76.  
 1917 E, 198 ("stork").  
 Pleistocene (Early); Florida.

**Jabiru sp. indet.**

- Hay, O. P. 1927 D, 198. Pleistocene; California.  
 Merriam and Stock 1925 B.

## MYCTERINÆ.

A. O. U. 1910 A, 93.

Wetmore and Miller 1926 A, 341.

MYCTERIA Linnæus. Type *M. americana* Linnæus.

- Linnæus, C. 1758 A, 140.  
 A. O. U. 1910 A, 93.  
 Carus, J. V. 1875 A, 346.  
 Coues, E. 1884 A, 653.  
 Fürbringer, M. 1888 A, pl. ii.  
 Miller, L. H. 1925 B, 68, 90.  
 Newton and Gadow 1896 A, 1085 (*Tantalus*).  
 Reichenow, A. 1877 A, 121, 161 (*Tantalus*).  
 Stejneger, L. 1885 A, 164 (*Tantalus*).

**Mycteria americana** Linnæus.

- Linnæus, C. 1758 A, 140.  
 Chandler, A. C. 1916 C, 318, pl. xx, fig. 23.

- Coues, E. 1884 A, 653.  
 Hay, O. P. 1923 A, 382.  
 1927 D, 185.  
 Knowlton, F. H. 1909 B, 157, fig. 52.  
 Miller, L. H. 1912 A, 78, 97, 113.  
 1925 B, 73 (This species?).  
 Osborn, H. F. 1925 D, 542.  
 Shufeldt, R. W. 1916 E, 19 (This species?).  
 1917 B, 39, pl. ii, fig. 19 (This species?).  
 Recent; southern United States to Argentina. Pleistocene (LaBrea); California. (Early); Florida.

## Superfamily PHENICOPTEROIDÆ, new form.

- Hay, O. P. 1902 A, 531 (*Phenicopteroidea*).  
 Chandler, A. C. 1916 C (*Phenicopteri*).  
 Dabbene, R. 1910 A, 485 (*Phenicopteriformes*).  
 Evans, A. H. 1899 A, 105 (*Phenicopteri*).  
 Fürbringer, M. 1902 B, 637 (*Phenicopteri*).  
 Gadow, H. 1893 A, 144 (*Phenicopteri*).  
 1910 B, 977 (*Phenicopteri*).  
 Huxley, T. H. 1867 A, 460 (*Amphimorphæ*).  
 1867 C, 278 (*Amphimorphæ*).  
 Knowlton, F. H. 1909 B, 165 (*Phenicopteri*).  
 Lambrecht, K. 1914 A, 65 (*Phenicopteri*).  
 Lebedinsky, N. G. 1913 A (*Phenicopteriformes*).  
 Lydekker, R. 1879 A, 27 (*Amphimorphæ*).

- Lydekker, R. 1891 A, 76 (*Odontoglossæ*).  
 Reichenow, A. 1913 A, 234 (*Pelopatides*).  
 Ridgway, R. 1887 A, 121 (*Odontoglossæ*).  
 Sharpe, R. B. 1891 A, 76 (*Phenicopteriformes*).  
 Shufeldt, R. W. 1901 B, 295 (*Odontoglossæ*).  
 1904 B, 853 (*Phenicopteriformes*, *Phenicopteri*).  
 1909 A, 251 (*Phenicopteroideæ*).  
 Steiner, H. 1916 A, 499 (*Phenicopteri*).  
 1918 A, 317, 441, 490 (*Phenicopteri*).  
 Sushkin, P. P. 1899 B, 153 (*Phenicopteri*).  
 Wetmore and Miller 1926 A, 341 (*Phenicopteri*).

## PHENICOPTERIDÆ Bonaparte.

- Bonaparte, C. L. 1831 A, 34.  
 Hay, O. P. 1902 A, 531.  
 Arldt, T. 1907 D, 673.  
 1912 A, 756.  
 Carus, V. 1875 A, 350.  
 Dabbene, R. 1910 A, 485.  
 Evans, A. H. 1899 A, 105.  
 Forbes, W. A. 1882 A, 389.  
 Garrod, A. H. 1873 D, 638.  
 Gervais, P. 1856 A, 12 ("flamants").  
 Lebedinsky, N. G. 1913 A.  
 Leunis and Ludwig 1883 A, 486

- Lobley, J. L. 1908 A, 202, 207.  
 Lydekker, R. 1879 A, 13.  
 1891 A, 77.  
 Reichenow, A. 1877 A, 113, 225.  
 1913 A, 235.  
 Ridgway, R. 1887 A, 121.  
 Shufeldt, R. W. 1901 B, 295.  
 1904 B, 853.  
 Wallace, A. R. 1878 A, ii, 361.  
 Wetmore and Miller 1926 A, 341.  
 Young, G. W. 1915 A, 251 ("flamingoes").

PHENICOPTERUS Linnæus. Type *P. ruber* Linnæus.

- Linnæus, C. 1758 A, 139.  
 Hay, O. P. 1902 A, 531.  
 Adolphi, H. 1922 A, 49.

- Allen, J. A. 1893 B, 99.  
 Arldt, T. 1907 D, 673.  
 Beddard, F. E. 1898 A, 544.

Beebe, C. W. 1906 A, 489 ("flamingo").  
 Bignon, F. 1889 A.  
 Bronn, H. G. 1848 B, 960.  
 1849 A, 697.  
 Chandler, A. C. 1916 C.  
 Chapman, F. M. 1902 A, 573.  
 1905 A, figs. 1-16.  
 Cuvier, G. 1805 A (Phenicopterus).  
 Dabbene, R. 1910 A, 130, 234.  
 Diethelm, M. 1907 A, 41.  
 Evans, A. H. 1899 A, 105.  
 Eytton, T. C. 1867 A, 197, pl. iv K (Phenicopterus).  
 Fürbringer, M. 1888 A, pls. ii-iv, vi, vii.  
 1902 B, 637.  
 Gadow, H. 1893 A, 144.  
 Gegenbaur, C. 1871 A, 173.  
 Gervais, P. 1852 A, 233, pl. L, figs. 4, 5.  
 1859 A, 413.  
 Giebel, C. G. 1855 B, 30 ("flamingo").  
 Heilprin, A. 1887 A, 418 ("flamingo").  
 Hesse, H. 1907 A, 213, pl. vi, fig. 1.  
 Huxley, T. H. 1867 A, 437.  
 1867 C, 257, 278, fig. 19.  
 Kessler, K. T. 1841 A, 658, 688.  
 Knowlton, F. H. 1909 B, 165.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 83, pl. viii.  
 Lebedinsky, N. G. 1921 A, 13.  
 Ledouble, A. F. 1903 A, 642 ("flamant").  
 Leunis and Ludwig 1883 A, 486.  
 Lüdher, W. 1871 A, 329.  
 Mackie, S. J. 1863 C, 108.

Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A.  
 Miller, L. H. 1912 A, 80.  
 Newton and Gadow 1896 A, 1078.  
 Owen, R. 1866 B, 16, fig. 14 (Phenicopterus).  
 1868 A, 899 (Phenicopterus).  
 Parker, W. K. 1875 A, 712.  
 Reichenow, A. 1877 A, 121, 227.  
 Ridgway, R. 1887 A, 121, pl. xxix.  
 Shufeldt, R. W. 1901 B, 295.  
 1909 A, 250, 251, 252.  
 Steiner, H. 1918 A, 318.  
 Sundevall, C. J. 1886 A, 400.  
 Taschenberg, O. 1899 A, 4229.  
 Virchow, H. 1916 B, 245, 5 figs.  
 Wagner, R. 1843 A ("flamingo").  
 Weitzel, A. 1865 A, 338.  
 Wray, R. S. 1887 A, 348.

#### **Phenicopterus copei** Shufeldt.

Hay, O. P. 1902 A, 531.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1927 D, 244.  
 Lambrecht, K. 1916 C, 495.  
 1921 A, 22.  
 Miller, L. H. 1912 A, 81, 97, 113.  
 Osborn, H. F. 1910 B, 460.  
 Shufeldt, R. W. 1913 B, 152, 157.  
 Smith and Packard 1919 A, 103 ("flamingo").  
 Sternberg, C. H. 1909 C, 160.  
 Wetmore, A. 1928 A, 155.  
 Pleistocene (Fossil Lake); Oregon.

#### *Superfamily PLATALEOIDÆ, new name.*

Shufeldt, R. W. 1894 A, 23 (Plataleæ).

#### **PLATALEIDÆ.**

A. O. U. 1910 A, 91.  
 Coues, E. 1884 A, 651.  
 Eytton, T. C. 1867 A, 275, pls. xiv k, xxvii (Platalia).

Knowlton, F. H. 1909 A, 163.  
 Ridgway, R. 1887 A, 122.

#### **AJAJA** Reichenbach. Type *Platalea ajaja* Linnæus.

Reichenbach, H. G. 1852, Syst. Avium, xvi.  
 A. O. U. 1910 A, 91.  
 Coues, E. 1884 A, 651 (Ajaja).  
 Ridgway, R. 1887 A, 122, pl. xxxi (Ajaja).

#### **Ajaja ajaja** (Linnæus).

Linnæus, C. 1758 A, 140.  
 A. O. U. 1910 A, 91.

Coues, E. 1884 A, 651 (Ajaja ajaja).  
 Hay, O. P. 1927 D, 185.  
 Knowlton, F. H. 1909 A, 164, pl.  
 Miller, L. H. 1921 C, 130 (A. sp. indet).  
 1925 A, 72.

Recent; North and South America: Pleistocene; California.

#### *Superfamily IBIDIDOIDÆ, new form.*

A. O. U. 1910 A, 91 (Ibides).

#### **IBIDIDÆ.**

Abel, O. 1926 B, 239 ("ibisse").  
 A. O. U. 1910 A, 91.  
 Coues, E. 1884 A, 648.  
 Knowlton, F. H. 1909 A, 160.  
 Owen, R. 1866 B, 60 ("ibises").

Reichenow, A. 1913 A, 238.  
 Ridgway, R. 1887 A, 121, 123.  
 Selenka, E. 1869 A, pls. ii, xvii (Ibis).  
 Stejneger, L. 1885 A, 158.

PLEGADIS Kaup. Type *Tringa autumnalis* Linnæus.

- Kaup, J. J. 1829, Skizz. Entw.-Gesch. Eur. Thierw., 82.  
 A. O. U. 1910 A, 92.  
 Coues, E. 1884 A, 649.  
 Reichenow, A. 1913 A, 243.  
 Ridgway, R. 1887 A, 123, pl. xxx.

**Plegadis guarauna** (Linnæus).

- Linnæus, C. 1766, Syst. Nat., ed. 12, I, 242.  
 A. O. U. 1910 A, 92.  
 Coues, E. 1884 A, 649.  
 Hay, O. P. 1927 D, 185.  
 Knowlton, F. H. 1909 A, 163.  
 Miller, L. H. 1921 C, 130 (P. sp. indet.).  
 1925 A, 73.

Recent; Oregon to southern South America:  
 Pleistocene; California.

## Suborder ANATIFORMES, new name.

Unless otherwise indicated the authors, as quoted, use for this suborder the name Anseriformes.

- Hay, O. P. 1902 A, 528 (Chenomorphæ).  
 Abel, O. 1919 A, 704.  
 Adolphi, H. 1922 A, 50.  
 Allen, J. A. 1871 A (Chenomorphæ).  
 A. O. U. 1910 A, 66 (Anseres).  
 Beddard, F. E. 1898 A, 456 (Anseres).  
 Bittner, F. 1912 A, 2 ("Lamelliostres").  
 Blainville, H. M. D. 1821 A, 212 ("palmpèdes").  
 Bonaparte, C. L. 1831 A, 34 (Anseres).  
 1832 A, 311 (Lamellosodontati).  
 Carus, V. 1875 A, 347 (Lamelliostres).  
 Chandler, A. C. 1914 B, 141 (Anseres).  
 1916 C (Anseres).  
 Clark, H. L. 1901 A, 376 ("anseriforms").  
 Cope, E. D. 1891 N, 58, 60 (Chenomorphæ).  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 468.  
 Evans, A. H. 1899 A, 108, 110 (Anseriformes, Anseres).  
 Finn, F. 1894 B, 454 (Anseres).  
 Fürbringer, M. 1888 A, 1548, 1565.  
 1902 B, 630 (Anseriformes, Anseres).  
 Gadow, H. 1893 A, 151.  
 1910 B, 977.  
 Garrod, A. H. 1874 A, 118.  
 Gegenbaur, C. 1871 A, 173 (Chenomorphæ).  
 Hilzheimer, M. 1913 A, 517 (Anseres).  
 Hoernes, R. 1886 A, 641 (Lamelliostres).  
 Huxley, T. H. 1867 A, 460 (Chenomorphæ).  
 1867 C, 227 (Chenomorphæ); 248 (Nata-tores).  
 1868 B, 361 (Chenomorphæ).  
 Illiger, C. 1811 A, 270 (Natatores); 276 (Lamellosodontata).  
 Kessler, K. T. 1841 A, 673 (Lamelliostres).  
 Knowlton, F. H. 1909 B, 169.
- Lambrecht, K. 1914 A, 65, 73.  
 Lebedinsky, N. G. 1913 A, 694.  
 Leunis and Ludwig 1883 A, 484 (Lamelliostres).  
 Linnæus, C. 1758 A, 81, 122 (Anseres).  
 Lobley, J. L. 1908 A, 198 (Anseres).  
 Lühder, W. 1871 A, 324 (Lamelliostres).  
 Lydekker, R. 1879 A, 27 (Chenomorphæ).  
 1891 A, 97 (Anseres).  
 Meckel, J. F. 1825 A ("wasservogel").  
 Newton, A. 1885 A, 47 (Chenomorphæ).  
 Newton and Gadow 1896 A, 86, 134, 820 (Chenomorphæ); 1060 (Anseres).  
 Parker, W. K. 1875 A, 700, 712 (Chenomorphæ).  
 1888 D, 478 (Chenomorphæ).  
 Pycraft, W. P. 1910 A, 419 (Anseres).  
 Reichenow, A. 1913 A, 130 (Lamelliostres).  
 Ridgway, R. 1887 A, 84 (Anseres).  
 Slater, P. L. 1858 A (Anseres).  
 Selenka, E. 1869 A (Natatores).  
 Sharpe, R. B. 1891 A, 76.  
 Shufeldt, R. W. 1904 B, 853 (Anseriformes, Anseres).  
 1904 C, 315 (Anseres).  
 1909 A, 371 (Chenomorphæ).  
 1914 C (Anseres).  
 1916 C, 345 (Anseres).  
 Steiner, H. 1916 A, 493, 499 (Lamelliostres).  
 1918 A, 321, 490.  
 1922 A, 310, 327 (Anseres).  
 Sushkin, P. P. 1899 B, 153 (Anseres).  
 Vialleton, L. 1916 A, 6.  
 Virchow, H. 1921 A, 136, fig. 2 ("gans").  
 Wallace, A. R. 1876 A, i, 490; ii, 560 (Anseres).  
 Weitzel, A. 1865 A, 346 ("schwimmvögel").  
 Wetmore, A. 1917 A, 556 (Anseres).  
 Wetmore and Miller 1926 A, 341.  
 Wray, R. S. 1887 A, 348 (Anseres).  
 Zittel and Lucas 1902 A, 273 (Chenomorphæ).  
 Zittel and Schlosser 1911 A, 323 (Chenomorphæ).

## Superfamily ANATOIDEÆ, new form.

- Hay, O. P. 1902 A, 529 (Anatoidea).  
 Gadow, H. 1893 A, 154 (Anseres).  
 1910 B, 977 (Anseres).  
 Garrod, A. H. 1874 A, 116 (Anseres).  
 Knowlton, F. H. 1909 B, 172 (Anseres).

- Köstlin, O. 1844 A ("schwimmvogel").  
 Lull, R. S. 1917 B, 322 (Anseres).  
 Pycraft, W. P. 1901 A, 351 (Anseres).  
 Sharpe, R. B. 1891 A, 76 (Anseres).  
 Wetmore and Miller 1926 A, 341 (Anseres).

## ANATIDÆ Vigors.

- Vigors, N. A. 1825 A, 498.  
 Hay, O. P. 1902 A, 529.  
 Abel, O. 1912 F, 171.

- Allen, J. A. 1871 A.  
 A. O. U. 1910 A, 66 (Anatidæ).

- Arlt, T. 1907 D, 637.  
1912 A, 686, 687 (Anseridæ); 710, 756 (Anatidæ).  
Beebe, C. W. 1906 A, 487 ("ducks").  
Bittner, F. 1912 A, 2, 8.  
Bonaparte, C. L. 1831 A, 35.  
Brandt, J. F. 1840 A, 170, 185 ("anatiden").  
Carus, V. 1875 A, 351.  
Dabbene, R. 1910 A, 468.  
Evans, A. H. 1899 A, 108, 111.  
Finn, F. 1894 A, 210.  
Fürbringer, M. 1888 A.  
1902 B, 630.  
Gadow, H. 1893 A, 155.  
1912 B, 210 ("ducks").  
Garrod, A. H. 1874 A, 116, 122.  
Gegenbaur, C. 1871 A, 179 ("anatiden").  
Giebel, C. G. 1855 B, 32 ("enten").  
Grote, H. 1902 A, 60 ("schwimmvögel").  
Heilmann, G. 1926 A, 102 ("ducks," "geese").  
Hesse, H. 1907 A, 203.  
Jacquemin, E. 1837 A, 591 ("canards").  
Knowlton, F. H. 1909 B, 172.  
Leunis and Ludwig 1883 A, 491.  
L'Herminier, F. 1836 A, 111 ("canards").  
Lobley, J. L. 1908 A, 202, 207.  
Lühder, W. 1871 A, 323.  
Lydekker, R. 1879 A, 13.  
1891 A, 98.  
Magnus, H. 1871 A.  
Meckel, J. F. 1825 A ("enten").  
Miller, L. H. 1925 B, 72.  
Miller, W. D. 1924 A, 1 (Anseres).  
Owen, R. 1866 B, 26, 61 (Lamellirostrata).  
Parker, W. K. 1875 D, 128 ("geese").  
1888 D, 477.  
1890 A, 1.  
Pycraft, W. P. 1906 A, 397 ("geese," "ducks").  
1910 A, 50, 402, 450.  
Reichenow, A. 1913 A, 133.  
Ridgway, R. 1887 A, 84.  
Seeley, H. G. 1872 A, 276 ("ducks").  
Shufeldt, R. W. 1904 B, 853.  
1904 C, 315.  
1909 A, 369.  
1914 C.  
Sieglbauer, F. 1911 A, 267.  
Sterner, H. 1918 A, 441, 490 (Anseres).  
Sundevall, C. J. 1886 A, 404 (Anates).  
Wagner, R. 1843 A ("enten").  
Wallace, A. R. 1876 A, II, 363.  
Wetmore and Miller 1926 A, 341.

## CYGNINÆ Bonaparte.

- Bonaparte, C. L. 1838 B, 119.  
A. O. U. 1910 A, 89.  
Knowlton, F. H. 1909 B, 172.  
Lydekker, R. 1891 A, 107.  
Oberholser, H. C. 1908 A, 1.  
Reichenow, A. 1913 A, 162 (Cygnidæ).  
Shufeldt, R. W. 1914 C.  
Wetmore and Miller 1926 A, 341.

CYGNUS Bechstein. Type *Cygnus musicus* Bechstein = *Anas cygnus* Linnæus.

- Bechstein, J. M. 1803, Ornith. Taschenb. Deutschl., II.  
Hay, O. P. 1902 A, 530 (Olor).  
Abel, O. 1912 F, 171.  
Adolphi, H. 1922 A, 16, 51, figs. 4, 22, 24, 25 (Olor).  
Allen, J. A. 1893 B, 99 (Olor).  
A. O. U. 1910 A, 89 (Olor).  
Arlt, T. 1907 D, 649.  
Beddard, F. E. 1898 A, 462, 466.  
Beebe, C. W. 1906 A, 494 ("swans").  
Bignon, F. 1889 A.  
Bittner, F. 1912 A, 8.  
Bonsdorff, E. J. 1871 A, 310.  
Brit. Ornith. Union Comm. List of Brit. Birds, ed. 2. 1915, 382.  
Bronn, H. G. 1849 A, 696.  
Chandler, A. C. 1916 C, 329 (Olor).  
Eimer, G. H. T. 1901 A, 207, 231.  
Evans, A. H. 1899 A, 135.  
Eyton, T. C. 1887 A, 205 (Cygnus).  
1869 A, pls. i, iv.  
Foote, J. S. 1916 A, 71, pl. vii (Olor).  
Fürbringer, M. 1888 A, pls. ii-v, vii.  
Gegenbaur, C. 1871 A, 179.  
Giebel, C. G. 1855 B, 31 ("schwann").  
Harting, P. 1866 A, 24.  
Heilmann, G. 1913 B, 29, fig. 74.  
1926 A, 207, fig. 131 ("swan").  
Heinroth, O. 1923 A, 279, pl. v.  
Hesse, H. 1907 A, 204, pl. vii, fig. 4.  
Kessler, K. T. 1841 A, 675, 690.  
Kingsbury, B. F. 1926 A, 103.  
Knowlton, F. H. 1909 B, 172.  
Köstlin, O. 1844 A.  
Lambrecht, K. 1914 A, 65.  
Lebedinsky, N. G. 1913 B, 136, fig. 3 (Olor).  
Leunis and Ludwig 1883 A, 487.  
Lilienthal, G. 1917 A, 271 ("schwan").  
Lühder, W. 1871 A, 329.  
Lydekker, R. 1891 A, 107.  
Mackie, S. J. 1863 C, 109.  
Magnan, A. 1922 A, 170, pl. x.  
Magnus, H. 1871 A.  
Meckel, J. F. 1825 A.  
Newton and Gadow 1896 A, 1065.  
Nitzsch, C. L. 1862 B, 408.  
Oberholser, H. C. 1908 A, 2 (Olor).  
Owen, R. 1866 B, fig. 101 ("swans").  
1868 A, 875.  
Parker, W. K. 1875 A, 719.  
1888 D, 466, 478.  
1890 A, 4, pls. ii-v.  
Pycraft, W. P. 1906 A, 402.  
Reichenow, A. 1913 A, 163.  
Ridgway, R. 1887 A, 88, 120, pl. xxix (Olor).  
Selenka, E. 1869 A, pls. x, xvii.  
Shufeldt, R. W. 1909 A, 378 (Olor).  
1914 C, 38, 40 (Olor).  
1916 C, 346 (Olor).  
Sieglbauer, F. 1911 A, 267.  
Steiner, H. 1918 A, 325, 490.  
Sundevall, C. J. 1886 A, 401, 410.  
Sushkin, P. P. 1899 B, 153 (Olor).  
Taschenberg, O. 1899 A, 4028.  
Wagner, J. G. 1832, Isis, xxv, 1234 (Olor).  
Weitzel, A. 1865 A, 342.

**Cygnus buccinator** Richardson.

Richardson, J. 1831 (1832), Fauna Bor.-Amer., 464.

A. O. U. 1910 A, 89 (Olor).

Fürbringer, M. 1888 A.

Oberholser, H. C. 1908 A, 3 (Olor, subgenus Clangoccygnus).

Shufeldt, R. W. 1909 A, 311, 331, 335 (Olor).

1913 A, 39 (Olor).

1913 B, 150; pl. xxvi, figs. 315, 317, 318; pl. xxxiv, fig. 419; pl. xxxv, figs. 423, 424; pl. xxxvi, fig. 430; pl. xxxvii, figs. 433-436 (Olor).

1913 F, 307 (Olor).

1914 C, 31, 32 (Olor).

Wyman, J. 1843 A, 119.

Recent; interior and western North America: Pleistocene (Fossil Lake); Oregon.

**Cygnus columbianus** (Ord).

Ord, G. 1815, Guthrie's Geogr., 2d Amer. ed., 319 (Anas).

Miller, L. H. 1924 B, 180, fig. 2.

1925 B, 73 (Olor).

Oberholser, H. C. 1908 A, 4 (Olor).

Shufeldt, R. W. 1913 B, 150, 172, pl. xxxvi, fig. 429; pl. xxxvii, figs. 437, 438 (Olor americanus).

1913 F, 307 (Olor).

1914 C, pl. vii (Olor).

Recent; North America: Pleistocene (Fossil Lake); Oregon.

**Cygnus matthewi** (Shufeldt).

Shufeldt, R. W. 1913 B, 145, 151, pl. xxvi, fig. 309; pl. xxxv, fig. 422 (Olor).

Lambrecht, K. 1921 A, 11 (Olor).

Shufeldt, R. W. 1893 C, 683, fig. 2 (Olor paloregonus).

1913 F, 307 (Olor).

Pleistocene (Fossil Lake); Oregon.

**Cygnus paloregonus** Cope.

Hay, O. P. 1902 A, 530 (Olor).

1922 A, 8 (Olor).

1927 D, 244, 266, 267 (Olor); 266, 267 (Olor palaeocygnus); 268 (Cygnus paloregonus).

Lambrecht, K. 1918 C, 494.

1921 A, 11 (Olor).

Lindgren and Drake 1904 A, 3 (Olor palaeocygnus. This species?).

Lucas, F. A. 1900 H, 99 (Olor palaeocygnus. This species?).

1904 F, 3 (Olor palaeocygnus. This species?).

Merriam, J. C. 1917 A, 432 (Olor palaeocygnus).

Miller, L. H. 1912 A, 81, 112 (Olor).

Oberholser, H. C. 1908 A, 3 (Olor).

Osborn, H. F. 1910 B, 460.

Shufeldt, R. W. 1893 E, 683, fig. 2 (Olor).

1909 A, 335 (Olor).

1913 A, 37 (Olor).

1913 B, 145, 149, pl. xix, fig. 257; pl. xxvi, figs. 310, 316; pl. xxxiv, fig. 420; pl. xxxv, figs. 421, 425; pl. xxxvi, fig. 431 (Olor).

1918 C, 346 (Olor).

Pleistocene (Fossil Lake); Oregon: (Idaho); Idaho.

**Cygnus** sp. indet.

Hay, O. P. 1927 D, 71, 191 (Cygnus); 75 (Olor); 245 ("swan").

Pleistocene; California, Idaho, Oregon.

## ANSERINÆ Swainson.

Swainson, W. 1837 A, 364.

Abel, O. 1926 B, 239 ("gänse").

A. O. U. 1910 A, 83.

Arlt, T. 1907 D, 56, 87.

Evans, A. H. 1899 A, 131.

Fürbringer, M. 1888 A, 52, 54, 61 (Anseres).

Knowlton, F. H. 1909 B, 177.

Leunis and Ludwig 1883 A, 848 (Anseridæ).

Lydekker, R. 1891 A, 103.

Reichenow, A. 1913 A, 157 (Anseridæ).

Ridgway, R. 1887 A, 87.

Shufeldt, R. W. 1914 C.

Sieglbauer, F. 1911 A, 267.

Wetmore and Miller 1926 A, 341.

LAORNIS Marsh. Type *L. edwardsianus* Marsh.

Hay, O. P. 1902 A, 531.

Fürbringer, M. 1888 A, 1141.

1902 B, 629

Heilprin, A. 1887 A, 330.

Lambrecht, K. 1916 C, 493.

Newton and Gadow 1896 A, 281.

Van den Broeck, E. 1900 A, 77.

Wallace, A. R. 1876 A, i, 164.

Zittel and Schlosser 1911 A, 323.

1923 A, 399.

**Laornis edwardsianus** Marsh.

Hay, O. P. 1902 A, 531.

Delafontaine, M. 1875 A, 176 (*L. edwardsianus*).

Lambrecht, K. 1921 A, 65 (*L. edwardsianus*).

Shufeldt, R. W. 1915 D, 21, 76, pl. ii, fig. 10.

Wetmore, A. 1928 A, 150.

Upper Cretaceous (Navesink-Hornerstown): New Jersey.

BEANTA Scopoli. Type *Anas bernicla* Linnaeus.

Scopoli, G. A. 1789, Annus i, Hist. Nat., 67.

Hay, O. P. 1902 A, 530.

Adolphi, H. 1922 A, 58 (*Bernicla*).

Allen, J. A. 1893 B, 99.

Beddard, F. E. 1898 A, 57, 468 (*Bernicla*).

Chandler, A. C. 1916 C, 328.

Evans, A. H. 1899 A, 131 (*Bernicla*).

Foot, J. S. 1916 A, 73 (*Bernicla*).

Fürbringer, M. 1888 A, 150, pls. i, v, vii (*Bernicla*).

Heilmann, G. 1915 A, 97.

Hesse, H. 1907 A, 206.

Knowlton, F. H. 1909 B, 180.

Leunis and Ludwig 1883 A, 489 (*Bernicla*).

- Magnan, A. 1922 A, 170.  
 Miller, L. H. 1924 B, 179.  
 Ridgway, R. 1887 A, 87, 116, pl. xxviii.  
 Shufeldt, R. W. 1901 B, 315 (Bernicla).  
     1909 A, 370.  
     1914 C.  
     1916 C, 346.

**Branta bernicla glaucogastra (Brehm).**

- Brehm, C. L. 1831, Handb. Vögel Deutschl., 849.  
 Miller, L. H. 1924 B, 178 (B. bernicla).  
 Shufeldt, R. W. 1913 A, 39 (B. bernicla).  
     1913 B, 147, 150, pl. xxxii, figs. 400-402, 404.  
     1913 F, 307 (B. bernicla).  
 Recent; Northern Hemisphere: Pleistocene (Fossil Lake); Oregon.

**Branta canadensis (Linnæus).**

- Linnæus, C. 1758 A, 123 (Anas).  
 Hay, O. P. 1902 A, 530.  
 Abel, O. 1912 F, 22.  
 Beebe, C. W. 1906 A, 490 ("Canada goose").  
 Evans, A. H. 1899 A, 131 (Bernicla).  
 Foote, J. S. 1916 A, 73, pl. vii (Bernicla).  
 Hay, O. P. 1927 D, 172, 186, 244.  
 Knowlton, F. H. 1909 B, 181, fig. 59.  
 Miller, L. H. 1909 B, 306.  
     1911 C, 396, 400.  
     1912 A, 71, 78, 81, 112.  
     1914 A, 36.  
     1921 C, 129.  
     1924 B, 179.  
     1925 B, 72.  
     1928 A, 120.  
 Osborn, H. F. 1910 B, 473.  
     1925 D, 542.  
 Shufeldt, R. W. 1909 A, 370, figs. 33, 38, 42.  
     1913 B, 146, 148, pl. xxv, figs. 304, 305;  
     pl. xxviii; pl. xxxii, figs. 412, 413, 415;  
     pl. xxxiv, fig. 418; pl. xxxvi, fig. 428.  
     1914 C, pls. iv, v, x.  
     1915 D, 64, pl. xiii, figs. 99, 100.  
 Recent; North America: Pleistocene; California, Oregon.

**Branta canadensis hutchinsi (Richardson).**

- Richardson, J. 1831 (1832) Fauna Bor. Amer., 470 (Anser hutchinsi).  
 Coues, E. 1884 A, 689 (Bernicla).  
 Knowlton, F. H. 1909 B, 181.  
 Shufeldt, R. W. 1913 A, 39 (B. hutchinsi).  
     1913 B, 147, pl. xxxii, fig. 414.  
     1913 F, 307 (This subspecies?).  
     1914 C, pl. v.  
 Recent; western North America: Pleistocene (Caves); California: (Fossil Lake); Oregon.

**Branta canadensis minima Ridgway.**

- Ridgway, R. 1885, Proc. U. S. Nat. Mus., viii, 22 (B. minima).  
 Miller, L. H. 1925 B, 72.  
 Shufeldt, R. W. 1913 A, 39.  
     1913 B, 174, pl. xxxviii, figs. 464, 465.  
     1913 F, 307 (This subspecies?).  
 Recent; western North America: Pleistocene (Fossil Lake?); Oregon.

**Branta dickeyi Miller.**

- Miller, L. H. 1924 B, 179, figs. 1, 2.  
 Hay, O. P. 1927 D, 198.  
 Miller, L. H. 1925 A, 316, figs. 1, 2.  
 Osborn, H. F. 1925 D, 542.  
 Pleistocene (McKittrick); California.

**Branta hypsibata (Cope).**

- Hay, O. P. 1902 A, 530.  
     1927 D, 244.  
 Lambrecht, K. 1921 A, 13 (B. hypsibatus).  
 Miller, L. H. 1912 A, 81, 112.  
     1924 B, 178.  
 Shufeldt, R. W. 1913 B, 125 (Anser); 147, 156,  
     pl. ix, fig. 5; pl. xxv, figs. 298, 299; pl. xxvii  
     (Branta).  
 Pleistocene (Fossil Lake); Oregon.

**Branta minuscula Wetmore.**

- Wetmore, A. 1924 A, 6, fig. 3.  
 Hay, O. P. 1927 D, 136.  
 Miller, L. H. 1924 B, 178 (B. minuscula).  
 Wetmore, A. 1928 A, 154.  
 Pliocene? (San Pedro Valley); Arizona.

**Branta propinqua Shufeldt.**

- Hay, O. P. 1902 A, 530.  
     1927 D, 244.  
 Lambrecht, K. 1921 A, 13.  
 Miller, L. H. 1912 A, 81, 112.  
 Shufeldt, R. W. 1913 B, 148, pl. xxix.  
     1914 C, pl. ii.  
 Pleistocene (Fossil Lake); Oregon.

**Branta sp. indet.**

- Gidley, J. W. 1922 B, 120. Pliocene? (San Pedro Valley); Arizona.  
 Hay, O. P. 1927 D, 186. Pleistocene; California.  
 Merriam, J. C. 1911 B, 211, 212, 234, fig. 3.  
     1917 A, 429. Phocene (Thousand Creek); Nevada.  
 Miller, L. H. 1910 C, 11. Pleistocene (La Brea); California.  
 Wetmore, A. 1923 A, 489 (This genus?). Upper Miocene (Lower Snake Creek); Nebraska.

ANSER Brisson. Type *Anas anser* Linnæus.

- Brisson, M. J. 1760, Ornith., vi, 261.  
 Hay, O. P. 1902 A, 530.  
 Adolphi, H. 1922 A, 60.  
 Allen, J. A. 1893 B, 99.  
 A. O. U. 1910 A, 84.  
 Arldt, T. 1907 D, 87, 156.  
 Bignon, F. 1889 A.  
 Bittner, F. 1912 A, 8.

- Bonsdorff, E. J. 1871 A, 310.  
 Bronn, H. G. 1849 A, 696.  
 Eimer, G. H. T. 1901 A, 207, 231.  
 Engelmann, O. 1910 A, 487.  
 Eyton, T. C. 1867 A, 205.  
     1869 A, pl. iii.  
 Fürbringer, M. 1888 A.  
 Gaupp, E. 1908 B, 528.

Gegenbaur, C. 1871 A, 173 ("gans").  
 Harting, P. 1866 A, 24.  
 Heilmann, G. 1926 A, 203, fig. 3.  
 Kessler, K. T. 1841 A, 675, 690.  
 Kingsbury, B. F. 1926 A, 103.  
 Knowlton, F. H. 1909 B, 178.  
 Krukenberg, A. 1849 A, 413 ("gans").  
 Lambrecht, K. 1914 A, 65, pl. viii.  
 Lebedinsky, N. G. 1921 A, 13.  
 Leunis and Ludwig 1883 A, 488.  
 Lilienthal, G. 1917 A, 271 ("gans").  
 Lydekker, R. 1879 A, 36, pl. iv, fig. 2.  
 Mackie, S. J. 1863 C, 109.  
 Magnan, A. 1922 A, 170, pls. v, xi, xiii, xiv.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A ("gänse").  
 Miller, L. H. 1924 B, 180.  
 Müller, W. D. 1924 A, 5, fig. 7.  
 Nitzsch, C. L. 1862 B, 412.  
 Norsa, E. 1895 A, 284.  
 Owen, R. 1848 B, 184.  
 1868 A, 860.  
 Parker, W. K. 1890 A, 16, pl. i.  
 Prein, F. 1914 A, 678.  
 Reichenow, A. 1913 A, 158.  
 Ridgway, R. 1887 A, 87, 115, pl. xxviii.  
 Shufeldt, R. W. 1909 A, 369.  
 1914 C.  
 Steiner, H. 1921 A, 538.  
 1922 A, 310, 317, figs. 4-8.  
 Sundevall, C. J. 1886 A, 405.  
 Szalay, E. L. 1902 A, 12, pls. i-iii.  
 Virchow, H. 1919 A, 326, fig. 11 ("gans").  
 Vitali, G. 1909 A, 214.  
 Weitzel, A. 1865 A, 341.

### **Anser albifrons gambelli Hartlaub.**

Hartlaub, C. J. G. 1852, Revue et Mag. Zool., 7 (A. gambelli).  
 Hay, O. P. 1902 A, 530 (A. albifrons).  
 Coues, E. 1884 A, 684.  
 Hay, O. P. 1927 D, 172, 186 (A. albifrons); 244 (A. gambelli).  
 Knowlton, F. H. 1909 B, 178 (A. albifrons).  
 Miller, L. H. 1912 A, 78, 81, 112.  
 1914 A, 36 (A. albifrons).  
 1923 A, 120 (A. albifrons).  
 Osborn, H. F. 1925 D, 542 (A. albifrons?).  
 Shufeldt, R. W. 1909 A, 369 (A. albifrons).  
 1913 B, 144, 146, pl. xxiv, figs. 290, 291, 293, 295; pl. xxv, fig. 303; pl. xxxii, figs. 408-411.  
 1914 C, 32, pls. v, xi.  
 The subspecific name is usually spelled *gambeli*.  
 Recent; Central and western North America: Pleistocene (Fossil Lake); Oregon; (La Brea, San Pedro); California.

### **Anser condoni Shufeldt.**

Hay, O. P. 1902 A, 530.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1927 D, 244.  
 Lambrecht, K. 1921 A, 12.  
 Miller, L. H. 1912 A, 81, 112.  
 Osborn, H. F. 1910 B, 460.  
 Shufeldt, R. W. 1909 A, 335.  
 1913 B, 125, 145, pl. ix, fig. 3.  
 1916 C, 346.  
 Pleistocene (Fossil Lake); Oregon.

### **Anser sp. indet.**

Miller, L. H. 1910 C, 11. Pleistocene (La Brea); California.

## **CHEN Boie. Type *Anser hyperboreus* Pallas.**

Boie, F. 1822, Isis, x, 563.  
 Hay, O. P. 1902 A, 530.  
 A. O. U. 1910 A, 83.  
 Beddard, F. E. 1898 A, 467.  
 Chandler, A. C. 1916 C, 328.  
 Knowlton, F. H. 1909 B, 179.  
 Miller, L. H. 1925 A, 315.  
 Newton and Gadow 1896 A, 300, 374, 1026.  
 Ridgway, R. 1887 A, 87, 114, pl. xxviii.  
 Shufeldt, R. W. 1909 A, 371.  
 1914 C.

### **Chen caerulescens (Linnæus).**

Linnæus, C. 1758 A, 124.  
 A. O. U. 1910 A, 84.  
 Shufeldt, R. W. 1913 B, 145, pl. xxv, fig. 301; pl. xxvi, figs. 306, 307, 312; pl. xxxiv, fig. 416; pl. xxxvi, fig. 426 (C. caerulescens).  
 1914 C, pl. x (C. caerulescens).  
 Recent; Eastern North America: Pleistocene (Fossil Lake); Oregon.

### **Chen hyperboreus (Pallas).**

Pallas, P. S. 1769, Spic. Zool., i, fasc. vi, 25 (Anas).  
 Hay, O. P. 1902 A, 530 (C. hyperborea).

A. O. U. 1910 A, 83.  
 Evans, A. H. 1899 A, 133.  
 Hay, O. P. 1927 D, 198, 244.  
 Miller, L. H. 1912 A, 81, 112 (C. hyperborea).  
 1923 A, 120.  
 Osborn, H. F. 1925 D, 542.  
 Shufeldt, R. W. 1909 A, 371.  
 1913 B, 125, 144, pl. ix, fig. 2; pl. xxiv, figs. 289, 292, 294, 296; pl. xxv, figs. 297, 300.  
 1914 C, 23, 32.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

### **Chen hyperboreus nivalis (J. R. Forster).**

Forster, J. R. 1772, Philos. Trans., LXII, 433 (Anas nivalis).  
 A. O. U. 1910 A, 83.  
 Knowlton, F. H. 1909 B, 179, fig. 58.  
 Shufeldt, R. W. 1913 B, 145, pl. xxv, fig. 302; pl. xxvi, figs. 308, 311, 314; pl. xxxiv, fig. 417; pl. xxxvi, fig. 427.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.



## DENDROCYGNINÆ Shufeldt.

Shufeldt, R. W. 1914 C, 60.

Wetmore and Miller 1926 A, 341.

DENDROCYGNA Swainson. Type *Anas arcuata* Horsfield.

Swainson, W. 1837 A, 365.

Knowlton, F. H. 1909 B, 183.

Reichenow, A. 1913 A, 154.

Ridgway, R. 1887 A, 87, 118, pl. xxv.

Shufeldt, R. W. 1914 C, 1-70, pls. i-iv, viii, x, xvi.

Wetmore, A. 1924 A, 3.

**Dendrocygna eversa** Wetmore.

Wetmore, A. 1924 A, 3, 5, figs. 1, 2.

Gidley, J. W. 1922 B, 120 (D. n. sp.).

Hay, O. P. 1927 D, 136.

Wetmore, A. 1928 A, 154.

Pliocene? (San Pedro Valley); Arizona.

## ANATINÆ Swainson.

Swainson, W. 1837 A, 366.

Abel, O. 1926 B, 239 ("enten").

A. O. U. 1910 A, 68.

Evans, A. H. 1899 A, 123.

Fürbringer, M. 1888 A.

Knowlton, F. H. 1909 B, 183 ("ducks").

Lydekker, R. 1891 A, 111.

Reichenow, A. 1913 A, 142.

Ridgway, R. 1887 A, 84.

Shufeldt, R. W. 1914 C.

Wetmore and Miller 1926 A, 341.

ANAS Linnæus. Type *A. boschas* Linnæus = *A. platyrhynchos* Linnæus.

Linnæus, C. 1758 A, 122.

Hay, O. P. 1902 A, 529.

Adolph, H. 1922 A, 64, figs. 26, 27.

Aeby, C. 1873 A, 701.

Allen, J. A. 1893 B, 99.

A. O. U. 1910 A, 68.

Arlt, T. 1907 D, 637.

Beddard, F. E. 1898 A, 75, 460.

Beecker, A. 1903 A, 583.

Bignon, F. 1889 A.

Bittner, F. 1912 A, 6.

Bonsdorff, E. J. 1871 A, 310.

Bronn, H. G. 1849 A, 696.

Chandler, A. C. 1916 C, 329.

Cuvier, G. 1805 A.

Diethelm, M. 1907 A, 41.

Döderlein, L. 1923 A, 142, 162.

Dollo, L. 1906 C, 9, fig. 3.

Foote, J. S. 1916 A, 69, pl. 6.

1921 A, 8, pl. ii, fig. 15.

Fürbringer, M. 1888 A, pl. ii.

Gaupp, E. 1905 D, 1029, figs. 45, 46.

Gegenbaur, C. 1871 A, 173.

Geoffroy St. Hilaire, E. F. 1832 A, 354 ("canard").

Giebel, C. G. 1855 B, 31.

Heilmann, G. 1926 A, 204 ("duck").

Hesse, H. 1907 A, 206, pl. vii, fig. 5.

Hommes, J. H. 1924 A, 14, figs. 1, 3, 5-7.

Huxley, T. H. 1867 A, 436, fig. 18 (Querquedula).

Kessler, K. T. 1841 A, 675, 690.

Kingsbury, B. F. 1926 A, 103.

Kingsley, J. S. 1925 A, 175, fig. 189 ("duck").

Knopfli, W. 1917 A, 50.

Knowlton, F. H. 1909 B, 185.

Köstlin, O. 1844 A.

Kulczycki, W. 1901 A, 577.

Lambrecht, K. 1914 A, 65.

Lapicque and Girard 1907 A, 1017.

Lebedinsky, N. G. 1913 B, 193.

1917 A, 322, 326, figs. 5, 6.

1918 B, 133.

1921 A, 9, fig. 1.

Leunis and Ludwig 1883 A, 491.

Lydekker, R. 1891 A, 114.

Mackie, S. J. 1863 C, 109.

Magnan, A. 1922 A, 170, pl. xi.

Magnus, H. 1871 A.

Meckel, J. F. 1825 A.

Mehnert, E. 1887 B, 213.

Nauck, E. T. 1926 B, 40, figs. 8, 9.

Newton and Gadow 1896 A, 1060.

Nitzsch, C. L. 1862 B, 414.

Noordenbos, W. 1905 B, 376.

Norsa, E. 1895 A, 234.

Owen, R. 1866 B, 32, fig. 22.

1868 A, 860.

Parker, W. K. 1890 A, 31, pls. i, ii.

Parker and Haswell 1897 A, 401, fig. 1005.

Prem, F. 1914 A, 678.

Pycraft, W. P. 1906 A, 399.

Reichenow, A. 1913 A, 145.

Reynolds, S. H. 1897 A, 304-327 (*Anas*); 539, figs. 56-61 ("duck").

Ridgway, R. 1887 A, 84, 90, pls. xxii, xxiii.

Sedgwick, A. 1894 A, 43 ("duck").

Shufeldt, R. W. 1909 A, 369.

1914 C.

Sieglbauer, F. 1911 A, 268.

Sippel, W. 1907 A, 519 ("ente").

Sonies, F. 1907 A, 395 ("enten").

Steiner, H. 1921 A, 538.

Sundevall, C. J. 1886 A, 405.

Wallace, A. R. 1876 A, ii, 363.

Weitzel, A. 1865 A, 342.

**Anas platyrhynchos** Linnæus.

Linnæus, C. 1758 A, 125.

Hay, O. P. 1902 A, 529 (*A. boschas*).

A. O. U. 1910 A, 68.

Evans, A. H. 1899 A, 127 (*A. boschas*).Eyton, T. C. 1867 A, 207 (*A. boschas*).1869 A, pl. ix (*A. boschas*).Foote, J. S. 1916 A, 69, pl. vi (*A. boschas*).

Hay, O. P. 1927 D, 172, 186, 198, 244.

Knopfli, W. 1917 A, 50 (*A. boschas*).Knowlton, F. H. 1909 B, 185, fig. 61 (*A. boschas*).Lebedinsky, N. G. 1918 B, 132, fig. 2 (*A. boschas*).Lydekker, R. 1891 A, 114 (*A. boschas*).

Miller, L. H. 1912 A, 80, 112.

1914 A, 35.

1925 A, 313.

1925 B, 72 (This species?).

1927 A, 156 (This species?).

Osborn, H. F. 1925 D, 542.

Shufeldt, R. W. 1913 B, 170, pl. xxxi, figs. 386, 387.

Shufeldt, R. W. 1914 C, pl. vi, fig. 38.

Steiner, H. 1922 A, 313, figs. 1, 2 (A. boschas).

Wetmore, A. 1923 B, 3 (A. platyrhyncha).

Recent; northern hemisphere: Pleistocene (Fossil Lake); Oregon: (San Pedro, La Brea, McKittrick); California.

### CHAULELASMUS Bonaparte. Type *Anas strepera* Linnæus.

Bonaparte, C. L. 1833, Geogr. and Comp. List, 56.

A. O. U. 1910 A, 69.

Coues, E. 1884 A, 693.

Shufeldt, R. W. 1914 C, 12.

#### *Chaulelasmus streperus* (Linnæus).

Linnæus, C. 1758, Syst. Nat., ed. 10, i, 125 (Anas).

A. O. U. 1910 A, 69.

Coues, E. 1884 A, 693.

Hay, O. P. 1927 D, 186.

Miller, L. H. 1912 A, 78, 112.

Osborn, H. F. 1925 D, 542.

Shufeldt, R. W. 1892 D, 406 (Anas).

1913 B, 143 (Anas).

1914 C, pl. vi.

Recent; nearly cosmopolitan: Pleistocene (La Brea); California: (Fossil Lake); Oregon.

### MARECA Stephens. Type *Anas penelope* Linnæus.

Stephens, J. F. 1824, Gen. Zool., xii, pt. ii, 130.

Hay, O. P. 1902 A, 529 (Anas, in part).

A. O. U. 1910 A, 69.

Chandler, A. C. 1916 C, 329.

Coues, E. 1884 A, 693.

Parker, W. K. 1875 A, 712.

#### *Mareca americana* (Gmelin).

Gmelin, J. F. 1789, Syst. Nat., I, ii, 526 (Anas).

Hay, O. P. 1902 A, 529 (Anas).

A. O. U. 1910 A, 70.

Hay, O. P. 1927 D, 198, 244.

Miller, L. H. 1912 A, 80, 112.

1925 A, 313.

Osborn, H. F. 1925 D, 542.

Shufeldt, R. W. 1909 A, 272.

1913 B, 156.

1914 C, 16.

Recent; North America: Pleistocene (Fossil Lake); Oregon.

### DAFILA Stephens. Type *Anas acuta* Linnæus.

Stephens, J. F. 1824, Gen. Zool. xii, pt. ii, 126.

Hay, O. P. 1902 A, 529.

Allen, J. A. 1893 B, 107.

A. O. U. 1910 A, 72.

Arlt, T. 1907 D, 87, 156.

Dabbene, R. 1910 A, 231.

Knowlton, F. H. 1909 B, 187.

Newton and Gadow 1896 A, 109, 726.

Ridgway, R. 1887 A, 85, 97, pl. xxiii.

Shufeldt, R. W. 1909 A, 373.

#### *Dafila acuta* (Linnæus).

Linnæus, C. 1758 A, 126 (Anas).

Hay, O. P. 1902 A, 529.

Evans, A. H. 1899 A, 125.

Eyton, T. C. 1867 A, 208.

Hay, O. P. 1927 D, 198, 244.

Knowlton, F. H. 1909 B, 187, fig. 188.

Miller, L. H. 1912 A, 80, 112.

1925 A, 314.

Osborn, H. F. 1925 D, 542 (This species?).

Shufeldt, R. W. 1909 A, 373.

1913 B, 175, pl. xxxix, figs. 478, 479.

1914 C, 18.

Recent; whole northern hemisphere; Pleistocene (Fossil Lake); Oregon.

### NETTION Kaup. Type *Anas crecca* Linnæus.

Kaup, J. J. 1829, Skizz. Entw.-Gesch. europ. Thierw., 95.

Hay, O. P. 1902 A, 529 (Anas, in part).

A. O. U. 1910 A, 70.

Miller, L. H. 1914 A, 35.

#### *Nettion carolinense* (Gmelin).

Gmelin, J. F. 1789, Syst. Nat. I, ii, 533 (Anas).

Hay, O. P. 1902 A, 529 (Anas).

1927 D, 309.

Miller, L. H. 1912 A, 75, 80, 112.

Miller, L. H. 1914 A, 35.

1916 D, 173 (This species?).

1925 A, 313.

1925 B, 72 (This species?).

Osborn, H. F. 1925 D, 542.

Shufeldt, R. W. 1913 B, 146.

1914 C, pl. vi.

Recent; North America: Pleistocene (Hawver Cave); California: (Fossil Lake); Oregon: ?Miocene (Cedar Mountain); California.

QUERQUEDULA Oken. Type *Anas querquedula* Linnæus.

- Oken, L. 1817, Isis, i, 1183.  
 Hay, O. P. 1902 A, 529 (Anas, in part).  
 A. O. U. 1910 A, 71.  
 Arldt, T. 1907 D, 678.  
 Beddard, F. E. 1898 A, 459, 467.  
 Chandler, A. C. 1916 C, 328.  
 Coues, E. 1884 A, 694.  
 Dabbene, R. 1910 A, 70, 232, fig. 40.  
 Eyton, T. C. 1869 A, pls. viii, xviii.  
 Huxley, T. H. 1867 C, 256, fig. 18.  
 Magnan, A. 1922 A, 170.  
 Newton and Gadow 1896 A, 297, 309, 933.  
 Parker, W. K. 1875 A, 712.  
 Shufeldt, R. W. 1914 C, 16.  
 Wetmore, A. 1924 A, 3.

**Querquedula cyanoptera** (Vieillot).

- Vieillot, L. J. P. 1816, Nouv. Dict. d'Hist. Nat., v, 104.  
 Hay, O. P. 1902 A, 529 (Anas).  
 A. O. U. 1910 A, 71.  
 Hay, O. P. 1927 D, 172, 198, 244.  
 Miller, L. H. 1912 A, 80, 112.  
 1914 A, 36.  
 1916 D, 173 (This species?).  
 1925 A, 313.  
 Osborn, H. F. 1925 D, 542.

- Shufeldt, R. W. 1913 B, 170, pl. xxxi, fig. 382.  
 Recent; South America, North America: Pleistocene (Fossil Lake); Oregon: (San Pedro beds); California: Upper Miocene (Cedar Mountain); California.

**Querquedula discors** Linnæus.

- Linnæus, C. 1766, Syst. Nat., ed. 12, i, 205 (Anas).  
 Hay, O. P. 1902 A, 529 (Anas).  
 1927 D, 244.  
 Miller, L. H. 1912 A, 80, 112.  
 Shufeldt, R. W. 1913 B, 156.  
 1914 C, 32.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

**Querquedula floridana** Shufeldt.

- Shufeldt, R. W. 1917 B, 36, pl. i, fig. 4; pl. ii, fig. 25.  
 Hay, O. P. 1923 A, 332.  
 Shufeldt, R. W. 1916 E, 18 (No description).  
 Pleistocene (Middle?); Florida.

**Querquedula sp. indet.**

- Hay, O. P. 1927 D, 136. Pleistocene or Pliocene; Arizona.  
 Wetmore, A. 1924 A, 3. Pliocene? (San Pedro Valley); Arizona.

SPATULA Boie. Type *Anas clypeata* Linnæus.

- Boie, F. 1822, Isis, x, 564.  
 Hay, O. P. 1902 A, 529.  
 Allen, J. A. 1893 B, 99, 107.  
 A. O. U. 1910 A, 72.  
 Knowlton, F. H. 1909 B, 189.  
 Leunis and Ludwig 1883 A, 493.  
 Magnan, A. 1922 A, 170.  
 Ridgway, R. 1887 A, 85, 96, pl. xxiii.  
 Shufeldt, R. W. 1909 A, 380.

**Spatula clypeata** (Linnæus).

- Linnæus, C. 1758 A, 124 (Anas).  
 Hay, O. P. 1902 A, 529.  
 A. O. U. 1910 A, 72.

- Evans, A. H. 1899 A, 124.  
 Eyton, T. C. 1867 A, 209.  
 Hay, O. P. 1927 D, 198, 244.  
 Knowlton, F. H. 1909 B, 189.  
 Miller, L. H. 1912 A, 80, 112.  
 1925 A, 314.  
 Newton, E. T. 1891 A, 84, pl. ix, figs. 7a, 7b.  
 Osborn, H. F. 1925 D, 542.  
 Shufeldt, R. W. 1909 A, 380, figs. 13-16, 19, 21, 22, 24, 25.  
 1913 B, 156.  
 1914 C, 30, 32.  
 Recent; whole northern hemisphere: Pleistocene (Fossil Lake); Oregon.

AIX Boie. Type *Anas sponsa* Linnæus.

- Boie, F. 1828, Isis von Oken, xxi, 329.  
 Hay, O. P. 1902 A, 529.  
 A. O. U. 1910 A, 73.  
 Arldt, T. 1907 D, 156, 211.  
 Eyton, T. C. 1867 A, 208.  
 Knowlton, F. H. 1909 B, 189.  
 Leunis and Ludwig 1883 A, 493.  
 Newton and Gadow 1896 A, 949.  
 Shufeldt, R. W. 1909 A, 369.  
 1914 C, 16, seq.  
 Wallace, A. R. 1876 A, xi, 363.

**Aix sponsa** (Linnæus).

- Linnæus, C. 1758 A, 128 (Anas).  
 Hay, O. P. 1902 A, 529.  
 A. O. U. 1910 A, 73.  
 Beddard, F. E. 1898 A, 535 (Aex).  
 Evans, A. H. 1899 A, 133 (Aex).  
 Eyton, T. C. 1869 A, pl. xviii.  
 Hay, O. P. 1927 D, 244.  
 Knowlton, F. H. 1909 B, 190, fig. 63, plate.  
 Miller, L. H. 1912 A, 80, 112.  
 Shufeldt, R. W. 1913 B, 156.  
 1914 C, pls. vi, xi, xiii.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

## FULIGULINÆ Swainson.

- Swainson, W. 1837 A, 368.  
 A. O. U. 1910 A, 73.  
 Knowlton, F. H. 1909 B, 191.

- Pycraft, W. P. 1906 A, 406.  
 Reichenow, A. 1913 A, 134.  
 Shufeldt, R. W. 1914 C, 41.

**MARILA** Oken. Type *Anas marila* Linnæus.

- Oken, L. 1817, Isis, i, 1183.  
 Hay, O. P. 1902 A, 530 (Athyra).  
 A. O. U. 1910 A, 74.  
 Chandler, A. C. 1916 C, 328.  
 Fürbringer, M. 1888 A, pl. ii (Fuligula).  
 Knowlton, F. H. 1909 B, 193 (Fuligula).  
 Leunis and Ludwig 1883 A (Fulix).  
 Newton and Gadow 1896 A, 1068 (Fuligula).  
 Ridgway, R. 1887 A, 85, 101, pl. xxiv (Athyra).  
 Shufeldt, R. W. 1913 B, 141.

**Marila affinis** (Eyton).

- Eyton, T. C. 1838, Monogr. Anatidæ, 157 (Fuligula).  
 A. O. U. 1910 A, 75.  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 141, pl. xxxi, figs. 388, 389, 392, 393.  
 1913 F, 307.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

**Marila americana** (Eyton).

- Eyton, T. C. 1838, Monogr. Anatidæ, 155 (Fuligula).  
 A. O. U. 1910 A, 74.  
 Hay, O. P. 1927 D, 198.  
 Miller, L. H. 1925 A, 314.  
 Osborn, H. F. 1925 D, 542.  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 141, pl. xxxi, figs. 384, 385 (This species?).  
 1913 F, 307 (This species?).  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

**Marila collaris** (Donovan).

- Donovan, E. 1809, Brit. Birds, vi, 147 (Anas).  
 A. O. U. 1910 A, 75.  
 Miller, L. H. 1916 D, 173 (This species?).  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 141 (This species?).  
 1913 F, 307 (This species?).  
 Recent; North America: Pleistocene (Fossil Lake?); Oregon: Upper Miocene (Cedar Mountain?); California.

**Marila marila** (Linnæus).

- Linnæus, C. 1761, Fauna Suecica, ed. 2, 39 (Anas).  
 Hay, O. P. 1902 A, 530 (Athyra).  
 A. O. U. 1910 A, 75.  
 Evans, A. H. 1899 A, 121 (Fuligula).  
 Knowlton, F. H. 1909 B, 193 (Fuligula).  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 141 (This species?).  
 1913 F, 307.  
 1914 C, pl. xii.  
 Recent; northern part of northern hemisphere: Pleistocene (Fossil Lake); Oregon.

**Marila valisineria** (Wilson).

- Wilson, A. 1814, Amer. Ornith., viii, 103, pl. lxx, fig. 5.  
 A. O. U. 1910 A, 74.  
 Hay, O. P. 1927 D, 244.  
 Miller, L. H. 1912 A, 81, 112.  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 141, pl. xxx, figs. 372, 373, 375-378.  
 1913 F, 307.  
 1914 C, 11, pls. v, vi.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

**CHARITONETTA** Stejneger. Type *Anas albeola* Linnæus.

- Stejneger, L. 1885, Bull. U. S. Nat. Mus., No. 29, 163.  
 A. O. U. 1910 A, 76.  
 Knowlton, F. H. 1909 B, 195.  
 Shufeldt, R. W. 1914 C, 33.

**Charitonetta albeola** (Linnæus).

- Linnæus, C. 1758 A, 124 (Anas).  
 Coues, E. 1884 A, 705, fig. 491 (Clangula).  
 Knowlton, F. H. 1909 B, 195, fig. 195.  
 Shufeldt, R. W. 1913 A, 39.  
 1913 B, 142, pl. xxx, figs. 366-369.  
 1913 F, 307.  
 1914 C, pls. vi, xii.  
 Recent; throughout northern hemisphere: Pleistocene (Fossil Lake); Oregon.

**CLANGULA** Oken. Type *Anas clangula* Linnæus.

- Oken, L. 1817, Isis, i, 1183.  
 Hay, O. P. 1902 A, 530 (Clangula, Glaucionetta).  
 Adolph, H. 1922 A, 81, fig. 30 (Harelda).  
 A. O. U. 1910 A, 76 (Clangula); 77 (Harelda).  
 Eyton, T. C. 1867 A, 210.  
 1869 A, pl. xi (Harelda); pl. xii (Clangula).  
 Giebel, C. G. 1855 A, 32 (Anas).  
 Kingsley, J. S. 1925 A, 288, fig. 311.  
 Knowlton, F. H. 1909 B, 194 (Clangula); 195 (Harelda).  
 Leunis and Ludwig 1883 A, 495 (Harelda).  
 Magnan, A. 1922 A, 170, pl. i.  
 Newton and Gadow 1896 A, 1064 (Clangula); 1070 (Harelda).

- Ridgway, R. 1887 A, 88, 106, pl. xxv.  
 Shufeldt, R. W. 1909 A, 284 (Harelda); 372 (Clangula).  
 1913 B, 175.  
 1914 C, 58.

**Clangula hyemalis** (Linnæus).

- Linnæus, C. 1758 A, 126 (Anas).  
 Hay, O. P. 1902 A, 530 (Clangula).  
 A. O. U. 1910 A, 77 (Harelda).  
 Hay, O. P. 1927 D, 244 (Harelda).  
 Knowlton, F. H. 1909 B, 195 (Harelda).  
 Miller, L. H. 1912 A, 81, 112 (Harelda).  
 Shufeldt, R. W. 1909 A, 375 (Harelda).

Shufeldt, R. W. 1913 B, 175, pl. xxxix, figs. 484, 485.

1914 C, pls. ix, xiv (Harelda).

Recent; Northern Hemisphere: Pleistocene (Fossil Lake); Oregon.

***Clangula islandica* (Gmelin).**

Gmelin, J. F. 1789, Syst. Nat. I, ii, 541 (Anas).

Hay, O. P. 1902 A, 530 (Glaucionetta).

A. O. U. 1910 A, 76.

Hay, O. P. 1927 D, 244.

Miller, L. H. 1912 A, 81, 112.

Shufeldt, R. W. 1909 A, 372, figs. 17, 18, 20, 26, 28, 31, 32.

1913 B, 171, pl. xxxii, figs. 406, 407.

1914 C, 25, 32, 47.

Recent; northern North America: Pleistocene (Fossil Lake); Oregon.

**HISTRIONICUS Lesson. Type *Anas histrionica* Linnæus.**

Lesson, R. P. 1828, Manuel d'Ornith., ii, 415.

Allen, J. A. 1893 B, 107.

A. O. U. 1910 A, 77.

Coues, E. 1884 A, 707.

Knowlton, F. H. 1909 B, 196.

Newton and Gadow 1896 A, 407.

Pycraft, W. P. 1906 A, 406.

Ridgway, R. 1887 A, 86, 107, pl. xxv.

***Histrionicus histrionicus* (Linnæus).**

Linnæus, C. 1758 A, 127 (Anas).

A. O. U. 1910 A, 77.

Coues, E. 1884 A, 707 (H. minutus).

Giebel, C. G. 1855 B, 31 (Anas).

Knowlton, F. H. 1909 B, 196.

Shufeldt, R. W. 1913 A, 39.

1913 B, 126, 142, pl. ix, fig. 16; pl. xxx, figs. 360-363.

1913 F, 307.

1914 C, 32.

Recent; northern North America and eastern Asia: Pleistocene (Fossil Lake); Oregon.

**POLYSTICTA Eyton. Type *Anas stelleri* Pallas.**

Eyton, T. C. 1836, Cat. Brit. Birds, 58.

A. O. U. 1910 A, 78.

Knowlton, F. H. 1909 B, 197.

***Polysticta stelleri* (Pallas).**

Pallas, P. S. 1789, Spic. Zool., i, fasc. vi, 35, pl. v (Anas).

A. O. U. 1910 A, 78.

Shufeldt, R. W. 1913 A, 39.

1913 B, 143, pl. xxx, figs. 370, 371, 374, 379, 381.

1913 F, 307.

1914 C, pls. ix, xi, xiv.

Recent; coast of Bering Sea and Arctic Ocean; Pleistocene (Fossil Lake); Oregon.

**OIDEZIA Fleming. Type *Anas nigra* Linnæus.**

Fleming, J. 1822, Philos. Zool., ii, 260.

Adolphi, H. 1922 A, 81.

A. O. U. 1910 A, 80.

Coues, E. 1884 E, 713 (OEdemia).

Eyton, T. C. 1867 A, 209.

Knowlton, F. H. 1909 B, 198.

Leunis and Ludwig 1883 A, 496.

Magnan, A. 1922 A, 170.

Parker, W. K. 1875 A, 712.

Shufeldt, R. W. 1914 C, 16.

***Oidemia perspicillata* (Linnæus).**

Linnæus, C. 1758 A, i, 125 (Anas).

A. O. U. 1910 A, 82.

Coues, E. 1884 A, 714 (OEdemia).

Hay, O. P. 1927 D, 172.

Miller, L. H. 1914 A, 36.

1928 A, 120.

Miller, W. D. 1926 A, 2, figs. 1, 2 (Melanitta).

Shufeldt, R. W. 1914 C, 24, pl. v.

Recent; North America: Pleistocene (San Pedro); California.

**ERISMATURINÆ.**

Ardt, T. 1907 D, 59.

Knowlton, F. H. 1909 B, 199.

Pycraft, W. P. 1906 A, 406.

Shufeldt, R. W. 1914 C, 60.

Wetmore and Miller 1926 A, 341.

**ERISMATURA Bonaparte. Type *Anas rubidus* Wilson = *A. jamaicensis* Gmelin.**

Bonaparte, C. L. 1832, Gior. Arcad., lxi, 208.

Allen, J. A. 1893 B, 107.

Ardt, T. 1907 D, 653.

Coues, E. 1884 A, 715.

Eyton, T. C. 1867 A, 211.

1869 A, pl. xv.

Knowlton, F. H. 1909 B, 199.

Pycraft, W. P. 1906 A, 396.

Reichenow, A. 1913 A, 136.

Ridgway, R. 1887 A, 87, 113, pl. xxvi.

Shufeldt, R. W. 1914 C, 18.

***Erismatura jamaicensis* (Gmelin).**

Gmelin, J. F. 1789, Syst. Nat. I, ii, 519 (Anas).

A. O. U. 1910 A, 82.

Coues, E. 1884 A, 715 (E. rubida).

Hay, O. P. 1927 D, 198, 244.

Knowlton, F. H. 1909 B, 199.

Miller, L. H. 1911 A, 86.

1912 A, 81, 112.

1925 A, 314.

Shufeldt, R. W. 1913 A, 39.

Shufeldt, R. W. 1913 B, 143, pl. xxxi, figs. 390, 391,  
394-397.  
1913 F, 307.

Shufeldt, R. W. 1914 C, 18, pl. vi.  
Recent; North America: Pleistocene (Fossil  
Lake); Oregon.

## MERGINÆ Bonaparte.

Bonaparte, C. L. 1838 B, 119.  
A. O. U. 1910 A, 66.  
Arlt, T. 1907 D, 89.  
Carus, V. 1875 A, 353 (Mergidæ).  
Knowlton, F. H. 1909 B, 199.

Reichenow, A. 1913 A, 133 (Mergidæ).  
Shufeldt, R. W. 1913 B, 140.  
1914 C, 41.  
Wetmore and Miller 1926 A, 341.

LOPHODYTES Reichenbach. Type *Mergus cucullatus* Linnæus.

Reichenbach, H. G. 1852, Syst. Avium, ix.  
Hay, O. P. 1902 A, 529.  
Allen, J. A. 1893 B, 107.  
A. O. U. 1910 A, 67.  
Lebedinsky, N. G. 1921 A, 13.  
Leunis and Ludwig 1883 A, 497 (Mergus).  
Magnus, H. 1871 A, 24, 57 (Mergus).  
Ridgway, R. 1887 A, 84, 89, pl. xxi.  
Shufeldt, R. W. 1909 A, 376.

**Lophodytes cucullatus** (Linnæus).

Linnæus, C. 1758 A, 129 (Mergus).  
Hay, O. P. 1902 A, 529.  
1927 D, 244.  
Miller, L. H. 1912 A, 80, 112.  
Shufeldt, R. W. 1909 A, 376.  
1913 B, 140.  
1914 C, 30.  
Recent; North America: Pleistocene (Fossil  
Lake); Oregon.

MERGUS Linnæus. Type *M. merganser* Linnæus.

Linnæus, C. 1758 A, 129.  
Adolphi, H. 1922 A, 84.  
A. O. U. 1910 A, 66.  
Arlt, T. 1907 D, 865.  
Beddard, F. E. 1898 A, 542.  
Brauns, D. 1890 A, 201.  
Chandler, A. C. 1916 C, 328.  
Coues, E. 1884 A, 716.  
Cuvier, G. 1805 A.  
Diethelm, M. 1907 A, 41.  
Döderlein, L. 1923 A, 142, 162.  
Eyton, T. C. 1887 A, 212.  
1869 A, pl. i.  
Foote, J. S. 1916 A, 60.  
Fürbringer, M. 1888 A, pls. ii, iv, v, vii.  
Gegenbaur, C. 1871 A, 174.  
Giebel, C. G. 1855 B, 32.  
Heilmann, G. 1913 A, 37.  
1916 A, 105, fig. 198.  
Hesse, H. 1907 A, 203, pl. x, fig. 13.  
Kessler, K. T. 1841 A, 676.  
Kingsbury, B. F. 1926 A, 103.  
Knowlton, F. H. 1909 B, 200.  
Magnan, A. 1922 A, 170, pl. x.  
Meckel, J. F. 1825 A.  
Newton and Gadow 1896 A, 1074.  
Pycraft, W. P. 1910 A, 403.  
Ridgway, R. 1887 A, 84, 90, pl. xxi.  
Selenka, E. 1869 A, 76.  
Shufeldt, R. W. 1882 B, 326, fig. 2.  
1909 A, 377.  
1913 B, 140.  
1914 C, 40.  
Sundevall, C. J. 1886 A, 401, 405.  
Taschenberg, O. 1899 A, 4150.  
Weitzel, A. 1865 A, 343.

**Mergus americanus** Cassin.

Cassin, J. 1852, Proc. Acad. Nat. Sci. Phila.,  
vi, 1852, 187.  
Adolphi, H. 1922 A, 84, fig. 31 (M. merganser).  
A. O. U. 1910 A, 66.  
Coues, E. 1884 A, 716, fig. 499 (M. merganser).  
Owen, R. 1866 B, 225, fig. 107.  
Shufeldt, R. W. 1913 A, 39.  
1913 B, 140, pl. xxxii, fig. 403.  
1913 F, 307.  
Recent; North America: Pleistocene (Fossil  
Lake?); Oregon.

**Mergus serrator** Linnæus.

Linnæus, C. 1758 A, 129.  
A. O. U. 1910 A, 67.  
Baker, F. C. 1920 A, 464.  
Coues, E. 1884 A, 717, fig. 500.  
Eyton, T. C. 1869 A, pl. xvi.  
Fürbringer, M. 1888 A, pl. v.  
Hay, O. P. 1923 A, 336.  
Heilmann, G. 1913 A, 36, fig. 32.  
1926 A, 9, 51, 139, figs. 4, 36.  
Owen, R. 1866 B, 225, fig. 106.  
Pycraft, W. P. 1906 A, 401.  
Shufeldt, R. W. 1909 A, 377, figures.  
1913 A, 39.  
1913 B, 140, pl. xxx, figs. 364, 365.  
1913 F, 307.  
1914 C, 29, 30, 39.  
Recent, northern part of northern hemi-  
sphere; Pleistocene (Fossil Lake); Oregon.

**Mergus** sp. indet.

Shufeldt, R. W. 1913 B, 171, pl. xxxi, fig. 398.  
1913 F, 307.  
Pleistocene (Fossil Lake); Oregon.

## Suborder FALCONIFORMES Seebohm.

- Seebohm, H. 1890, *Classif. Birds*.  
 Hay, O. P. 1902 A, 535 (Raptores).  
 Abel, O. 1919 A, 705 (Falconiformes).  
 Adolphi, H. 1922 A, 89.  
 Arldt, T. 1907 D, 678 (Raptatores).  
 1912 A, 686, 687.  
 Barrows, W. B. 1885 A, 260 (Accipitres).  
 Blainville, H. M. D. 1821 A, 191 ("oiseaux de proie").  
 Bonaparte, C. L. 1832 A, 295 (Rapaces).  
 Brandt, J. F. 1853 A, 179 (Rapaces).  
 Chandler, A. C. 1914 B, 141 (Accipitres).  
 Clark, H. L. 1901 A, 376 ("falconiform").  
 Cope, E. D. 1891 N, 58, 60 (Accipitres).  
 Evans, A. H. 1899 A, 137.  
 Fürbringer, M. 1888 A (Aëtomorphæ).  
 Gadow, H. 1893 A, 155.  
 1910 B, 977.  
 Gegenbaur, C. 1871 A, 188 ("raubvögel").  
 Grote, H. 1902 A, 59 ("raubvögel").  
 Hoernes, R. 1886 A, 645 (Raptatores).  
 Houssay and Magnan 1912 A, 39 ("rapaces diurnes").  
 Huxley, T. H. 1867 C, 255 (Raptores).  
 Illiger, C. 1811 A, 194, 222 (Raptatores).  
 Köstlin, O. 1844 A ("raubvögel").  
 Lambrecht, K. 1914 A, 66, 73.  
 Lebedinsky, N. G. 1918 A, 37 (Accipitriformes).  
 1918 B, 140, 146 (Accipitriformes).  
 Leunis and Ludwig 1883 A, 416 (Raptores).  
 Lohder, W. 1871 A, 324 (Raptatores).  
 Lydekker, R. 1879 A, 13, 27 (Raptores, Aëtomorphæ).  
 Magnus, H. 1871 A (Raptatores).  
 Meckel, J. F. 1825 A ("raubvögel").  
 Miller, W. D. 1924 A, 2 ("birds of prey").  
 Newton and Gadow 1896 A, 2, 40, 765 (Raptatores).  
 Owen, R. 1866 B (Raptores).  
 Pander and Alton 1833 A, 1 ("raubvögel").  
 Parker, W. K. 1875 A, 700, 712, 713, 724 (Aëtomorphæ).  
 Parker and Bettany 1877 A, 264 (Aëtomorphæ).  
 Pycraft, W. P. 1902 A, 277, 318 (Falconiformes).  
 1903 B, 6 (Falconiformes).  
 Reichenow, A. 1913 A, 360 (Accipitres).  
 Sharpe, R. B. 1891 A, 78 (Accipitriformes).  
 Shufeldt, R. W. 1896 A, 370 (Accipitres).  
 1909 A, 7 (Raptores).  
 Steiner, H. 1916 A, 493, 499 (Raptores).  
 1918 A, 324, 441, 490.  
 Stejneger, L. 1903 A, 628 (Raptores).  
 Sushkin, P. P. 1896 A, 767 ("raubvögel").  
 1899 A, 500 (Raptatores).  
 1900 A, 269 ("tagraubvögel").  
 1900 B, 522 ("tagraubvögel").  
 Vialleton, L. 1916 A, 6.  
 Wetmore and Miller 1926 A, 341.

## Superfamily VULTUROIDÆ, new form.

- Hay, O. P. 1902 A, 535 (Cathartides).  
 Adolphi, H. 1922 A, 89 (Cathartæ).  
 Chandler, A. C. 1916 C (Catharthæ).  
 Chomjahoff, M. 1901 A, 136 (Catharthæ).  
 Dabbene, R. 1910 A, 472 (Cathartidiformes).  
 Evans, A. H. 1899 A, 137 (Cathartæ).  
 Gadow, H. 1893 A, 135, 158 (Cathartæ).  
 1910 B, 977 (Cathartæ).  
 Gaillard, C. 1908 A, 43 ("cathartides").  
 Knowlton, F. H. 1909 B, 203 (Cathartæ).  
 Lebedinsky, N. G. 1918 A, 40 (Cathartidiformes).  
 1918 B, 146 (Cathartidiformes).  
 Lönnberg, E. 1905 H, 8 (Cathartæ).  
 Miller, L. H. 1912 A, 72 (Cathartiformes).  
 1916 C, 105 (Cathartiformes).  
 Newton and Gadow 1896 A, 1063 (Cathartæ).  
 Pycraft, W. P. 1902 A, 278, 318 (Cathartæ).  
 1910 A, 49 (Cathartæ).  
 Sharpe, R. B. 1891 A, 78 (Cathartidiformes).  
 Shufeldt, R. W. 1904 B, 853 (Cathartoidea).  
 1909 A, 126, 371 (Cathartoidea).  
 Steiner, H. 1918 A, 490 (Cathartæ).  
 Stejneger, L. 1903 A, 628 (Sarcorampfi).  
 Sushkin, P. P. 1899 A, 500 (Cathartæ).  
 1899 B, 153 (Cathartæ).  
 Wallace, A. R. 1894 A, 441 (Cathartides).  
 Wetmore and Miller 341 (Cathartæ).

## VULTURIDÆ Vigors.

- Vigors, N. A. 1825 A, 423, 425.  
 Unless otherwise indicated the authors below quoted use the name Cathartidæ. Some of the literature cited refers to the Old World vultures now known as the Gypæstidæ.  
 Hay, O. P. 1902 A, 535.  
 Adolphi, H. 1922 A, 89.  
 Arldt, T. 1907 D, 688 (Vulturidæ).  
 1912 A, 756.  
 Beddard, F. E. 1898 A, 481.  
 1904 A, 388.  
 Bonaparte, C. L. 1833 A, 1045 ("vautours").  
 1838 B, 116 (Vulturidæ, Vulturinæ).  
 1840 A, 260 (Vulturidæ, Vulturinæ).  
 Brandt, J. F. 1853 A, 180 (Vulturidæ); 181 (Sarcorhamphinæ).  
 Brauer, A. 1914 A, 283.  
 Carus, V. 1875 A, 305.  
 Dabbene, R. 1910 A, 472.  
 Evans, A. H. 1899 A, 137.  
 Forbes, W. A. 1882 B, 141.  
 Fürbringer, M. 1888 A (Cathartidæ).  
 1902 B, 640.  
 Gadow, H. 1893 A, 158.  
 Garrod, A. H. 1873 D, 634.  
 1874 A, 117.  
 Heilmann, G. 1926 A, 102 ("vultures").  
 Heilprin, A. 1887 A, 66 (Cathartinæ).  
 Huxley, T. H. 1867 A, 442, 463.  
 1867 C, 280.  
 1868 C, 314.  
 Knowlton, F. H. 1909 B, 246 (Vulturinæ).  
 Lebedinsky, N. G. 1918 B, 146 (Vulturidæ).  
 Leunis and Ludwig 1883 A, 421.  
 Lydekker, R. 1891 A, 33.  
 Miller, L. H. 1912 A, 85.  
 1913 A, 132.  
 1925 B, 92, 94.

Newton, A. 1835 A, 47.  
 Parker, W. K. 1875 A, 713.  
     1875 D, 129.  
 Reichenow, A. 1913 A, 361 (Cathartidae).  
 Ridgway, R. 1875 A, 225.  
     1887 A, 218.  
     1903 A, 510.  
 Sharpe, R. B. 1891 A, 78 (Vulturidae).

Shufeldt, R. W. 1881 F, 906.  
     1894 A, 23.  
     1904 B, 853.  
     1907 A, 123.  
     1909 A, 126, 371.  
     1915 C, 733.  
 Stejneger, L. 1903 A, 628.  
 Wetmore and Miller 1926 A, 341 (Cathartidae).

**CATHARTES Illiger. Type *Vultur aura* Linnaeus.**

Illiger, C. 1811 A, 236.  
 Barrows, W. B. 1835 A, 266.  
 Beddard, F. E. 1898 A, 537.  
     1904 A, 388, 389.  
 Bignon, F. 1889 A, 238, pl. x.  
 Blanchard, E. 1859 A, 55.  
 Bronn, H. G. 1849 A, 700.  
 Chandler, A. C. 1916 C.  
 Coues, E. 1884 A, 558.  
 Dabbene, R. 1910 A, 239, fig. 40.  
 Eyton, T. C. 1867 A, 19, pl. i, fig. 8.  
 Fürbringer, M. 1888 A.  
 Huxley, T. H. 1867 A, 441, 463.  
     1867 C, 259, 281, fig. 22.  
 Knowlton, F. H. 1909 B, 204.  
 Leunis and Ludwig 1883 A, 421.  
 Lillenthal, G. 1917 A, 263, fig. 2 ("urubugeier")  
 Lönnberg, E. 1905 A, 8.  
 Mackie, S. J. 1863 C, 106.  
 Miller, L. H. 1912 A, 92.  
     1914 A, 38.  
     1921 B, 263.  
 Newton and Gadow 1896 A, 1063.  
 Pander and Alton 1838 A, 7.  
 Pycraft, W. P. 1902 A, 290.  
     1910 A, 49 (Cathartæ).  
 Ridgway, R. 1887 A, 220, pls. lx, lxiv (Pseudogryphys).  
 Slater, P. L. 1886 A, 149.  
 Shufeldt, R. W. 1909 A, 371.  
 Wallace, A. R. 1876 A, i, 164.  
 Weitzel, A. 1865 A, 324 ("Cathar").  
**Cathartes aura** (Linnaeus).  
*Linnaeus, C.* 1758 A, 86 (Vultur).  
 Abel, O. 1926 B, 441.  
 Barrows, W. B. 1835 A, 267, fig. 126.  
 Chandler, A. C. 1916 C, 332.  
 Coues, E. 1884 A, 559, fig. 387.  
 Eyton, T. C. 1867 A, 19, pl. i, fig. 2.  
 Foote, J. S. 1916 A, 75, pl. vii.  
     1921 A, 7, pl. ii, figs. 11, 12.

Forbes, W. A. 1832 B, 141.  
 Fürbringer, M. 1888 A, pl. vi.  
 Hay, O. P. 1923 A, 382.  
     1927 D, 303.  
 Huxley, T. H. 1867 A, 440, 441, 463, fig. 22.  
     1867 C, 260, fig. 22.  
 Kinsley, J. S. 1925 A, 56, fig. 63.  
 Knowlton, F. H. 1909 B, 204.  
 Miller, L. H. 1909 B, 306.  
     1910 C, 11.  
     1911 C, 337, 399.  
     1912 A, 71, 73, 75, 78, 84, 90, 113.  
     1914 A, 37.  
     1925 B, 86.  
 Osborn, H. F. 1925 D, 541.  
 Pander and Alton 1838 A, 6, pl. iv.  
 Parker, W. K. 1875 D, 137.  
 Ridgway, R. 1887 A, 221.  
 Selenka, E. 1869 A, pl. xii.  
 Shufeldt, R. W. 1881 F, 908 (Catharista).  
     1893 E, 681, fig. 1.  
     1916 E, 18.  
     1917 B, 36, pl. i, figs. 1, 2.  
 Swarth, H. S. 1915 A, 30.  
     Recent; United States south to Mexico:  
     Pleistocene (La Brea, San Pedro, and caves)  
     California: (Middle); Florida.  
**Cathartes aura septentrionalis** Wied.  
*Wied-Neuwied, M. A.* 1839, Reise Nord-America, i, 162.  
 Hay, O. P. 1923 A, 382.  
 Shufeldt, R. W. 1909 A, 371, pl. vi, fig. 9; pls. xiii, xiv; text-fig. 29.  
     Recent; British Columbia to Mexico, and  
     New York: Pleistocene; Florida.

**Cathartes sp. indet.**

Miller, L. H. 1922 A, 123 (This genus?).  
 Pleistocene (McKittrick); California.  
 1925 A, 309 (Occurrence at McKittrick recalled).

**CORAGYPS Le Maout. Type *Vultur urubu* Vieillot.**

*Le Maout, E.* 1853, Hist. nat. Oiseaux, 66.  
 Allen, J. A. 1893 B, 130 (Catharista).  
 Coues, E. 1884 A, 560 (Catharista).  
 Dabbene, R. 1910 A, 239 (Catharista).  
 Fürbringer, M. 1888 A (Catharista).  
 Knowlton, F. H. 1909 B, 206 (Catharista).  
 Maguan, A. 1922 A, 165 (Catharista).  
 Miller, L. H. 1912 A, 92 (Catharista).  
 Shufeldt, R. W. 1909 A, 371, figs. 5, 17 (Catharista).  
 Vieillot, L. J. P. 1816, Analyse, 21 (Catharista).

**Coragyps occidentalis** (L. H. Miller).

Miller, L. H. 1909 B, 306 (Catharista).  
 Abel, O. 1926 B, 238 (Catharista).  
 Hay, O. P. 1927 D, 186 (Catharista).  
 Lambrecht, K. 1921 A, 29 (Catharista).  
 Miller, L. H. 1910 C, 11 (Catharista).  
     1912 A, 78, 90, 97, 113 (Catharista).  
     1925 B, 86 (Catharista).  
 Osborn, H. F. 1925 D, 541 (Catharista).  
 Wetmore, A. 1927 A, 5.  
 Wyman, L. E. 1922 A, 31 (Catharista).  
     Pleistocene (La Brea); California.



**Coragyps shastensis** (Miller).

Müller, L. H. 1911 C, 388, 399, fig. 1 (Catharista).  
 Hay, O. P. 1927 D, 223 (Coragyps); 216 (Catharista).

Miller, L. H. 1912 A, 71, 73, 75, 90, 113 (Catharista).  
 Wetmore, A. 1927 A, 5.  
 Pleistocene (Caves); California.

**PHASMAGYPS** Wetmore. Type *P. patritus* Wetmore.

Wetmore, A. 1927 A, 3.

**Phasmagyps patritus** Wetmore.

Wetmore, A. 1927 A, 3, figs. 1-4.  
 1928 A, 152.  
 Oligocene (Chadron); Colorado.

**CATHARTORNIS** L. H. Miller. Type *C. gracilis* L. H. Miller.

Müller, L. H. 1910 B, 14.  
 Osborn, H. F. 1925 D, 541.

**Cathartornis gracilis** L. H. Miller.

Müller, L. H. 1910 B, 14, figs. 4, 4a.  
 Abel, O. 1926 B, 238.  
 Hay, O. P. 1927 D, 186.

Lambrecht, K. 1921 A, 29.  
 Miller, L. H. 1912 A, 78, 90, 113.  
 1925 B, 84, pl. v, figs. a-c; text-fig. 13.  
 Osborn, H. F. 1925 D, 541.  
 Wyman, L. E. 1922 A, 31, fig. 21 ("Cathartornis").  
 Pleistocene (La Brea); California.

**PALÆOGYPS** Wetmore. Type *P. prodromus* Wetmore.

Wetmore, A. 1927 A, 5.

**Palæogyps prodromus** Wetmore.

Wetmore, A. 1927 A, 5.  
 1928 A, 152.  
 Oligocene (Chadron); Colorado.

**GYMNOGYPS** Lesson. Type *Vultur californianus* Shaw.

Lesson, R. P. 1842, *Echo du Monde Savant* (2), vi, 1037.  
 Coues, E. 1884 A, 558 (Pseudogryphus).  
 Knowlton, F. H. 1909 B, 206.  
 Miller, L. H. 1912 A, 87, 92.  
 Ridgway, R. 1887 A, 219, 220, pls. lx, lxiv (Pseudogryphus).  
 Shufeldt, R. W. 1909 A, 375.

**Gymnogyps amplus** Miller.

Müller, L. H. 1911 C, 390, 399, fig. 2.  
 Hay, O. P. 1927 D, 216.  
 Miller, L. H. 1912 A, 71, 73, 113.  
 Pleistocene (Caves); California.

**Gymnogyps californianus** (Shaw).

Shaw, G. 1797, *Nat. Misc.*, ix, 301 (Vultur).  
 Abel, O. 1926 B, 238.  
 Chandler, A. C. 1916 C, 331, pl. xxii, fig. 34.  
 Coues, E. 1884 A, 558, fig. 386 (Pseudogryphus).

Finley, W. L. 1908 A, 5.  
 Gilbert, J. Z. 1910 B, 25, fig. ("condor").  
 Hay, O. P. 1927 D, 186.  
 Knowlton, F. H. 1909 B, 206.  
 Miller, L. H. 1909 B, 306.  
 1910 B, 6, fig. 1.  
 1910 C, 11.  
 1912 A, 78, 84, 90, 92, 113.  
 1925 B, 81, fig. 10.  
 1927 A, 156.  
 Osborn, H. F. 1925 D, 541.  
 Ridgway, R. 1887 A, 220.  
 Selater, P. L. 1886 A, 149 (Pseudogryphus).  
 Shufeldt, R. W. 1881 F, 907 (Pseudogryphus).  
 1909 A, 375, pl. ii; text-fig. 35.  
 Swarth, H. S. 1915 A, 30.  
 Wetmore, A. 1927 A, 5.  
 Recent; southern Oregon to Lower California: Pleistocene (La Brea); California.

**VULTUR** Linnæus. Type *Vultur gryphus* Linnæus.

Linnæus, C. 1758 A, 86.

Unless otherwise indicated the authors, as cited, use for this genus the name *Sarcorhamphus*.

Adolphi, H. 1922 A, 89.  
 Aeby, C. 1873 A, 702.  
 Allen, J. A. 1906 A, 775, 858 (Vultur).  
 A. O. U. 1910 A, 371.  
 Barrows, W. B. 1885 A, 269, figs. 127, 128.  
 Beddard, F. E. 1898 A, 546.  
 1904 A, 389.  
 Bignon, F. 1889 A, 278, pl. x.  
 Blanchard, E. 1859 A, 55.  
 Bonsdorff, E. J. 1871 A, 305, 310.  
 Brandt, J. F. 1853 A, 181.  
 Dabbene, R. 1910 A, 238.  
 Diethelm, M. 1907 A, 41.

Duméril, A. M. 1806 A, 32.  
 Evans, A. H. 1899 A, 138.  
 Eyton, T. C. 1887 A, 17, pl. i A; pl. i, fig. 4; pl. ii, fig. 6; pl. v, fig. 1; pl. vi, fig. 1.  
 Foote, J. S. 1916 A, 71, pl. vii.  
 Fürbringer, M. 1888 A, pls. iii, iv, vi.  
 Gegenbaur, C. 1871 A, 189.  
 Giebel, C. G. 1855 B, 38.  
 Heilmann, G. 1913 B, 77.  
 Huxley, T. H. 1867 A, 463.  
 1867 C, 259, 281.  
 Knowlton, F. H. 1909 B, 207.  
 Leunis and Ludwig 1883 A, 421.  
 Lönnberg, E. 1905 A, 8.  
 Miller, L. H. 1912 A, 87.  
 Newton and Gadow 1896 A, 1082.  
 Osborn, H. F. 1925 D, 541.

Owen, R. 1866 B, 81 (Sarcorhamphus).  
 Pander and Alton 1838 A, 6, pl. u.  
 Parker, W. K. 1875 A, 713, 714 (Sarcorhamphus).  
 1875 D, 129, pl. xxv.  
 Pycraft, W. P. 1902 A, 280.  
 Reichenow, A. 1913 A, 362.  
 Selenka, E. 1869 A, pls. xii, xiii, xvi (Sarcorhamphus).  
 Shufeldt, R. W. 1909 A, 380, pl. ii, fig. 3;  
 text-fig. 2.  
 Wallace, A. R. 1876 A, ii, 346.

### **Vultur clarki** (L. H. Miller).

Miller, L. H. 1910 B, 11, figs. 3, 3a (Sarcorhamphus).  
 Abel, O. 1926 B, 238 (Sarcorhamphus).  
 Hay, O. P. 1927 D, 186.  
 Lambrecht, K. 1921 A, 29 (Sarcorhamphus).  
 Miller, L. H. 1912 A, 78, 90, 97, 113 (Sarcorhamphus).  
 1925 B, 82, fig. 12 (Sarcorhamphus).  
 Osborn, H. F. 1925 D, 541 (Sarcorhamphus).  
 Pleistocene (La Brea); California.

### **PALÆOBORUS** Coues. Type *Cathartes umbrosus* Cope.

Hay, O. P. 1902 A, 535.

#### **Palæoborus umbrosus** (Cope).

Cope, E. D. 1874 U, 151 (Cathartes).  
 Hay, O. P. 1902 A, 535.  
 Baird, S. F. 1876 A, .cciii (Vultur).

Lambrecht, K. 1916 C, 494 (Palæoborus).  
 1921 A, 29.

Miller, L. H. 1912 A, 87, 94, 95.  
 Wetmore, A. 1927 A, 5.  
 Upper Miocene (Santa Fe); New Mexico.

### **TERATORNITHIDÆ** Miller.

Miller, L. H. 1909 B, 317.

### **TERATORNIS** L. H. Miller. Type *T. merriami* Miller.

Miller, L. H. 1909 B, 307.  
 Hrdlička, A. 1918 A, 19.  
 Merriam, J. C. 1909 C, 11.  
 1914 B, 6.  
 Miller, L. H. 1910 B, 16 (Pleistogyps).  
 1912 A, 90, 108, 111.  
 1915 B.  
 1921 B, 263.  
 1925 B, 67, 87, 94 (Teratornis); 92 (Pleistogyps a syn.).  
 Osborn, H. F. 1910 B, 473.  
 1925 D, 541.

#### **Teratornis merriami** L. H. Miller.

Miller, L. H. 1909 B, 307, figs. 1-9.  
 Abel, O. 1926 B, 238.  
 Gilbert, J. Z. 1910 B, 24, fig.  
 H. H. 1927 A, 167 ("Teratornis").  
 Hay, O. P. 1927 D, 186, 198.  
 Lambrecht, K. 1921 A, 30 (T. merriami, Pleistogyps rex).  
 Merriam, J. C. 1909 C, 11, fig. ("Teratornis").  
 1914 F, 28 ("Teratornis").  
 1915 G, 98 ("Teratornis").

Merriam, J. C. 1924 A, 352 ("Teratornis").  
 Miller, L. H. 1910 B, 18 (T. merriami); 16, figs. 5-5b (Pleistogyps rex).  
 1910 C, 11.  
 1911 D, 118.  
 1912 A, 78, 113 (T. merriami); 78, 90, 113 (Pleistogyps rex).  
 1921 C, 130 (Pleistogyps rex a syn.).  
 1922 A, 123 ("Teratornis").  
 1923 A, 350, 355 ("Teratornis").  
 1925 A, 309, 322.  
 1925 B, 87, pls. i-iv; text-figs. 15-17.  
 1927 A, 156.  
 Osborn, H. F. 1925 D, 541.  
 Swarth, H. S. 1915 A, 30, fig. 17.  
 Wetmore, A. 1926 E, 525.  
 1928 A, 157.  
 Wyman, L. E. 1922 A, 30, fig. 21.  
 Pleistocene (La Brea); California.

#### **Teratornis** sp. indet.

Hoffmann, R. 1927 A, 155. Pleistocene; California.

### *Superfamily FALCONOIDÆ*, new form.

Unless otherwise indicated the authors, as quoted, use for this group the name *Accipitres*.

Hay, O. P. 1902 A, 535.  
 Abel, O. 1912 F, 301.  
 Adolphi, H. 1921 A, 90.  
 Beddard, F. E. 1898 A, 472.  
 Bittner, F. 1912 A, 2 ("tagraubvögel").  
 Bonaparte, C. L. 1831 A, 29.  
 1832 A, 294.  
 Bonsdorff, E. J. 1871 A, 310.  
 Blainville, H. M. D. 1821 A, 192 ("oiseaux de proie diurnes").  
 Brandt, J. F. 1853 A, 179 ("rapaces diurnæ").  
 Carus, V. 1875 A, 300 (Raptatores).  
 Chandler, A. C. 1916 C.  
 Chomjakoff, M. 1901 A, 136.  
 Cuvier, G. 1805 A.

Dabbene, R. 1910 A, 467 (Accipitriformes).  
 Diethelm, M. 1907 A, 18 (Accipitriformes).  
 Eimer, G. H. T. 1901 A, 261 ("raubvögel").  
 Evans, A. H. 1899 A, 137.  
 Forbes, W. A. 1881 B, 671.  
 Fürbringer, M. 1902 B, 640.  
 Gadow, H. 1893 A, 159.  
 1910 B, 977.  
 Garbowski, T. 1895 A, 445 ("diurni").  
 Garrod, A. H. 1874 A, 117.  
 Gegenbaur, C. 1871 A, 191 ("tagraubvögel").  
 Gervais, P. 1856 A, 8.  
 Heilmann, G. 1926 A, 102 ("hawks").  
 Huxley, T. H. 1867 C, 225.  
 Kessler, K. T. 1841 A, 481.  
 Köstlin, O. 1844 A ("tagraubvögel").  
 Lebedinsky, N. G. 1913 A.

L'Hermier, F. 1836 A, 112.  
 Linnæus, C. 1758 A, 81, 83, 86.  
 Lönnberg, E. 1905 A, 10 (Accipitriformes).  
 Lydekker, R. 1891 A, 18.  
 Magnus, H. 1871 A, 88 (Accipitrini).  
 Meckel, J. F. 1825 A, ("tagraubvögel").  
 Müller, W. 1907 A, 407.  
 Newton, A. 1885 A, 47 (Accipitres).  
 Newton and Gadow 1896 A, 1059.  
 Pander and Alton 1838 A, 1.  
 Pycraft, W. P. 1902 A, 279, 318.  
 1910 A, 49, 439.  
 Sclater, P. L. 1858 A.  
 Sharpe, R. B. 1891 A, 78.  
 Shufeldt, R. W. 1904 B, 853 (Accipitres, Accipitriformes, Falconoidea).  
 1909 A, 369 (Accipitres); 374 (Falconoidea).

Steiner, H. 1918 A, 490.  
 Stejneger, L. 1903 A, 628 (Falcones).  
 Sushkin, P. P. 1896 A, 768.  
 1899 A, 500.  
 1899 B.  
 1900 A, 269.  
 1905 A.  
 Vialleton, L. 1916 A, 7.  
 Wallace, A. R. 1876 A, I, 489; II, 557.  
 Weitzel, A. 1885 A, 344, 353 ("tagraubvögel").  
 Wetmore and Miller 1926 A, 341 (Falconi, Falconides).  
 Wilbrand, J. B. 1823 A, 511 ("raubvögel").  
 Wray, R. S. 1887 A, 348.  
 Zittel and Lucas 1902 A, 276.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 400.

## BUTEONIDÆ.

A. O. U. 1910, 153.  
 Arldt, T. 1907 D, 642.  
 Carus, V. 1875 A, 308.  
 Fürbringer, M. 1888 A.  
 Knowlton, F. H. 1909 B, 226.

Pycraft, W. P. 1902 A, 279, 315, 318.  
 Sushkin, P. 1899 B, 152 (Buteoninae, Halie-  
 tine).  
 Wetmore and Miller 1926 A, 342 (Accipitridæ).

## ELANINÆ.

Knowlton, F. H. 1909 B, 226.  
 Pycraft, W. P. 1902 A, 315.  
 Ridgway, R. 1873 A, 53 (Elani).  
 1875 A, 225-231.

Ridgway, R. 1876 B, 150 (Elani).  
 1903 A, 510 (Elani).  
 Wetmore and Miller 1926 A, 342. "

ELANUS Savigny. Type *Falco melanopterus* Daudin.

Savigny, M. J. C. L. 1809, Descr. Égypte, I, 69, 87.  
 A. O. U. 1910 A, 154.  
 Arldt, T. 1907 D, 87, 155.  
 Chandler, A. C. 1916 C, 335.  
 Coues, E. 1884 A, 525.  
 Eyton, T. C. 1867 A, 8.  
 Knowlton, F. H. 1909 B, 226.  
 Leunis and Ludwig 1883 A, 428.  
 Newton and Gadow 1896 A, 491, 739.  
 Parker, W. K. 1875 A, 713.  
 Pycraft, W. P. 1902 A, 288, pl. xxxi, fig. 2.  
 Ridgway, R. 1887 A, 222, 224, pl. lxxv.  
 Shufeldt, R. W. 1909 A, 373.  
 Sushkin, P. P. 1899 A, 501.

*Elanus leucurus* (Vieillot).  
 Vieillot, L. J. P. 1818, Nouv. Dict. d'Hist. nat., xx, 563 (Milvus).  
 A. O. U. 1910 A, 154.  
 Coues, E. 1884 A, 525 (E. glaucus).  
 Hay, O. P. 1927 D, 186.  
 Miller, L. H. 1912 A, 78, 95, 113.  
 1925 B, 94.  
 Osborn, H. F. 1925 D, 541.  
 Ridgway, R. 1887 A, 225.  
 Shufeldt, R. W. 1909 A, 373, figs. 85, 87, 89.  
 Recent; North America and South America: Pleistocene (La Brea); California.

## MILVINÆ Bonaparte.

Bonaparte, C. L. 1838 B, 116.  
 Barrows, W. B. 1885 A, 273.  
 Carus, V. 1875 A, 308.  
 Coues, E. 1884 A, 522.

Knowlton, F. H. 1909 B, 234.  
 Reichenow, A. 1913 A, 396.  
 Shufeldt, R. W. 1909 A, 126, 377 (Milvidæ, Milvine).

PROICTINIA Shufeldt. Type *P. gilmorei* Shufeldt.

Shufeldt, R. W. 1913 C, 301, pl. lv, fig. 27.  
 Wetmore, A. 1923 A, 504.

The position of this genus is doubtful.

*Proictinia effera* Wetmore.

Wetmore, A. 1923 A, 504, figs. 19, 20.  
 1928 A, 153.

Lower Miocene (Lower Harrison); Nebraska.

*Proictinia gilmorei* Shufeldt.

Shufeldt, R. W. 1913 C, 301, pl. lv, fig. 27.  
 Lambrecht, K. 1921 A, 34.  
 Wetmore, A. 1923 A, 505.

Lower Pliocene (Republican River); Kansas.

## ACCIPITRINÆ Swainson.

Swainson, W. 1837 A, 214.  
 Adolphi, H. 1922 A, 103.  
 Barrows, W. B. 1885 A, 273.

Bonaparte, C. L. 1838 B, 116.  
 1840 A, 261.  
 Brandt, J. F. 1853 A, 185, 189.

Carus, V. 1875 A, 307.  
 Coues, E. 1884 A, 526.  
 Evans, A. H. 1899 A, 146, 153.  
 Knowlton, F. H. 1909 B, 259.  
 Pycraft, W. P. 1902 A, 315.  
 Reichenow, A. 1913 A, 368.  
 Ridgway, R. 1875 A, 227.

Ridgway, R. 1887 A, 222.  
 Shufeldt, R. W. 1909 A, 126, 369.  
 Sushkin, P. P. 1899 A, 500.  
 1900 A, 275.  
 Wagner, R. 1843 A, 79.  
 Wetmore and Miller 1926 A, 342.

**ACCIPITER** Brisson. Type *A. accipiter* Brisson = *Falco nisus* Linnæus.

Brisson, M. J. 1760, Ornith., i, 310.  
 A. O. U. 1910 A, 155.  
 Barrows, W. B. 1885 A, 306.  
 Beddard, F. E. 1898 A, 478, 484.  
 Bignon, F. 1889 A.  
 Blanchard, E. 1859 A, 35.  
 Chomjakoff, M. 1901 A, 136.  
 Diethelm, M. 1907 A, 44.  
 Eyton, T. C. 1867 A, 5, pl. iii, fig. 6.  
 Heilmann, G. 1913 A, 16, fig. 10.  
 Knowlton, F. H. 1909 B, 259.  
 Lambrecht, K. 1914 A, 66.  
 Magnan, A. 1922 A, 135, pl. iv; text-fig. 2.  
 Newton and Gadow 1896 A, 1059.  
 Parker, W. K. 1875 A, 713, 714, fig. 25.  
 1875 D, 135, pls. xxv, figs. 7, 8.  
 Ridgway, R. 1887 A, 223, 227, pl. lxvi.  
 Shufeldt, R. W. 1909 A, 91, 126.  
 Steiner, H. 1918 A, 325, fig. 29.

**Accipiter cooperi** (Bonaparte).

Bonaparte, C. L. 1828, Amer. Ornith., ii, 1, pl. x, fig. 1 (Falco).

A. O. U. 1910 A, 156.  
 Chandler, A. C. 1916 C, 336.  
 Hay, O. P. 1927 D, 186.  
 Knowlton, F. H. 1909 B, 260.  
 Miller, L. H. 1912 A, 84.  
 1921 C, 130.  
 1925 B, 95.  
 Ridgway, R. 1887 A, 228.  
 Recent; North America: Pleistocene (La Brea); California.

**Accipiter velox** (Wilson).

Wilson, A. 1812, Amer. Ornith., v, 116, pl. xlv, fig. 1 (Falco).  
 A. O. U. 1910 A, 115.  
 Hay, O. P. 1927 D, 186, 216.  
 Miller, L. H. 1911 C, 392, 399.  
 1912 A, 73, 84, 95, 113.  
 1925 B, 95.  
 Ridgway, R. 1887 A, 227.  
 Recent; North America: Pleistocene (La Brea, Samwel Cave); California.

**BUTEONINÆ** Swainson.

Swainson, W. 1837 A, 210 (Buteoninæ); 207 (Aquilinæ).  
 Adolphi, H. 1922 A, 91 (Aquilinæ).  
 Arldt, T. 1907 C, 677 (Aquilidæ).  
 1907 D, 639 (Aquilidæ).  
 Barrows, W. B. 1885 A, 273, 278 (Buteoninæ, Aquilinæ).  
 Bonaparte, C. L. 1838 B, 116.  
 1840 A, 260 (Aquilinæ, Buteoninæ).  
 Brandt, J. F. 1853 A, 185, 190 (Buteoninæ); 185, 187 (Aquilinæ).  
 Coues, E. 1884 A, 541.  
 Evans, A. H. 1899 A, 146, 164 (Buteoninæ); 146, 158 (Aquilinæ).  
 Gadow, H. 1893 A, 159 (Aquilinæ).

Knowlton, F. H. 1909 B, 254 (Buteoninæ); 238 (Aquilinæ).  
 Pander and Alton 1838 A, 13 ("buteonen").  
 Pycraft, W. P. 1902 A, 315 (Aquilinæ).  
 Reichenow, A. 1913 A, 389.  
 Ridgway, R. 1875 A, 227 (Buteoninæ, Aquilinæ).  
 1876 A, 451.  
 1903 A, 510 (Buteoninæ); 511 (Aquilæ).  
 Shufeldt, R. W. 1909 A, 370 (Buteoninæ); 127 (Aquilinæ).  
 Stejneger, L. 1903 A, 629 (Accipitrinæ).  
 Sushkin, P. P. 1899 A, 500 (Buteoninæ, Aquilinæ).  
 1899 B, 153.  
 1900 A, 272.  
 Wetmore and Miller 1926 A, 342.

**BUTEO** Lacepède.

Lacepède, B. G. E. 1799, Tableaux Oiss., 4.  
 Adolphi, H. 1922 A, 10, 96, fig. 33.  
 Allen, J. A. 1893 B, 99.  
 Arldt, T. 1907 D, 210, 266.  
 Barrows, W. B. 1885 A, 278, 292.  
 Bignon, F. 1889 A.  
 Blanchard, E. 1859 A, 40.  
 Bonaparte, C. L. 1833 A, 1046.  
 Bonsdorff, E. J. 1871 A, 312.  
 Brandt, J. F. 1853 A, 191.  
 Chandler, A. C. 1916 C, 335.  
 Chomjakoff, M. 1901 A, 137.  
 Coues, E. 1884 A, 541.  
 Dabbene, R. 1910 A, 244.  
 Diethelm, M. 1907 A, 15, figs. 5, A, B.  
 Evans, A. H. 1899 A, 164.  
 Eyton, T. C. 1867 A, 9.

Gegenbaur, C. 1871 A, 189.  
 Heilmann, G. 1913 A, 16, fig. 10.  
 Hesse, H. 1907 A, 218, pl. viii, fig. 2.  
 Kingsley, J. S. 1925 A, 178, fig. 192.  
 Knowlton, F. H. 1909 B, 254.  
 Lambrecht, K. 1914 A, 66.  
 Leunis and Ludwig 1883 A, 428.  
 Lydekker, R. 1891 A, 21.  
 Mackie, S. J. 1863 C, 106.  
 Magnan, A. 1922 A, 177, pl. iv.  
 Newton and Gadow 1896 A, 1062.  
 Parker, W. K. 1875 A, 713.  
 Reichenow, A. 1913 A, 391.  
 Ridgway, R. 1887 A, 223, 229, pls. lxxvii, lxxii.  
 Shufeldt, R. W. 1909 A, 370.  
 Strasser, H. 1885 A, 204.  
 Sundevall, C. J. 1886 A, 423.

Sushkin, P. P. 1899 A, 501.

1900 A, 277.

Wallace, A. R. 1876 A, II, 348.

Weitzel, A. 1885 A, 326.

### ***Buteo borealis* Gmelin.**

*Gmelin*, J. G. 1788, Syst. Nat., I, 266.

A. O. U. 1910 A, 157.

Chandler, A. C. 1916 C, 335, pl. xxii, fig. 33.

Coues, E. 1884 A, 544, fig. 380.

Hay, O. P. 1927 D, 186.

Knowlton, F. H. 1909 B, 255, fig. 81.

Matthew, W. D. 1918 A, 187 (This species?).

Merriam, J. C. 1917 A, 437 (This species?).

Miller, L. H. 1909 B, 306.

1910 C, 11.

1911 C, 391, 399.

1912 A, 71, 78, 84, 95.

1925 B, 95.

Osborn, H. F. 1925 D, 541.

Ridgway, R. 1887 A, 232.

Shufeldt, R. W. 1909 A, 72, 126, figs. 42, 45, 47.

Sinclair, W. J. 1915 A, 77 (This species?).

Wetmore, A. 1923 A, 491.

1926 F, 2.

1928 D, 149.

Recent; North America from Alaska to

Guatemala: Pliocene (Snake Creek); Nebraska:

Pleistocene (La Brea and Caves); California;

Nebraska.

### ***Buteo swainsoni* Bonaparte.**

*Bonaparte*, C. L. 1833, Geog. and Comp. List, 3.

A. O. U. 1910 A, 159.

Coues, E. 1884 A, 546.

Hay, O. P. 1927 D, 186, 216.

Miller, L. H. 1911 C, 391, 399.

1912 A, 73, 84, 95, 113 (This species?).

1925 B, 95.

Ridgway, R. 1887 A, 235.

Recent; North America and South America:

Pleistocene (La Brea); California.

### ***Buteo typhoides* Wetmore.**

*Wetmore*, A. 1923 A, 489, figs. 3-5.

Matthew, W. D. 1924 C, 68.

Wetmore, A. 1923 A, 153.

1928 D, 149, figs. 58-61.

Upper Miocene (Lower Snake Creek);

Nebraska.

### ***Buteo* sp. indet.**

Hay, O. P. 1927 D, 186. Pleistocene; California.

Merriam, J. C. 1919 A, 450, 462, 527. Miocene

(Barstow); California.

Miller, L. H. 1912 A, 78, 113. Pleistocene (La

Brea); California.

1925 B, 95. Pleistocene (La Brea);

California.

Osborn, H. F. 1925 D, 541. Pleistocene (La

Brea); California.

## **ARCHIBUTEO Brehm. Type *Falco lagopus* Brünlich.**

*Brehm*, C. L. 1828, Isis, XXI, 1269.

Adolphi, H. 1922 A, 98.

A. O. U. 1910 A, 161.

Barrows, W. B. 1885 A, 291.

Blanchard, E. 1859 A, 40.

Brandt, J. F. 1853 A, 192.

Chandler, A. C. 1916 C, 335.

Coues, E. 1884 A, 549.

Eyton, T. C. 1867 A, 9.

Knowlton, F. H. 1909 B, 258.

Lambrecht, K. 1914 A, 66.

Leunis and Ludwig 1883 A, 429.

Miller, L. H. 1925 A, 309, 323.

Ridgway, R. 1887 A, 223, 240.

Shufeldt, R. W. 1909 A, 96, 126.

Sushkin, P. P. 1899 A, 501.

Wallace, A. R. 1876 A, II, 348.

### ***Archibuteo ferrugineus* (Lichtenstein).**

*Lichtenstein*, M. H. C. 1839, Abh. k. Akad.

Wiss. Berlin (Phys. Kl.) for 1838 (1839), 428

(Falco).

A. O. U. 1910 A, 161.

Coues, E. 1884 A, 551.

Hay, O. P. 1927 D, 198, 223.

Miller, L. H. 1911 C, 391, 399.

1912 A, 75, 84, 85, 95, 113.

Osborn, H. F. 1925 D, 541.

Ridgway, R. 1887 A, 241.

Recent; western North America: Pleistocene

(Caves); California.

## **MORPHENUS "Cuvier" Dumont. Type *Falco guianensis* Daudin.**

*Dumont*, C. H. F. 1816, Dict. Sci. Nat.,  
Suppl., 88.

Barrows, W. B. 1885 A, 287, fig. 134.

Carus, V. 1875 A, 309.

Knowlton, F. H. 1909 B, 245.

Leunis and Ludwig 1883 A, 430.

Miller, L. H. 1911 B, 312.

1912 A, 92, 93, 96.

1919 A, 427 ("walking eagle").

1921 B, 263 (Morphus).

1923 A, 351.

Osborn, H. F. 1925 D, 541.

Pycraft, W. P. 1902 A, 315.

Reichenow, A. 1913 A, 335.

Ridgway, R. 1876 B, 147.

Sushkin, P. P. 1899 A, 501.

### ***Morphnus woodwardi* Miller.**

*Miller*, L. H. 1911 B, 312, 316, figs. 2a, 3b.

Hay, O. P. 1927 D, 186.

Miller, L. H. 1912 A, 78, 92, 95, 97, 114.

1925 B, 96.

Osborn, H. F. 1925 D, 541.

Wyman, L. E. 1922 A, 31.

Pleistocene (La Brea); California.

WETMOREGYPS Miller. Type *Morphnus daggetti* Miller.

Miller, L. H. 1928, Condor, xxx, 255.

**Wetmoregyps daggetti** (Miller).

Miller, L. H. 1915 A, 179, fig. 63 (Morphnus).

Hay, O. P. 1927 D, 186 (Morphnus).

Lambrecht, K. 1921 A, 30 (Morphnus).

Miller, L. H. 1921 C, 130 (Morphnus).

1925 B, pl. v. figs. f-h (Morphnus).

Miller, L. H. 1928, Condor, xxx, 255.

Osborn, H. F. 1925 D, 541 (Morphnus).

Wetmore, A. 1923 A, 486 (Morphnus).

Wyman, L. E. 1922 A, 31 (Morphnus).

Pleistocene (La Brea); California.

GERANOÆTUS Kaup. Type *G. aguja* = *G. melanoleucus* (Vieillot).

Kaup, J. J. 1844, Class. Säugethiere u. Vögel, 122.

Miller, L. H. 1911 B, 312.

1912 A, 92, 96.

Ridgway, R. 1876 B, 131.

Sushkin, P. P. 1899 A, 501.

Wetmore, A. 1923 A, 485.

1926 C, 405.

**Geranoætus ales** Wetmore.

Wetmore, A. 1926 C, 403, pl. xxxviii.

1928 A, 153.

Upper Miocene (Lower Harrison); Nebraska.

**Geranoætus conterminus** Wetmore.

Wetmore, A. 1923 A, 497, figs. 11-13.

Matthew, W. D. 1924 C, 68.

Wetmore, A. 1926 C, 406.

Lower Pliocene (Upper Snake Creek); Nebraska.

**Geranoætus contortus** Wetmore.

Wetmore, A. 1923 A, 492.

Matthew, W. D. 1924 C, 68.

Wetmore, A. 1926 C, 406.

1928 A, 153.

Upper Miocene (Lower Snake Creek); Nebraska.

**Geranoætus dananus** (Marsh).

Hay, O. P. 1902 A, 536 (Aquila).

Lambrecht, K. 1921 A, 33 (Aquila).

Matthew, W. D. 1918 A, 187 (Aquila. This species?).

Merriam, J. C. 1917 A, 437 (Aquila. This species?).

Miller, L. H. 1912 A, 92, 94, 95 (Aquila).

Shufeldt, R. W. 1915 D, 60, 77, pl. ii, fig. 13 (Aquila).

Sinclair, W. J. 1915 A, 77 (Aquila. This species?).

Wetmore, A. 1923 A, 499, 504 (Aquila).

1926 C, 406.

Upper Miocene or Pliocene (Snake Creek); Nebraska: Pleistocene? (Loup Fork); Nebraska.

**Geranoætus fragilis** Miller.

Miller, L. H. 1911 B, 315, 316, figs. 5a, 5b.

Hay, O. P. 1927 D, 186.

Miller, L. H. 1912 A, 78, 92, 95, 97, 114 (G. fragilis); 94 (G. gracilis).

1925 B, 98.

Osborn, H. F. 1925 D, 541.

Wetmore, A. 1923 A, 488, 502.

1926 C, 406.

Wyman, L. E. 1922 A, 31.

Pleistocene (La Brea); California.

**Geranoætus grinnelli** Miller.

Miller, L. H. 1911 B, 314, 316, figs. 4a, 4b.

Hay, O. P. 1927 D, 186.

Miller, L. H. 1911 C, 392.

1912 A, 78, 92, 95, 97, 114.

1925 B, 97.

Osborn, H. F. 1925 D, 541.

Wetmore, A. 1923 A, 488.

1926 C, 406.

Wyman, L. E. 1922 A, 31.

Pleistocene (La Brea); California.

**Geranoætus melanoleucus** (Vieillot).

Vieillot, L. J. P. 1819, Nouv. Dict. d'hist. nat. (nouv. ed.), 57 (Spizæus).

Hay, O. P. 1927 D, 223.

Miller, L. H. 1912 A, 75, 93, 95, 97, 114 (This species?).

Ridgway, R. 1876 B, 131.

Sharpe, R. B. 1874, Cat. Birds Brit. Mus., 1, 168 (Buteo).

1899, Hand-list gen. and spec. birds, 1, 225.

Wetmore, A. 1923 A, 488.

1926 C, 406.

1928 B, 3, figs. 1, 2.

1928 D, 150.

Recent; South America, Cuba: Pleistocene; Cuba.

Doubtfully in Hawver Cave, California.

**Geranoætus sp. indet.**

Matthew, W. D. 1918 A, 187. Pliocene (Snake Creek); Nebraska.

Miller, L. H. 1911 C, 392, 399. Pleistocene (Hawver Cave); California.

1922 A, 123 (This genus?). Pleistocene (McKittrick); California.

URUBITINGA La Fresnayé. Type *Falco urubitinga* Gmelin.

- La Fresnayé*, F. 1843, Dict. Univ. Hist. Nat.,  
 II, 788.  
 Barrows, W. B. 1885 A, 290.  
 Bignon, F. 1889 A.  
 Reichenow, A. 1913 A, 390.  
 Ridgway, R. 1887 A, 223, 238, pls. lxviii, lxxii.  
 Wetmore, A. 1923 A, 500.  
 1926 F, 1.

**Urubitinga enecta** Wetmore.

- Wetmore, A. 1923 A, 500, figs. 14-18.  
 Matthew, W. D. 1924 C, 68.  
 1924 F, 119 ("Urubitinga").  
 Wetmore, A. 1926 F, 1, figs. 1-3.  
 Middle Miocene (Sheep Creek); Nebraska.

AQUILA Brisson. Type *Falco chrysaetos* Linnæus.

- Brisson, M. J. 1780, Ornith., I, 419.  
 Hay, O. P. 1902 A, 536.  
 Adolphi, H. 1922 A, 17, 91, fig. 7.  
 Aebly, C. 1873 A, 702.  
 Allen, J. A. 1893 B, 99.  
 A. O. U. 1910 A, 161.  
 Arldt, T. 1907 D, 639.  
 Barrows, W. B. 1885 A, 278, 281.  
 Beddard, F. E. 1898 A, 476.  
 Bittner, F. 1912 A, 8.  
 Bonsdorff, E. J. 1871 A, 310.  
 Chandler, A. C. 1916 C, 335.  
 Coues, E. 1834 A, 553.  
 Cuvier, G. 1805 A.  
 Diethelm, M. 1907 A, 7, fig. 2 D.  
 Eyton, T. C. 1867 A, 11, pl. ii, fig. 14; pl. v,  
 fig. 2.  
 Fürbringer, M. 1838 A, pls. iii, iv, vi, vii.  
 Gaillard, C. 1908 A, 27.  
 Gaupp, E. 1905 D, 1025, fig. 43 ("adler").  
 Gegenbaur, C. 1871 A, 189.  
 Heilprin, A. 1887 A, 79.  
 Kessler, K. T. 1841 A, 488.  
 Knowlton, F. H. 1909 B, 238.  
 Ledouble, A. F., 1903 A, 642 ("aigle").  
 Leunis and Ludwig 1833 A, 429.  
 Lühder, W. 1871 A, 326.  
 Lydekker, R. 1879 A, 36, pl. iv, figs. 3-5.  
 1891 A, 24.  
 Mackie, S. J. 1863 C, 106.  
 Magnan, A. 1922 A, 156, pl. ii; text-figs. 10, 11.  
 Magnus, H. 1871 A, 18.  
 Miller, L. H. 1911 B, 307.  
 1924 B, 179.  
 1925 B, 81.  
 Newton and Gadow 1896 A, 1060.  
 Owen, R. 1866 B.  
 1868 A, 861.  
 Parker, W. K. 1875 A, 713.  
 Pycraft, W. P. 1902 A, 280.  
 Reichenow, A. 1913 A, 395.  
 Ridgway, R. 1887 A, 223, 241, pl. lxix.  
 Shufeldt, R. W. 1909 A, 126.  
 1913 C, 296.  
 Strasser, H. 1885 A, 204.  
 Sundevall, C. J. 1886 A.  
 Sushkin, P. P. 1899 A, 591.  
 Wallace, A. R. 1876 A, II, 348.  
 Weitzel, A. 1865 A, 359.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 400.

**Aquila antiqua** Shufeldt.

- Shufeldt, R. W. 1913 C, 297, pl. iv, fig. 26.  
 1915 D, 42.  
 Middle Eocene (Bridger); Wyoming.

**Aquila chrysaetos** (Linnæus).

- Linnæus, C. 1758 A, 88 (Falco).  
 Abel, O. 1912 F, 22, 533.  
 1926 B, 236 (A. chrysaetos).  
 A. O. U. 1910 A, 162.  
 Coues, E. 1884 A, 554.  
 Eyton, T. C. 1867 A, 11, pl. i, fig. 1; pl. vi,  
 fig. 6.  
 Hay, O. P. 1927 D, 186, 198.  
 Knowlton, F. H. 1909 B, 238.  
 Miller, L. H. 1909 B, 306.  
 1910 C, 11.  
 1911 B, 307, 316, fig. 1.  
 1912 A, 78, 84, 92, 95, 113.  
 1921 A, 567.  
 1922 A, 123.  
 1925 A, 309, 323.  
 1925 B, 95.  
 1927 A, 156.  
 Osborn, H. F. 1910 B, 473.  
 1925 D, 541.  
 Ridgway, R. 1887 A, 242.  
 Shufeldt, R. W. 1909 A, 369, pls. v, xv; text-  
 figs. 48, 50.  
 1913 A, 39.  
 1913 B, 153, pl. xl, figs. 488-493, 495.  
 1913 F, 307.  
 Sundevall, C. J. 1886 A, 406.  
 Wetmore, A. 1926 F, 2.  
 Recent; northern part of Northern Hemis-  
 phere: Pleistocene (La Brea); California;  
 (Fossil Lake); Oregon.

**Aquila ferox** Shufeldt.

- Shufeldt, R. W. 1913 C, 297.  
 Lambrecht, K. 1921 A, 33.  
 Middle Eocene (Bridger); Wyoming.

**Aquila lydekkeri** Shufeldt.

- Shufeldt, R. W. 1913 C, 298.  
 Lambrecht, K. 1921 A, 33.  
 Middle Eocene (Bridger); Wyoming.

**Aquila pliogryps** Shufeldt.

- Hay, O. P. 1902 A, 536.  
 1927 D, 244.

Lambrecht, K. 1921 A, 33.  
 Miller, L. H. 1912 A, 81, 92, 95, 114.  
 Shufeldt, R. W. 1913 B, 157.  
 Pleistocene (Fossil Lake); Oregon.

***Aquila sodalis* Shufeldt.**

Hay, O. P. 1902 A, 536.  
 1927 D, 244.  
 Lambrecht, K. 1921 A, 33.

Miller, L. H. 1912 A, 81, 92, 93, 95, 114.  
 Shufeldt, R. W. 1913 B, 157.  
 Pleistocene (Fossil Lake); Oregon.

***Aquila* sp. indet.**

Matthew, W. D. 1924 C, 68.  
 Wetmore, A. 1923 A, 504. Upper Miocene  
 (Lower Snake Creek); Nebraska.

**HALIÆTUS Savigny. Type *H. nisus* Savigny = *Falco albicilla* Linnæus.**

Savigny, M. J. C. L. 1809, Descr. de l'Égypte, 68, 85.  
 Adolphi, H. 1922 A, 10, 94, fig. 32 (*Haliaëtus*).  
 Barrows, W. B. 1885 A, 281 (*Haliaëtus*).  
 Beddard, F. E. 1898 A, 541.  
 Blanchard, E. 1859 A, 40.  
 Brandt, J. F. 1853 A, 188 (*Haliaëtus*).  
 Chandler, A. C. 1916 C, 335.  
 Coues, E. 1884 A, 554.  
 Dabbene, R. 1910 A, 478.  
 Döderlein, L. 1902 A, 488.  
 1923 A, 142, 162 (*Haliaëtus*).  
 Foote, J. S. 1916 A, pl. v.  
 Fürbringer, M. 1888 A, pl. iii (*Haliaëtus*).  
 Gegenbaur, C. 1871 A, 189 (*Haliaëtus*).  
 Heilmann, G. 1913 B, 79 (*Haliaëtus*).  
 Kingsley, J. S. 1925 A, 255, fig. 271 (*Haliaëtus*).  
 Knowlton, F. H. 1909 B, 235 (*Haliaëtus*).  
 Lambrecht, K. 1914 A, 58, 66, text-figs. 1, 2 (*Haliaëtus*).  
 Leunis and Ludwig 1883 A, 431 (*Haliaëtus*).  
 Lühder, W. 1871 A, 329 (*Haliaëtus*).  
 Lydekker, R. 1891 A, 23 (*Haliaëtus*).  
 Miller, L. H. 1911 B, 307.  
 1916 B, 100.  
 1921 B, 262 (*Haliaëtus*).  
 Newton and Gadow 1896 A, 1070.  
 Owen, R. 1866 B, 21 (*Haliaëtus*).  
 Pycraft, W. P. 1902 A, 280.  
 Reichenow, A. 1913 A, 398 (*Haliaëtus*).  
 Ridgway, R. 1887 A, 223, 242, pl. lxxi.  
 Selenka, E. 1869 A, 32 (*Haliaëtus*).  
 Shufeldt, R. W. 1909 A, 126.

Sushkin, P. P. 1899 A, 501.  
 1900 B, 527.

Taschenberg, O. 1899 A, 4096 (*Haliaëtus*).  
 Weitzel, A. 1865 A, 359 (*Haliaëtus*).

***Haliæetus leucocephalus* (Linnæus).**

Linnæus, C. 1766, Syst. Nat., ed. 12, 1, 124 (*Falco*).  
 A. O. U. 1910 A, 162.  
 Coues, E. 1884 A, 555, fig. 334.  
 Eyton, T. C. 1867 A, 14, pl. i; pl. ii, fig. 1; pl. iii, fig. 2 (*Pandion*).  
 Giebel, C. G. 1865 D, 505 (*Haliaëtus*).  
 Hay, O. P. 1927 D, 186, 280.  
 Knowlton, F. H. 1909 B, 235, fig. 77 (*Haliaëtus*).  
 Miller, L. H. 1911 B, 310, 311, 316, figs. 2a, 2b.  
 1912 A, 78, 84, 92, 93, 95, 114.  
 1925 B, 67, 81, 96 (*Haliaëtus*).  
 Osborn, H. F. 1925 D, 541.  
 Ridgway, R. 1887 A, 243.  
 Shufeldt, R. W. 1909 A, 375, pl. vii; pl. x, fig. 20; pl. xi, fig. 25; pl. xvi, fig. 33; text-figs. 49, 50, 52.  
 1913 A, 39.  
 1913 B, 153, 175, pl. xl, figs. 487, 494, 496 (*Aquila haliæetus*); 157 (*Haliaëtus leucocephalus*).  
 1913 C, 295, pl. lv, figs. 29, 33-37, 42.  
 1913 F, 307.  
 Recent; North America: Pleistocene (La Brea); California: (Sheridan); Nebraska: (Fossil Lake); Oregon.

**CIRCINÆ Bonaparte.**

Bonaparte, C. L. 1838 B, 116.  
 Barrows, W. B. 1885 A, 273, 294.  
 Blanchard, E. 1859 A, 42.  
 Carus, V. 1875 A, 307.  
 Coues, E. 1884 A, 521.

Knowlton, F. H. 1909 B, 251.  
 Pycraft, W. P. 1902 A, 315.  
 Shufeldt, R. W. 1909 A, 126, 371.  
 Wetmore and Miller 1926 A, 342.

**CIRCUS Lacépède. Type *Falco aeruginosus* Linnæus.**

Lacépède, B. G. E. 1799, Tableaux Oiss., 4.  
 Adolphi, H. 1922 A, 111.  
 Barrows, W. B. 1885 A, 294.  
 Bignon, F. 1889 A.  
 Bittner, F. 1912 A, 9.  
 Blanchard, E. 1859 A, 42.  
 Chandler, A. C. 1916 C.  
 Chomjakoff, M. 1901 A, 136.  
 Coues, E. 1884 A, 521.

Dabbene, R. 1910 A, 15, 241.  
 Eyton, T. C. 1867 A, 7, pl. ii, fig. 4; pl. iii fig. 4.  
 Fürbringer, M. 1888 A.  
 Knowlton, F. H. 1909 B, 251.  
 Lambrecht, K. 1914 A, 66.  
 Leunis and Ludwig 1883 A, 426.  
 Lydekker, R. 1891 A, 20.  
 Magnan, A. 1922 A, 177, pl. vi.



Miller, L. H. 1912 A, 96.  
 Newton and Gadow 1896 A, 1064.  
 Parker, W. K. 1875 A, 713.  
 Pycraft, W. P. 1902 A, 233.  
 Reichenow, A. 1913 A, 382.  
 Ridgway, R. 1887 A, 223, 227, pl. lxvi.  
 Shufeldt, R. W. 1909 A, 9, 126.  
 Sushkun, P. P. 1899 A, 501.

### **Circus hudsonius Linnæus.**

Linnæus, C. 1766, Syst. Nat., ed. 12, i, 128 (Falco).  
 A. O. U. 1910 A, 155.  
 Chandler, A. C. 1916 C.  
 Coues, E. 1884 A, 521 (C. cyaneus h.).  
 Hay, O. P. 1927 D, 186, 198, 244.  
 Knowlton, F. H. 1909 B, 251.  
 Miller, L. H. 1909 B, 306.  
 1910 C, 11.

Miller, L. H. 1911 A, 87.  
 1912 A, 78, 81, 84, 95, 113.  
 1922 A, 123.  
 1925 A, 322.  
 1925 B, 94.

Osborn, H. F. 1925 D, 541.

Ridgway, R. 1887 A, 226.

Recent; Alaska to Prince Edward Island and Cuba: Pleistocene (La Brea); California.

### **Circus sp. indet.**

Hay, O. P. 1927 D, 186, 198. Pleistocene; California.  
 Miller, L. H. 1912 A, 78, 95. Pleistocene (La Brea); California.  
 1921 A, 567. Pleistocene (McKittrick); California.  
 Osborn, H. F. 1925 D, 541. Pleistocene (La Brea); California.

## **FALCONIDÆ Vigors.**

Vigors, N. A. 1825 A, 422.  
 Hay, O. P. 1902 A, 535.  
 Adolphi, H. 1922 A, 91.  
 Allen, J. A. 1871 A.  
 Arldt, T. 1907 D, 654.  
 1912 A, 710, 756.  
 Barrows, W. B. 1885 A, 263, 273.  
 Beddard, F. E. 1898 A, 472.  
 Bittner, F. 1912 A, 2 ("falconiden").  
 Bonaparte, C. L. 1831 A, 29.  
 1832 A, 295.  
 Brandt, J. F. 1853 A, 185.  
 Carus, V. 1875 A, 306.  
 Chandler, A. C. 1916 C.  
 Dabbene, R. 1910 A, 147 (Accipitridæ); 475 (Falconidæ).  
 Evans, A. H. 1899 A, 146.  
 Forbes, W. A. 1882 D, 63.  
 Fürbringer, M. 1902 B, 640, 641.  
 Gadow, H. 1893 A, 159.  
 Garrod, A. H. 1873 D, 634.  
 1874 A, 117, 122.  
 Gervais, P. 1856 A, 8 ("falconidés").  
 Hesse, H. 1907 A, 218.  
 Huxley, T. H. 1867 A, 462 (Gypaëtidæ, in part).  
 1867 C, 282 (Gypaëtidæ, in part).  
 Knowlton, F. H. 1909 B, 212.  
 Lebedinsky, N. G. 1913 A.

Leunis and Ludwig 1833 A, 423.  
 Lobley, J. L. 1908 A, 201, 207.  
 Lydekker, R. 1891 A, 19.  
 Miller, L. H. 1912 A, 92.  
 1913 A, 132.  
 1925 B, 92.  
 Newton, A. 1885 A, 47.  
 Parker, W. K. 1875 D, 129, 136.  
 1888 D, 473 ("falcons").  
 Pycraft, W. P. 1901 A, 350.  
 1902 A, 278, 315, 318.  
 1902 B, 324 ("hawks").  
 Reichenow, A. 1913 A, 367.  
 Ridgway, R. 1875 A, 225.  
 1876 A, 451.  
 1887 A, 218, 222.  
 1903 A, 509.  
 Shufeldt, R. W. 1904 B, 853.  
 1907 A, 123.  
 1909 A, 126, 374 (Falconioidea, Falconidæ).  
 Steiner, H. 1918 A, 324, 490.  
 Stejneger, L. 1903 A, 629.  
 Sushkin, P. 1899 A, 500.  
 1905 A.  
 Taschenberg, O. 1899 A, 4053.  
 Wallace, A. R. 1876 A, ii, 347.  
 1894 A, 441.  
 Wetmore and Miller 1926 A, 342.

## **PANDIONINÆ.**

Adolphi, H. 1922 A, 119 (Pandionidæ).  
 A. O. U. 1910 A, 168 (Pandionidæ).  
 Barrows, W. B. 1885 A, 273.  
 Beddard, F. E. 1898 A, 478 (Pandionidæ).  
 Coues, E. 1884 A, 556 (Pandionidæ).  
 Fürbringer, M. 1888 A, 1306.

Gadow, H. 1893 A, 159 (Pandionidæ).  
 Knowlton, F. H. 1909 B, 271.  
 Ridgway, R. 1903 A, 510 (Pandionidæ).  
 Shufeldt, R. W. 1909 A, 126, 378 (Pandionidæ).  
 Sushkin, P. 1899 A, 500 (Pandionidæ).  
 Wetmore and Miller 1926 A, 342.

## **PANDION Savigny. Type *Falco haliaëtus* Linnæus.**

Savigny, M. J. C. L. 1809, Descrip. de l'Égypte, i, 69, 95.

A. O. U. 1910 A, 168.

Barrows, W. B. 1885 A, 293.

Beddard, F. E. 1898 A, 544.

Blanchard, E. 1859 A, 39.

Coues, E. 1884 A, 556.

Fürbringer, M. 1888 A, pls. i, iii, vi.

Heilmann, G. 1913 A, 16, fig. 10.  
1913 B, 79.  
Huxley, T. H. 1867 A, 464.  
1867 C, 282.  
Knowlton, F. H. 1909 B, 231.  
Lebedinsky, N. G. 1921 A, 13.  
Leunis and Ludwig 1883 A, 431.  
Magnan, A. 1922 A, 177.  
Miller, L. H. 1925 B, 90.  
Newton and Gadow 1896 A, 1077.  
Owen, R. 1866 B, 21.  
Pycraft, W. P. 1902 A, 281.  
Reichenow, A. 1913 A, 399.  
Ridgway, R. 1887 A, 254, pl. lxx.  
1903 A, 510.  
Selenka, E. 1869 A, pl. xvi, fig. 7.  
Shufeldt, R. W. 1885 C, 516, fig.  
1909 A, 378.

Sundevall, C. J. 1836 A, 406.  
Sushkin, P. P. 1899 A, 510.  
Weitzel, A. 1885 A, 359.

**Pandion haliaëtus carolinensis** (Gmelin).

Gmelin, J. F. 1788, Syst. Nat. I, 1, 263 (Falco carolinensis).  
Adolphi, H. 1922 A, 10, 119, fig. 39 (P. haliaëtus).  
A. O. U. 1910 A, 168.  
Barrows, W. B. 1885 A, 293, pl. (P. haliaëtus).  
Coues, E. 1884 A, 556, fig. 385 (P. haliaëtus).  
Ridgway, R. 1887 A, 255 (P. haliaëtus).  
Shufeldt, R. W. 1913 B, 153 (Aquila haliaëtus).  
Recent; N. and S. America to Paraguay:  
Pleistocene (Fossil Lake); Oregon.

**POLYBORINÆ Bonaparte.**

Bonaparte, C. L. 1838 B, 116.  
A. O. U. 1910 A, 167.  
Arlt, T. 1907 C, 677 (Polyboridæ).  
1907 D, 675.  
Barrows, W. B. 1885 A, 273, 300.  
Blanchard, E. 1859 A, 43, 45.  
Coues, E. 1884 A, 539.  
Evans, A. H. 1899 A, 151.  
Knowlton, F. H. 1909 B, 220.  
Miller, L. H. 1916 C, 105.

Pycraft, W. P. 1902 A, 293 (Polyboridæ); 296, 315, 318 (Polyborinæ).  
Reichenow, A. 1913 A, 370.  
Ridgway, R. 1875 A, 229, 231 (Polybori).  
1876 A, 451 (Polybori).  
1903 A, 510 (Polybori).  
Shufeldt, R. W. 1909 A, 126, 379.  
Sushkin, P. P. 1905 A.  
1905 A.  
Wetmore and Miller 1926 A, 342.

**POLYBORUS Vieillot. Type *Falco tharus* Molina.**

Vieillot, L. J. P. 1816, Analyse, 22.  
A. O. U. 1910 A, 187.  
Barrows, W. B. 1885 A, 301, fig. 141.  
Coues, E. 1884 A, 539.  
Dabbene, R. 1910 A, 486.  
Fürbringer, M. 1888 A, pl. vi.  
Huxley, T. H. 1867 A, 464.  
Kingsley, J. S. 1925 A, 270, fig. 295.  
Knowlton, F. H. 1909 B, 221.  
Leunis and Ludwig 1883 A, 425.  
Magnan, A. 1922 A, 187.  
Miller, L. H. 1912 A, 92.  
Newton and Gadow 1896 A, 74.  
Pycraft, W. P. 1902 A, 280.  
Reichenow, A. 1913 A, 372.  
Ridgway, R. 1876 A, 452, 454.  
1887 A, 224, 253.  
Selenka, E. 1869 A, pl. xvi.  
Shufeldt, R. W. 1909 A, 379.  
Sushkin, P. 1905 A.

**Polyborus cheriway** (Jacquin).

Jacquin, J. F. 1784, Beytr. Gesch. Vögel, 17, pl. iv (Falco).  
A. O. U. 1910 A, 167.  
Coues, E. 1884 A, 220 (P. tharus audubonii);  
539 (P. auduboni).

Eyton, T. C. 1867 A, 23, pl. i, fig. 9; pl. vi, fig. 4 (P. tharus).  
Hay, O. P. 1927 D, 186, 198.  
Knowlton, F. H. 1909 B, 221, fig. 75.  
Miller, L. H. 1912 A, 78, 95, 96, 102, 114 (P. tharus).  
1921 A, 567 ("caracara").  
1921 C, 130.  
1922 A, 123 ("C. sp.").  
1923 A, 352 ("caracara").  
1925 A, 309, 324.  
1925 B, 99.  
1927 A, 156.  
Osborn, H. F. 1925 D, 541.  
Reichenow, A. 1913 A, 372.  
Ridgway, R. 1876 A, 457, pl. xxii.  
1887 A, 254.  
Shufeldt, R. W. 1909 A, 10, 27, fig. 14 (P. tharus); 379, figs. 53-55 (P. cheriway).  
Recent; Florida to Arizona and Lower California, south to Guiana and Ecuador:  
Pleistocene (Early); California.

**Polyborus sp. indet.**

Hay, O. P. 1927 D, 198. Pleistocene; California.

**FALCONINÆ Bonaparte.**

Bonaparte, C. L. 1831 A, 30.  
Adolphi, H. 1922 A, 111.  
A. O. U. 1910 A, 168.  
Barrows, W. B. 1885 A, 273.

Bonaparte, C. L. 1840 A, 261.  
Brandt, J. F. 1853 A, 185, 194.  
Coues, E. 1884 A, 531.  
Evans, A. H. 1899 A, 146, 173.

Fürbringer, M. 1888 A, 1294.  
 Pycraft, W. P. 1902 A, 315, 318.  
 Reichenow, A. 1913 A, 404.  
 Ridgway, R. 1875 A, 227, 229.  
     1876 A, 451.  
     1903 A, 510.  
 Shufeldt, R. W. 1909 A, 126, 374.

Stejneger, L. 1903 A, 629.  
 Suschkin, P. 1900 A, 272.  
     1900 B, 522.  
     1905 A.  
     1909 A, 126, 130, 131.  
 Wetmore and Miller 1926 A, 342.

FALCO Linnæus. Type *F. subbuteo* Linnæus.

*Linnæus, C.* 1758 A, 88.  
 Adolphi, H. 1922 A, 113.  
 Allen, J. A. 1893 B, 99.  
 A. O. U. 1910 A, 163.  
 Barrows, W. B. 1885 A, 309.  
 Beddard, F. E. 1898 A, 540.  
 Bittner, F. 1912 A, 3.  
 Blanchard, E. 1859 A, 34.  
 Bonsdorff, E. J. 1871 A, 305, pl. i.  
 Brandt, J. F. 1853 A, 195.  
 Bronn, H. G. 1848 A, 488.  
     1849 A, 700.  
 Chandler, A. C. 1916 C, 335.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 117, 250.  
 Diethelm, M. 1907 A, 20.  
 Döderlein, L. 1923 A, 142, 162.  
 Eyton, T. C. 1867 A, 3, pl. in, fig. 1.  
 Fürbringer, M. 1888 A, pls. iii, iv, vi, vii.  
 Gaupp, E. 1908 B, 528.  
 Gegenbaur, C. 1863 A, 471.  
 Giebel, C. G. 1855 B, 39.  
 Kessler, K. T. 1841 A, 487.  
 Knowlton, F. H. 1909 B, 212.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 66.  
 Leunis and Ludwig 1883 A, 432.  
 Lühder, W. 1871 A, 326.  
 Mackie, S. J. 1863 C, 106.  
 Magnan, A. 1922 A, 135, pls. i, ii, vii, xii, xiv;  
     text-fig. 2.  
 Magnus, H. 1871 A, 52.  
 Meckel, J. F. 1825 A.  
 Miller, L. H. 1925 B, 90.  
 Newton and Gadow 1896 A, 1067.  
 Noordenbos, W. 1905 B, 392.  
 Owen, R. 1868 B, 32, 60.  
 Pander and Alton 1838 A, 12, pl. iii.  
 Parker, W. K. 1875 A, 714.  
     1875 D, 130, 132, pls. xxiv, xxv.  
     1888 D, 478.  
 Pycraft, W. P. 1902 A, 280.  
 Reichenow, A. 1913 A, 407.  
 Ridgway, R. 1887 A, 224, 244, pls. lxxii, lxxiii.  
 Selenka, E. 1869 A, pl. ii, fig. 1; pl. xii, fig.  
     11; pl. xvi, fig. 8.  
 Shufeldt, R. W. 1909 A, 374.  
 Sieglbauer, F. 1911 A, 275.  
 Sippel, W. 1907 A, 492.  
 Sundevall, C. J. 1886 A, 401, 403.  
 Sushkin, P. P. 1899 A, 501.  
     1905 A.  
 Taschenberg, O. 1899 A, 4054.  
 Wagner, R. 1843 A.  
 Weitzel, A. 1865 A, 325.

*Falco columbarius* Linnæus.

*Linnæus, C.* 1758 A, 90.  
 A. O. U. 1910 A, 165.  
 Miller, L. H. 1921 C, 130.  
     1925 B, 99.  
 Ridgway, R. 1867 A, 250.  
     Recent; North America: Pleistocene (La  
     Brea); California.

*Falco falconellus* Shufeldt.

*Shufeldt, R. W.* 1915 D, 40, pl. xv, figs. 139-143  
 (F. falconella).  
 Lambrecht, K. 1921 A, 31 (F. falconella).  
     Middle Eocene (Bridger); Wyoming.

*Falco fusco-cærulescens* Vieillot.

*Vieillot, J.* 1817, Nouv. Dict. d'Hist. Nat., xi,  
 90.  
 Hay, O. P. 1927 D, 198.  
 Miller, L. H. 1921 A, 567 (F. fusco-cærulescens?).  
     1925 B, 99 (F. fusco-cærulescens).  
     Recent; California to Patagonia; Pleistocene  
     (La Brea); California.

*Falco mexicanus* Schlegel.

*Schlegel, H.* 1850, Abh. Geb. Zool., Hft. 3, 15.  
 A. O. U. 1910 A, 164.  
 Coues, E. 1884 A, 534.  
 Hay, O. P. 1927 D, 186.  
 Knowlton, F. H. 1909 A, 213.  
 Miller, L. H. 1925 B, 98.  
 Ridgway, R. 1887 A, 247.  
     Recent; British Columbia, Saskatchewan to  
     southern Mexico: Pleistocene (La Brea); Cali-  
     fornia.

*Falco peregrinus* Tunstall.

*Tunstall, M.* 1771, Orn. Brit., 1.  
 Adolphi, H. 1922 A, 112, fig. 37.  
 Barrows, W. B. 1885 A, 310, fig. 146.  
 Chandler, A. C. 1916 C, 335, pl. 23, fig. 38a.  
 Coues, E. 1884 A, 534, fig. 377.  
 Eyton, T. C. 1867 A, 1, pl. iii A; pl. ii, fig. 3;  
     pl. v, fig. 4; pl. vi, fig. 5; pl. vii, fig. 2.  
 Fürbringer, M. 1888 A, pls. iii, iv, vi.  
 Hay, O. P. 1927 D, 186, 198.  
 Heilmann, G. 1913 A, 16, fig. 10.  
 Kessler, K. T. 1841 A, 680.  
 Knowlton, F. H. 1909 B, 214.  
 Lebedinsky, N. G. 1913 B, 141, fig. 5.  
 Miller, L. H. 1911 C, 392, 399.  
     1912 A, 70, 71, 72, 78, 84, 95, 114.  
     1921 C, 130.  
     1922 A, 123.  
     1925 A, 223.

Osborn, H. F. 1925 D, 541.

Parker, W. K. 1875 A, 713.

Ridgway, R. 1887 A, 247.

Shufeldt, R. 1909 A, 126.

The remains found in California probably belong to *F. mexicanus*, according to Miller, L. H. 1921 C, 130.

Recent; Greater part of North America: Pleistocene (La Brea and caves); California.

### **Falco sparverius** (Linnæus).

Linnæus, C. 1758 A, 90

Adolphi, H. 1922 A, 118.

Coues, E. 1884 A, 537.

Hay, O. P. 1927 D, 186, 198, 216.

Knowlton, F. H. 1909 B, 219, fig. 74.

Miller, L. H. 1911 C, 392, 399.

1912 A, 71, 73, 78, 84, 95.

1922 A, 123.

1925 A, 324.

1925 B, 99.

Osborn, H. F. 1925 D, 541.

Pander and Alton 1838 A, 13.

Ridgway, R. 1887 A, 252.

Shufeldt, R. W. 1909 A, 374, fig. 28.

Recent; North America: Pleistocene (La Brea and caves); California.

### **Falco** sp. indet.

Hay, O. P. 1927 D, 186. Pleistocene; California.

Miller, L. H. 1925 B, 99. Pleistocene (La Brea); California.

## ÆGYPTIDÆ.

### NEOGYPS Miller. Type *N. errans* Miller, L. H.

Miller, L. H. 1916 C, 108.

Abel, O. 1926 B, 238 ("N." sp.).

Osborn, H. F. 1925 D, 541.

### **Neogyps errans** Miller, L. H.

Miller, L. H. 1916 C, 108, fig. 2.

Hay, O. P. 1927 D, 186.

Lambrecht, K. 1921 A, 30.

Miller, L. H. 1925 B, 102, fig. 20.

1927 A, 156.

Osborn, H. F. 1925 D, 541.

Pleistocene (La Brea); California.

### NEOPHRONTOPS Miller. Type *N. americanus* Miller.

Miller, L. H. 1916 C, 106.

Abel, O. 1926 B, 238 (N. sp.).

Osborn, H. F. 1925 D, 541.

### **Neophrontops americanus** Miller.

Miller, L. H. 1916 C, 106, fig. 1.

Hay, O. P. 1927 D, 186, 198.

Lambrecht, K. 1921 A, 30.

Miller, L. H. 1925 A, 309, 315, 323.

1925 B, 101, pl. v, figs. 4, 5; text-figs. 18, 19.

1927 A, 156.

Osborn, H. F. 1925 D, 541.

Wyman, L. E. 1922 A, 31, fig. 21.

Pleistocene (La Brea); California.

## Suborder GALLIFORMES Garrod.

Garrod, A. H. 1874 A, 116.

Unless otherwise indicated the writers, as quoted, use for this group the name Gallinæ.

Hay, O. P. 1902 A, 533.

Adolphi, H. 1922 A, 120.

Anderson, R. J. 1909 B, 745 (Gallinacæ).

Arlt, T. 1907 D, 655 (Galliformes).

1912 A, 686, 687 (Galliformes).

Beddard, F. E. 1898 A, 290 (Galli).

Beecker, A. 1903 A, 593 (Gallus).

Bonaparte, C. L. 1831 A, 33.

1832 A, 306.

1833 A, 1062.

Bonsdorff, E. J. 1871 A, 310 (Gallinacæ).

Braus, H. 1908 A, 386, figs. 1-3.

Carus, V. 1875 A, 317 (Rasores).

Chandler, A. C. 1914 B, 141 (Galli).

1916 C (Galliformes).

Clark, H. L. 1901 A, 377 ("galliform").

Cope, E. D. 1891 N, 58, 60.

Coues, E. 1884 A, 571.

Cutler, I. E. 1924 A, 144 ("fowls").

Cuvier, G. 1805 A.

Dabbene, R. 1910 A, 477 (Galliformes).

Du Toit, P. J. 1913 A (Gallus).

1914 A, 310 (Gallus).

Edgeworth, F. H. 1907 A, 511, figs. 1-17 (Gallus).

Evans, A. H. 1899 A, 186 (Galliformes).

Finn, F. 1894 A, 210.

1894 B, 454.

Foot, J. S. 1921 A, 7, pl. ii, fig. 13 (Gallus).

Forbes, W. A. 1881 A, 3.

Froiep, A. 1883 A, 177, pls. vii-ix; text-figs. 1-8.

1886 A, 137 ("hühner").

Fuchs, H. 1909 B, 132 (Phasianus, Tetrao).

Fürbringer, M. 1888 A, 1541, 1551, 1567 (Galliformes).

1902 B, 672, 677 (Galliformes).

Gadow, H. 1892 A, 243 (Galliformes).

1893 A, 164.

1910 B, 977.

Garrod, A. H. 1873 C, 33, 38.

Gaupp, E. 1913 A, 13, fig. 5 (Gallus).

Gegenbaur, C. 1863 A, 452 ("hühnchen").

1871 A, 165 (Alectoromorphæ).

Geoffroy St. Hilaire, E. F. 1807 E, 353 ("gallinacées").

Gervais, P. 1856 A, 11 ("gallinacées").

Heilmann, G. 1926 A, 205 ("gallinaceous birds").

Hill, C. 1899 A, 362, figs. 11-22 ("chick").

Hill, C. 1900 A, 421, pls. xxix, xxx.  
 Hoernes, R. 1886 A, 644 (Rasores).  
 Huxley, T. H. 1859 D, 394, 450, fig. 3 ("chick").  
 1867 C, 248, 255.  
 1868 C, 300.  
 Illiger, C. 1811 A, 257 (Gallinacei).  
 Kessler, K. T. 1841 A, 635.  
 Knopff, W. 1917 A, 51 (Gallus).  
 Knowlton, F. H. 1909 B, 263 (Galliformes).  
 Köstlin, O. 1844 A ("gallinaceen").  
 Kulczycki, W. 1901 A, 577 (Gallus).  
 Lambrecht, K. 1914 A, 66, 73.  
 Lebedinsky, N. G. 1913 A (Galliformes).  
 1917 A, 318, 324, figs. 3, 4 (Gallus).  
 1918 A, 38 (Galliformes).  
 Leunis and Ludwig 1883 A, 441 (Gallinacei).  
 L'Herminier, F. 1836 A, 111 ("gallinacés").  
 Linnæus, C. 1758 A, 82, 85.  
 Lippincott, W. A. 1920 A, 536, pl. i ("chicks").  
 Lühder, W. 1871 A, 324 (Gallinacei).  
 Lull, R. S. 1917 B, 337 (Galliformes).  
 Lydekker, R. 1879 A, 4, 26, pl. ii (Alectoromorphæ).  
 1891 A, 131.  
 Magnus, H. 1871 A ("hühner").  
 Marinelli, W. 1928 A, 155.  
 Meckel, J. F. 1825 A ("hühnervögel").  
 Miller, W. D. 1924 A, 2 ("gallinaceous birds").  
 Newton, A. 1885 A, 46 (Gallinæ).

Newton and Gadow 1896 A, 1068.  
 Owen, R. 1866 B, 10, 27, 32 (Gallinacei).  
 Parker, W. K. 1875 A, 699, 712, 723 (Alectoromorphæ).  
 1875 D, 99, pl. i ("fowl").  
 1888 D, 466 ("chick").  
 Pycraft, W. P. 1910 A, 50 (Galliformes).  
 Reichert, C. 1837 A, 121 ("hühner").  
 Ridgway, R. 1887 A, 184.  
 Slater, P. L. 1858 A.  
 Seebohm, H. 1888 A, 418, 422, 424.  
 Sharpe, R. B. 1891 A, 68.  
 Shufeldt, R. W. 1894 A, 23 (Galliformes).  
 1904 B, 852 (Galliformes).  
 1909 A, 374.  
 1915 C.  
 Steiner, H. 1916 A, 493 (Rasores).  
 1918 A, 356, 441 (Galliformes).  
 Strecker, C. 1887 A, 309 ("hühner").  
 Tonkoff, S. 1900 A, 296 ("hühner").  
 Vialleton, L. 1916 A, 6.  
 Wagner, R. 1843 A, 79.  
 Wallace, A. R. 1876 A, I, 494; II, 337, 340, 344.  
 Wertzel, A. 1865 A, 333, 345 ("hühnervögel").  
 Wetmore and Miller 1926 A, 342 (Galliformes).  
 Wray, R. S. 1887 A, 348.  
 Zittel and Lucas 1902 A, 276.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 400.

### *Superfamily GALLOIDÆ, new name.*

Hay, O. P. 1902 A, 533 (Alectoropodes).  
 Adolphi, H. 1922 A, 120 (Galli).  
 A. O. U. 1910 A, 134 (Phasiani).  
 Duméril, A. M. C. 1806 C, 54 (Alectrides).  
 Elliot, D. G. 1885 A, 197 (Gallini).  
 Evans, A. H. 1899 A, 190 (Galli).  
 Fürbringer, M. 1902 B, 677 (Alectornithes).  
 Gadow, H. 1892 A, 244 (Galli).  
 1893 A, 171 (Galli).  
 1910 B, 977 (Galli).  
 Hommes, J. H. 1924 A, 14, figs. 2, 4, 8-16 (Gallus).  
 Huxley, T. H. 1867 C, 275 (Alectropodes).  
 Illiger, C. 1811 A, 252 (Alectorides).

Jaekel, O. 1911 A, 175 (Galli).  
 Lubosch, W. 1923 A, 49, figs. 1-14 ("hündchen").  
 Merkel, F. 1809 A, tab. ii (Alectrides).  
 Newton and Gadow 1896 A, 1059 (Alectoromorphæ).  
 Proin, F. 1914 A, 643, pls. xxi-xxii; text-figs. 1-11 ("hühnchen").  
 Pycraft, W. P. 1910 A, 51 (Alectoropodes).  
 Rafinesque, C. S. 1815 A, 69 (Alectria).  
 Ridgway, R. 1887 A, 184 (Phasiani).  
 Sharpe, R. B. 1891 A, 68 (Phasiani).  
 Steiner, H. 1918 A, 357 (Galli).  
 Wetmore and Miller 1926 A, 342 (Galli, Phasianides).

### CRACIDÆ Vigors.

Vigors, N. A. 1825 A, 480.  
 A. O. U. 1910 A, 146.  
 Elliot, D. G. 1885 A, 232.  
 Gadow, H. 1910 B, 977.

Knowlton, F. H. 1909 B, 271.  
 Ridgway, R. 1887 A, 184, 207.  
 Wetmore, A. 1923 A, 488, 489.

### PENELOPINÆ Bonaparte.

Bonaparte, C. L. 1838 B, 118.  
 A. O. U. 1910 A, 146.  
 Elliot, D. G. 1885 A, 233.

Ridgway, R. 1887 A, 207 (Cracinæ).  
 Wetmore and Miller 1926 A, 342.

### ORTALIS Merrem. Type *Phasianus motmot* Linnæus.

Merrem, B. 1786, Avium Rar. Icones et Descr., II, 40.  
 A. O. U. 1910 A, 146.  
 Knowlton, F. H. 1909 B, 275.  
 Ridgway, R. 1887 A, 208, pl. xli.  
 Wetmore, A. 1923 A, 486.

### *Ortalis phengites* Wetmore.

Wetmore, A. 1923 A, 487, figs. 1, 2.  
 Matthew, W. D. 1924 C, 68.  
 Wetmore, A. 1928 A, 153.  
 Lower Pliocene (Upper Snake Creek); Nebraska.

## Superfamily GALLINULOIDIDÆ Lucas.

Hay, O. P. 1902 A, 535.  
Shufeldt, R. W. 1915 B, 633.

Wetmore, A. 1923 A, 488.

GALLINULOIDES Eastman. Type *G. wyomingensis* Eastman.

Hay, O. P. 1902 A, 535.  
Eastman, Gregory, Matthew 1917 A, 119.  
Fürbringer, M. 1902 B, 674.  
Shufeldt, R. W. 1915 B, 633 (*Palæobonasa* proposed).  
1915 D, 42.  
Zittel and Schlosser 1911 A, 324.  
1923 A, 400.

**Gallinuloides wyomingensis** Eastman.

Hay, O. P. 1902 A, 535.  
Andreas, A. 1901 C, 474.  
Lambrecht, K. 1916 C, 495 (*Gallinuloides*, *Palæobonasa*).  
1921 A, 80 (*Palæobonasa*).  
Shufeldt, R. W. 1915 A, 633 (*Palæobonasa*).  
1915 B, 619, figs. 1, 2.  
1915 D, 40.  
Wetmore, A. 1923 A, 488.  
1928 A, 151.  
Middle Eocene (Bridger); Wyoming.

## TETRAONIDÆ Vigors.

Vigors, N. A. 1825 A, 480.  
Hay, O. P. 1902 A, 534.  
Aeby, C. 1873 A, 701, pl. xii (Tetrao).  
Allen, J. A. 1871 A.  
Arlt, T. 1907 D, 685.  
1912 A, 710 (Tetraonidæ); 754 (Tetraoninæ).  
Bonaparte, C. L. 1838 B, 118 (Tetraonidæ, Tetraoninæ).  
Carus, V. 1875 A, 321.  
Chandler, A. C. 1916 C, 269.  
Coues, E. 1884 A, 577.  
Elliot, D. G. 1838 A, 198.  
Fürbringer, M. 1888 A.  
1902 B, 674.  
Gadow, H. 1893 A, 172.  
Garbowski, T. 1895 A, 449 (Tetrao).  
Gegenbaur, C. 1871 A, 166 (Tetrao).  
Hesse, H. 1907 A, 217.  
Huxley, T. H. 1868 C, 301 ("grouse type").

Knowlton, F. H. 1909 B, 280 (Tetraoninæ).  
Lebedinsky, N. G. 1913 A.  
Leunis and Ludwig 1883 A, 443.  
Lobley, J. L. 1908 A, 201, 206.  
Lühder, W. 1871 A, 330.  
Lydekker, R. 1891 A, 182 (Tetraonidæ).  
Magnus, H. 1871 A, 76.  
Newton and Gadow 1896 A, 391.  
Reichenow, A. 1913 A, 318.  
Ridgway, R. 1887 A, 184 (Tetraonidæ); 185 (Tetraoninæ).  
Shufeldt, R. W. 1904 B, 852.  
1909 A, 330 (Tetraonidæ, Tetraoninæ).  
1915 B, 632.  
Steiner, H. 1918 A, 357.  
Taschenberg, O. 1899 A, 4329.  
Wallace, A. R. 1876 A, II, 338.  
1894 A, 442.  
Weitzel, A. 1865 A, 334 (Tetrao).

DENDRAGAPUS Elliot. Type *Tetrao obscurus* Say.

Elliot, D. G. 1864, Proc. Acad. Nat. Sci., Phila., 23.  
A. O. U. 1910 A, 137.  
Knowlton, F. H. 1909 B, 286.  
Miller, L. H. 1912 A, 69.  
Ridgway, R. 1887 A, 186, 194, pl. lvii.

**Dendragapus obscurus** (Say).

Say, T. 1823, Long's Exped., II, 14 (Tetrao).  
Knowlton, F. H. 1909 B, 286.

Miller, L. H. 1911 C, 396, 400.  
1912 A, 71, 84, 113.

Recent; western United States: Pleistocene (Caves); California.

The remains found in the caves of northern California belong probably to *D. sierræ*.

**Dendragapus** sp. indet.

Miller, L. H. 1911 C, 397. Pleistocene; California.

BONASA Stephens. Type *Tetrao umbellus* Linnæus.

Stephens, J. F. 1819, Gen. Zool., xi, 298.  
Chandler, A. C. 1916 C, 266.  
Coues, E. 1884 A, 584.  
Knowlton, F. H. 1909 B, 289.  
Leunis and Ludwig 1883 A, 445.  
Newton and Gadow 1896 A, 394, 696.  
Ridgway, R. 1887 A, 186, 197, pl. lviii.

**Bonasa umbellus** (Linnæus).

Linnæus, C. 1766, Syst. Nat., ed. 12, I, 275 (Tetrao).  
Coues, E. 1884 A, 585, fig. 402.  
Knowlton, F. H. 1909 B, 289.

Miller, L. H. 1911 C, 397, 400.  
1912 A, 71, 113.

Peterson, O. A. 1926 A, 254.

Ridgway, R. 1887 A, 197.

Shufeldt, R. W. 1913 C, 299, pl. lv, figs. 19, 20; pl. lvi (This species?).

Wetmore, A. 1926, in Peterson, O. A. 1926 A, 254.

1927 B, 561.

Recent; Canada to Alaska, south to California, Colorado, Kansas, Tennessee: Pleistocene (Caves); California, Arkansas, Pennsylvania, Maryland.

**TYMPANUCHUS** Gloger. Type *Tetrao cupido* Linnæus.

Gloger, C. W. L. 1842, Hand- und Hilfsbuch, 396.

Hay, O. P. 1902 A, 534.

Foote, J. S. 1916 A, 61, pl. v.

1921 A, 8, pl. ii, fig. 14.

Fürbringer, M. 1888 A (Cupidonia).

Newton and Gadow 1896 A, 1086.

Ridgway, R. 1887 A, 185, 202, pl. lix.

Shufeldt, R. W. 1909 A, 381.

**Tympanuchus lulli** Shufeldt.

Shufeldt, R. W. 1915 D, 69, pl. xii, fig. 20.

Lambrecht, K. 1921 A, 79.

Pleistocene; New Jersey.

**Tympanuchus pallidicinctus** Ridgway.

Ridgway, R. 1873, Bull. Essex Inst., v, 199  
(Cupidonia cupido pallidicinctus).

Hay, O. P. 1902 A, 534.

A. O. U. 1910 A, 144.

Hay, O. P. 1927 D, 244.

Miller, L. H. 1912 A, 81, 113.

Ridgway, R. 1887 A, 203.

Shufeldt, R. W. 1909 A, 201.

1913 B, 155.

Recent; Great Plains: Pleistocene (Fossil Lake); Oregon.

**PEDICETES** Baird. Type *Tetrao phasianellus* Linnæus.

Baird, S. F. 1838, Rep. Expl. and Surv. R. R.

Pacif., ix, xxi, xlv, 619, 625.

Hay, O. P. 1902 A, 534 (Pediocætes).

Allen, J. A. 1893 B, 109, 130 (Pediocætes).

A. O. U. 1910 A, 144.

Knowlton, F. H. 1909 B, 289 (Pediocætes).

Ridgway, R. 1887 A, 185, 203 (Pediocætes).

Shufeldt, R. W. 1909 A, 378.

**Pediocetes lucasi** Shufeldt.

Hay, O. P. 1902 A, 534 (Pediocætes lucasi).

Lambrecht, K. 1921 A, 79 (Pediocætes).

Miller, L. H. 1912 A, 81, 113 (Pediocætes).

Shufeldt, R. W. 1913 B, 155 (Pediocætes).

Pleistocene (Fossil Lake); Oregon.

**Pediocetes nanus** Shufeldt.

Hay, O. P. 1902 A, 534 (Pediocætes).

1927 D, 244.

Lambrecht, K. 1921 A, 79 (Pediocætes).

Miller, L. H. 1912 A, 81, 113 (Pediocætes).

Shufeldt, R. W. 1913 B, 155 (Pediocætes).

Pleistocene (Fossil Lake); Oregon.

**Pediocetes phasianellus** (Linnæus).

Linnæus, C. 1758 A, 160 (Tetrao).

Hay, O. P. 1902 A, 534 (Pediocætes); 520  
(Ichthyornis lentus).

A. O. U. 1910 A, 144.

Cockerell, T. D. A. 1923 C, 1 (P.? lentus).

Hay, O. P. 1927 D, 244.

Lambrecht, K. 1921 A, 49 (Ichthyornis lentus).

Palmer, T. S. 1919 A, 657 (Ichthyornis lentus).

Shufeldt, R. W. 1909 A, 202, 203, 229, pl. vi;  
text-fig. 29.

1915 D, 20, 25 (Graculavus lentus); pl.

xv, fig. 127 (Ichthyornis lentus a syn.).

Recent; Alaska to northeastern California  
and Illinois: Pleistocene? Texas, Kansas.

**Pediocetes phasianellus columbianus**  
(Ord).

Ord, G. 1815, in Guthrie's Geog., 2d Amer.  
ed., 317 (Phasianus columbianus).

A. O. U. 1910 A, 144.

Miller, L. H. 1912 A, 81, 113 (Pediocætes).

Shufeldt, R. W. 1913 B, 175, pl. xxxix, figs.  
472, 473.

Recent; British Columbia to California and  
Colorado: Pleistocene (Fossil Lake); Oregon.

**CENTROCERCUS** Swainson. Type *Tetrao urophasianus* Bonaparte.

Swainson, W. 1831 (1832), Fauna Bor. Amer.,  
ii, 358, 496.

Allen, J. A. 1893 B, 109.

A. O. U. 1910 A, 145.

Knowlton, F. H. 1909 B, 289.

Ridgway, R. 1887 A, 185, 204.

**Centrocercus urophasianus** (Bonaparte).

Bonaparte, C. L. 1827, Zool. Journ., iii, 213.

A. O. U. 1910 A, 145.

Foote, J. S. 1916 A, 66, pl. v.

Shufeldt, R. W. 1913 A, 39.

1913 B, 125, 139, pl. ix, figs. 1, 4, 6, 7,  
9, 11-13; pl. xli.

1913 F, 307.

Recent; British Columbia to Nebraska and  
New Mexico: Pleistocene (Fossil Lake);  
Oregon.

**PALÆOTETRIX** Shufeldt. Type *P. gillii* Shufeldt.

Hay, O. P. 1902 A, 534.

Fürbringer, M. 1902 B, 674.

**Palæotetrix gillii** Shufeldt.

Hay, O. P. 1902 A, 534.

1927 D, 244.

Lambrecht, K. 1921 A, 79 (P. gillii).

Miller, L. H. 1912 A, 81, 113 (P. gillii).

Shufeldt, R. W. 1913 B, 155.

1913 C, 292.

Wetmore, A. 1928 A, 155.

Pleistocene (Fossil Lake); Oregon.

## PERDICIDÆ.

Wetmore and Miller 1926 A, 342.

## ODONTOPHORINÆ Gray.

Gray, G. R. 1846, Genera Birds, III, 512.

A. O. U. 1910 A, 134 (Odontophoridae).

Blanchard, E. 1857 A, 99 ("perdrix").

Carus, V. 1875 A, 321.

Coues, E. 1884 A, 576, 588.

Elliot, D. G. 1885 A, 205.

Huxley, T. H. 1868 C, 302, 313.

Knowlton, F. H. 1909 B, 293.

Newton and Gadow 1896 A, 188, 756.

Reichenow, A. 1913 A, 314 (Odontophoridae).

Wetmore and Miller 1926 A, 342.

COLINUS Goldfuss. Type *Tetrao virginianus* Linnaeus.

Goldfuss, G. A. 1820, Handb. Zool. II, 220.

A. O. U. 1910 A, 134.

Coues, E. 1884 A, 589 (Ortyx).

Knowlton, F. H. 1909 B, 226.

Reichenow, A. 1913 A, 315.

Ridgway, R. 1887 A, 185, 186, pl. lvi.

**Colinus eatoni** Shufeldt.

Shufeldt, R. W. 1915 D, 70, pl. xiii, fig. 103.

Lambrecht, K. 1921 A, 79.

Formation unrecorded; Kansas.

**Colinus virginianus** (Linnaeus).

Linnaeus, C. 1758 A, 161 (Tetrao).

A. O. U. 1910 A, 134.

Simpson, G. G. 1928 H, 3.

Recent; eastern North America from South Dakota to Maine, south to Gulf Coast: Pleistocene; Florida.

**Colinus** sp. indet.

Gadley, J. W. 1922 B, 120, pl. xxxv, fig. 11 (This genus?). Pliocene? (San Pedro Valley); Arizona.

Hay, O. P. 1927 D, 136. Pleistocene; Arizona. Wetmore, A. 1924 A, 10. Pliocene? (San Pedro Valley); Arizona.

OREORTYX Baird. Type *Ortyx picta* Douglas.

Baird, S. F. 1854 Rep. Expl. and Surv. R. R. Pacific, IX, 642.

A. O. U. 1910 A, 135.

Coues, E. 1884 A, 591 (Orortyx).

Elliot, D. G. 1885 A, 206.

Heilprin, A. 1887 A, 66.

Knowlton, F. H. 1909 B, 295.

Ridgway, R. 1887 A, 185, 190, pl. lvi.

**Oreortyx picta** (Douglas).

Douglas, D. 1829, Trans. Linn. Soc. Lond., xvi, pt. i, 143 (Ortyx).

A. O. U. 1910 A, 135.

Coues, E. 1884 A, 591 (Orortyx).

Hay, O. P. 1927 D, 216, 223.

Knowlton, F. H. 1909 B, 295.

Miller, L. H. 1911 C, 397, 400.

1912 A, 71, 73, 75, 84, 113.

Recent; Western Oregon, California, and northern Lower California: Pleistocene (Caves); California.

LOPHORTYX Bonaparte. Type *Tetrao californicus* Shaw.

Bonaparte, C. L. 1838, Geog. and Comp. List., 42.

A. O. U. 1910 A, 136.

Chandler, A. C. 1916 C, 266.

Coues, E. 1884 A, 591.

Elliot, D. G. 1885 A, 205.

Fürbringer, M. 1888 A, 161.

Knowlton, F. H. 1909 B, 295.

Miller, L. H. 1914 A, 38.

1925 A, 310, 321.

Newton and Gadow 1896 A, 756, 939.

Owen, R. 1866 B, 27.

**Lophortyx californica** (Shaw).

Shaw, G. 1798, Nat. Misc., IX, 345 (Tetrao).

Coues, E. 1884 A, 592, fig. 412.

Elliot, D. G. 1885 A, 205, fig. 96 (L. californicus).

Eyton, T. C. 1867 A, pl. xxii, fig. 1 (L. californicus).

Fürbringer, M. 1888 A, pl. vi.

Hay, O. P. 1927 D, 308.

Knowlton, F. H. 1909 B, 295, fig. 98.

Miller, L. H. 1911 C, 397, 400.

1912 A, 75, 84, 113.

1914 A, 36.

1922 A, 123.

1925 B, 79 (This species?).

1927 A, 156.

Osborn, H. F. 1925 D, 542.

Recent: Oregon to southern Lower California: Pleistocene; California.

**Lophortyx** sp. indet.

Miller, L. H. 1912 A, 112. Pleistocene (La Brea); California.

## PHASIANIDÆ Vigors.

Vigors, N. A. 1825 A, 480.

Hay, O. P. 1902 A, 534.

A. O. U. 1910 A, 387.

Ardt, T. 1907 D, 673.

1912 A, 710.

Blanchard, E. 1857 A, 97 ("faisans").



- Bonaparte, C. L. 1831 A, 33.  
1832 A, 307.  
Brauer, A. 1914 A, 283.  
Carus, V. 1875 A, 323.  
Chandler, A. C. 1916 C, 341.  
Dabbene, R. 1910 A, 52.  
Eimer, G. H. T. 1901 A, 229.  
Evans, A. H. 1899 A, 198 (Phasianidæ); 198,  
206 (Phasianinæ).  
Fürbringer, M. 1902 B, 674 (Gallidæ).  
Gadow, H. 1893 A, 172 (Phasianinæ).  
Heilprin, A. 1887 A, 95, 100.  
Hesse, H. 1907 A, 216.  
Huxley, T. H. 1867 A, 432, 443.  
1867 C, 251, 276.  
1868 C, 299.  
Knowlton, F. H. 1909 B, 276.  
Lambrecht, K. 1921 A, 78 (Gallidæ).  
Lebedinsky, N. G. 1913 A, 693.
- Leunis and Ludwig 1833 A, 447.  
Lobley, J. L. 1908 A, 201, 206.  
Lühder, W. 1871 A, 330.  
Lydekker, R. 1891 A, 135.  
Magnus, H. 1871 A, 61.  
Newton and Gadow 1896 A, 701.  
Reichenow, A. 1913 A, 283.  
Reynolds, S. H. 1897 A, 301, fig. 55 (Gallus).  
Ridgway, R. 1887 A, 184, 205.  
Seeböhm, H. 1888 A, 424.  
Shufeldt, R. W. 1904 B, 852.  
1909 A, 378.  
Steiner, H. 1918 A, 339 (Tetraonidæ); 357, 492  
(Gallidæ).  
Wallace, A. R. 1876 A, II, 339.  
1894 A, 442.  
Wetmore, A. 1923 A, 489.  
Wetmore and Miller 1926 A, 342.

## PHASIANINÆ Bonaparte.

- Bonaparte, C. L.* 1838 B, 118.  
Carus, V. 1875 A, 323.  
Fürbringer, M. 1888 A, 1255.
- Knowlton, F. H. 1909 B, 304.  
Reichenow, A. 1913 A, 297.  
Selenka, E. 1869 A, 58.

PHASIANUS Linnæus. Type *P. colchicus* Linnæus.

- Linnæus, C.* 1858 A, 158.  
Adolphi, H. 1922 A, 131.  
Bittner, F. 1912 A, 2.  
Bronn, H. G. 1849 A, 698.  
Cuvier, G. 1805 A.  
Eyton, T. C. 1867 A, 167, pl. iii H.  
Foote, J. S. 1916 A, 68, pl. vi.  
Gegenbaur, C. 1871 A, 167.  
Giebel, C. G. 1855 B, 36.  
Knowlton, F. H. 1909 B, 310.  
Köstlin, O. 1844 A (Fasianus).  
Lambrecht, K. 1914 A, 66.  
Mackie, S. J. 1863 C, 107.  
Magnus, H. 1871 A, 49.  
Miller, W. DeW. 1924 A, 5, fig. 1.  
Ridgway, R. 1887 A, 205.  
Weitzel, A. 1865 A, 333.
- Phasianus alfhildæ** Shufeldt.  
*Shufeldt, R. W.* 1915 D, 71, pl. xii, figs. 79,  
81, 85, 86.  
Lambrecht, K. 1921 A, 85.  
Middle Eocene (Bridger?); Wyoming.
- Phasianus americanus** Shufeldt.  
*Shufeldt, R. W.* 1915 D, 58, pl. xii, figs. 83, 84.  
Lambrecht, K. 1921 A, 84.  
Upper Oligocene (Middle John Day);  
Oregon.
- Phasianus mioceanus** Shufeldt.  
*Shufeldt, R. W.* 1915 D, 60, pl. xiii, figs. 94-  
96, 98.  
Lambrecht, K. 1921 A, 84 (P. mioceanus).  
Miocene; Nebraska.

PALÆOPHASIANUS Shufeldt. Type *P. meleagroides* Shufeldt.

- Shufeldt, R. W.* 1913 C, 291.  
Zittel and Schlosser 1923 A, 400.
- Palæophasianus meleagroides** Shufeldt.  
*Shufeldt, R. W.* 1913 C, 291, pl. lviii, figs.  
81-84, 86-88.
- Lambrecht, K. 1921 A, 84.  
*Shufeldt, R. W.* 1915 D, 50, 76, pl. ii, fig. 20.  
Lower and Middle Eocene (Wasatch,  
Bridger); Wyoming.

## MELEAGRIDÆ.

- Hay, O. P. 1902 A, 534 (Phasianidæ).  
A. O. U. 1910 A, 145.  
Ardt, T. 1912 A, 754.  
Blanchard, E. 1857 A, 97 ("dindons").  
Chandler, A. C. 1916 C, 340.  
Elliot, D. G. 1885 A, 222 (Meleagrines).  
Evans, A. H. 1899 A, 198, 206.  
Fürbringer, M. 1888 A, 1253 (Meleagrines).  
Gadow, H. 1893 A, 172.  
Gray, G. R. 1840 A, 60 (Meleagrines).  
Hay, O. P. 1923 A, 312.
- Howard, H. 1927 A, 1, 27.  
Huxley, T. H. 1868 C, 299, 314.  
Knowlton, F. H. 1909 B, 276.  
Ridgway, R. 1887 A, 205.  
Shufeldt, R. W. 1904 B, 852.  
1913 H, 97.  
1914 B, 3.  
Wallace, A. R. 1876 A, II, 340.  
Wetmore, A. 1923 A, 489.  
Wetmore and Miller 1926 A, 342.

AGRIOCHARIS Chapman. Type *A. ocellata* (Temminck).

- Chapman, F. M. 1896, Bull. Amer. Mus. Nat. Hist., viii, 288.  
 Abel, O. 1926 B, 238.  
 Frost, F. H. 1927 A, 57.  
 Howard, H. 1927 A, 1-30, pls. i-xiii.  
 Lambrecht, K. 1921 A, 66.  
 Miller, L. H. 1914 C, 130.

- Shufeldt, R. W. 1914 B, 1-48, pls. i-vi, ix-xiv.  
 Wetmore, A. 1924 A, 2, 8, 9.

**Agriocharis** sp. indet.

- Wetmore, A. 1924 A, 2, 8, fig. 5. Pliocene?  
 (San Pedro Valley); Arizona.

PARAPAVO Miller. Type *Pavo californicus* Miller.

- Miller, L. H. 1916 A, 96.

The following citations, unless otherwise indicated, concern the genus *Pavo*.

- Arlt, T. 1911 A, 214 ("pfau").  
 Beddard, F. E. 1898 A, 544.  
 Blanchard, E. 1857 A, 96 ("paons").  
 Dabbene, R. 1910 A, 88, fig. 58.  
 Eimer, G. H. T. 1901 A, 239.  
 Evans, A. H. 1899 A, 206.  
 Foote, J. S. 1916 A, 64, pl. v.  
 Howard, H. 1927 A, 1-30.  
 Kessler, K. T. 1841 A, 638.  
 Lambrecht, K. 1916 C, 498.  
 Lydekker, R. 1910 F, 667 (Pavo).  
 Meckel, J. F. 1825 A ("pfau").  
 Merriam, J. C. 1909 C, 12 ("peacock").  
 1915 G, 98 (Pavo).  
 Miller, L. H. 1912 A, 110.  
 1921 B, 263 (Parapavo).  
 1925 B, 66.  
 Owen, R. 1866 A, 27, 74, 81.  
 Selenka, E. 1869 A, pl. xiii, fig. 4 (Pavo).  
 Shufeldt, R. W. 1909 A, 172.  
 Wagner, R. 1843 A ("pfau").  
 Wetmore, A. 1924 A, 9.  
 Williston, S. W. 1910 G, 596 ("peacock").  
 Zittel and Schlosser 1923 A, 400 (Parapavo).

**Parapavo californicus** Miller, L. H.

- Miller, L. H. 1909 A, 285, pl. xxv (Pavo).  
 Abel, O. 1912 F, 22 (Pavo).  
 1926 B, 238.  
 A. O. U. 1910 A, 388 (Pavo).  
 Frost, F. H. 1927 A, 57.  
 Gilbert, J. Z. 1910 B, 24 ("peacock").  
 Hay, O. P. 1927 D, 186.  
 Howard, H. 1927 A, 1-30, pls. i-xiii.  
 Lambrecht, K. 1921 A, 85.  
 Merriam, J. C. 1914 B, 7 ("peacock").  
 Miller, L. H. 1910 C, 11 (Pavo).  
 1912 A, 78, 97, 113 (Pavo).  
 1916 A, 89, 96, fig. 1.  
 1916 E, 171 (Pavo).  
 1921 C, 130.  
 1922 A, 123 ("Parapavo").  
 1923 A, 352 ("peacock").  
 1925 A, 310, 321 ("Parapavo").  
 1925 B, 80, pl. vi; text-figs. 6, 7.  
 1927 A, 156.  
 Osborn, H. F. 1910 B, 473 (Pavo).  
 1925 D, 542.  
 Swarth, H. S. 1915 A, 30 (Pavo).  
 Wetmore, A. 1928 A, 157.  
 Wyman, L. E. 1922 A, 31 (Pavo).  
 Pleistocene (La Brea); California.

MELEAGRIS Linnæus. Type *M. gallopavo* Linnæus.

- Hay, O. P. 1902 A, 534.  
 Abel, O. 1912 F, 335.  
 Aebly, C. 1873 A, 702.  
 Allen, J. A. 1893 B, 99, 109.  
 Beddard, F. E. 1898 A, 542.  
 Bignon, F. 1889 A.  
 Carus and Engelmann 1861 A, 1767.  
 Chandler, A. C. 1916 C, 341.  
 Cuvier, G. 1805 A.  
 Eaton, G. F. 1910 F, 20, pl. ix, figs. 3, 4.  
 Eimer, G. H. T. 1901 A, 239.  
 Engelmann, O. 1910 A, 487.  
 Evans, A. H. 1899 A, 206.  
 Foote, J. S. 1921 A, 6, pl. i, fig. 9.  
 Fürbringer, M. 1888 A, pls. ii-iv, vi.  
 1902 B, 674.  
 Gegenbaur, C. 1871 A, 166.  
 Giebel, C. G. 1855 B, 35 ("truthahn").  
 Harting, P. 1866 A, 24.  
 Heilmann, G. 1913<sup>B</sup>, 78, fig. 105.  
 Heilprin, A. 1887 A, 66.  
 Howard, H. 1927 A, 1-30.  
 Kessler, K. T. 1841 A, 638.  
 Knowlton, F. H. 1909 B, 278.  
 Leunis and Ludwig 1883 A, 453.  
 Lohley, J. L. 1908 A, 197, 214.  
 Meckel, J. F. 1825 A ("trathahn").

- Miller, L. H. 1912 A, 110.  
 1916 A, 89, 95.  
 1925 B, 67.  
 Newton and Gadow 1896 A, 1074.  
 Norsa, E. 1895 A, 234.  
 Owen, R. 1866 B, 27.  
 1868 A, 892.  
 Prein, F. 1914 A, 678.  
 Reichenow, A. 1913 A, 304.  
 Ridgway, R. 1887 A, 205, 206, pl. lxi.  
 Scharff, R. F. 1911 A, 159.  
 Selenka, E. 1869 A, 62.  
 Shufeldt, R. W. 1887 A, 208.  
 1909 A, 377.  
 1913 H, 94.  
 1914 B, 2.  
 Sippel, W. 1907 A, 505, fig. 7.  
 Taschenberg, O. 1899 A, 4145.  
 Wallace, A. R. 1876 A, 1, 163.  
 Weitzel, A. 1865 A, 334.  
 Wetmore, A. 1924 A, 9.

**Meleagris antiqua** Marsh.

- Hay, O. P. 1902 A, 534 (M. antiquus).  
 A. O. U. 1910 A, 388.  
 Lambrecht, K. 1921 A, 78.  
 Miller, L. H. 1916 A, 95.

Shufeldt, R. W. 1913 A, 30, pl. iii, figs. 1, 2.  
1913 H, 94, figs. 1, 2.  
1915 D, 66.  
Oligocene; (White River); Oregon.

**Meleagris celer Marsh.**

Hay, O. P. 1902 A, 534.  
A. O. U. 1910 A, 388.  
Lambrecht, K. 1921 A, 79.  
Miller, L. H. 1916 A, 95.  
Shufeldt, R. W. 1913 A, 30, pl. iii, figs. 3-5.  
1913 H, 94, figs. 3-5.  
1915 D, 66.  
Pleistocene; New Jersey.

**Meleagris gallopavo silvestris Vieillot.**

Vieillot, L. J. P. 1817, *Nouv. Dict. d'Hist. Nat.*, ix, 447 (M. silvestris).  
A. O. U. 1910 A, 145.  
Brown, B. 1908 A, 206 (M. gallopavo?).  
Coues, E. 1884 A, 576 (M. gallopavo).  
Eyton, T. C. 1867 A, 171 (M. gallopavo).  
Foote, J. S. 1916 A, 68, pl. vi.  
Frost, F. H. 1927 A, 57 (M. gallopavo).  
Hay, O. P. 1923 A, 310, 311.  
1924 D, 252 (This species?).  
Howard, H. 1927 A, 1-30, pls. i-xiii (M. gallopavo).  
Huxley, T. H. 1868 C, 300, fig. 5.  
Knowlton, F. H. 1909 B, 278.  
Leidy, J. 1889 H, 19 (M. gallopavo).  
McIlhenny, E. A. 1913 A, 1-9, 146, 209, with figs. ("wild turkey").  
Matthew, W. D. 1925 A, 97.  
Ridgway, R. 1887 A, 207 (M. gallopavo).  
Shufeldt, R. W. 1887 A, 208, figs. 1-7 (M. gallopavo).  
1909 A, 210, 213, 215, figs. 31-36.  
1913 A, 33.  
1913 C, 299, pl. lviii, figs. 79, 80, 85; pl. lix.  
1914 B, 25, pls. i-ix.

Shufeldt, R. W. 1918 A, 358 (M. gallopavo).  
Recent; Great Plains to southern Maine, South Dakota to the Gulf of Mexico: Pleistocene; Florida, Arkansas.

**Meleagris richmondi Shufeldt.**

Shufeldt, R. W. 1915 D, 67, pl. ii, fig. 19.

Hay, O. P. 1927 D, 309.  
Lambrecht, K. 1921 A, 78.  
Pleistocene; California.

**Meleagris superba Cope.**

Hay, O. P. 1902 A, 534 (M. superbus).  
A. O. U. 1910 A, 388.  
Baker, F. C. 1920 A, 208, 213, 394 (M. superbus).  
Cope, E. D. 1873 FF, 8.  
Hay, O. P. 1923 A, 312 (M. superbus, M. altus).  
Lambrecht, K. 1921 A, 79.  
Miller, L. H. 1916 A, 95.  
Peterson, O. A. 1926 A, 254, pl. xvii, figs. 1-10.  
Shufeldt, R. W. 1913 A, 30.  
1913 H, 94.  
1915 D, 66, pl. x, figs. 71-73; pl. xi, figs. 74-77.  
Pleistocene; New Jersey.

**Meleagris sp. indet.**

Hay, O. P. 1902 A, 534.  
1923 A, 321. Pleistocene (Sangamon); Pennsylvania.  
1927 D, 186, 223. Pleistocene; California.  
Lambrecht, K. 1921 A, 79.  
Mercer, H. C. 1894 A, 98 ("wild turkey").  
Pleistocene; Pennsylvania.  
Miller, L. H. 1911 C, 396, 400. Potter Creek Cave; California.  
Osborn, H. F. 1925 D, 542. Pleistocene (La Brea); California.

**Suborder GRUIFORMES.**

Hay, O. P. 1902 A, 527 (Grallæ, in part).  
Abel, O. 1919 A, 705.  
Adolphi, H. 1922 A, 136.  
Ardt, T. 1907 D, 656.  
Blainville, H. M. D. 1821 A, 208 (Grallæ, in part).  
Bonaparte, C. L. 1840 A, 28 (Grallæ, in part).  
Burckhardt, R. 1902 A, 513.  
Carus, V. 1875 A, 331 (Grallæ, in part).  
Cope, E. D. 1891 N, 58, 60 (Grallæ, in part).  
Coues, E. 1884 A, 666, 669.  
Cuvier, G. 1805 A (Grallæ, in part).  
Dabbene, R. 1910 A, 477.  
Duméril, A. M. C. 1806 A, 58 (Grallæ, in part).  
Evans, A. H. 1899 A, 243.  
Fürbringer, M. 1888 A (Geranomorphæ, Gruiformes).  
1902 B, 656, 669.  
Gadow, H. 1893 A, 178.  
1910 B, 977.  
Hoernes, R. 1886 A, 642 (Grallæ, in part).  
Huxley, T. H. 1867 C, 273 (Geranomorphæ).  
Joleaud, L. 1920 A, 496.  
Knowlton, F. H. 1909 B, 321.

Lambrecht, K. 1914 A, 67, 73.  
Leunis and Ludwig 1883 A, 458 (Grallæ, in part).  
Linnæus, C. 1758 A, 139 (Grallæ, in part).  
Lobley, J. L. 1908 A, 198 (Grallæ, in part).  
Lühder, W. 1871 A, 324 (Grallatores).  
Lull, R. S. 1917 B, 337.  
Lydekker, R. 1879 A, 26 (Geranomorphæ).  
Meckel, J. F. 1825 A ("grallæ").  
Newton and Gadow 1896 A, 1068 (Geranomorphæ).  
Parker, W. K. 1875 A, 699 (Geranomorphæ).  
Pycraft, W. P. 1910 A, 52, 448.  
Seeborn, H. 1888 A, 416, 422, 427 (Grallæ, in part).  
Selenka, E. 1869 A (Grallæ, in part).  
Sharpe, R. B. 1891 A, 79.  
Shufeldt, R. W. 1894 A, 22 (Grallæ, in part).  
1909 A, 227; 252 (Grallæ, in part).  
Steiner, H. 1916 A, 499.  
1918 A, 347, 441, 490.  
Wagner, R. 1843 A, 79 (Grallæ, in part).  
Wallace, A. R. 1876 A, i, 494; ii, 351-362 (Grallæ, in part).

Wetmore, A. 1927 A, 11.  
Wetmore and Miller 1926 A, 342 (Megalornithiformes).

Zittel and Lucas 1902 A, 273 (Grallæ, in part).  
Zittel and Schlosser 1911 A, 322 (Grallæ, in part).

*Superfamily GRUOIDÆ, new name.*

Hay, O. P. 1902 A, 527 (Gruoidea).  
Beddard, F. E. 1898 A, 366 (Grues).  
Fürbringer, M. 1902 B, 638 (Grues).  
Lydekker, R. 1891 A, 160 (Fulcalariæ, Alektorides).

Sharpe, R. B. 1891 A, 74 (Grues).  
Shufeldt, R. W. 1894 A, 33 (Gruioidea).  
1904 B, 851 (Gruoidea).

*GRUIDÆ Vigors.*

Vigors, N. A. 1825 A, 488.  
Hay, O. P. 1902 A, 527.  
Abel, O. 1926 B, 239 ("kraniche").  
Adolphi, H. 1922 A, 143.  
Ardt, T. 1907 D, 656.  
1912 A, 710, 754.  
Beddard, F. E. 1898 A, 366.  
Blatschke, F. 1904 A, 150 ("kraniche").  
Bonaparte, C. L. 1831 A, 24 (Gruinæ).  
1832 A, 308 (Gruinæ).  
Burckhardt, R. 1902 A, 513, 517.  
Carus, V. 1875 A, 342.  
Chandler, A. C. 1914 B, 141 (Grues).  
1916 C.  
Evans, A. H. 1899 A, 251.  
Forbes, W. A. 1881 A, 4.  
Fürbringer, M. 1902 B, 656, 669.  
Gadow, H. 1893 A, 184.  
Garrod, A. H. 1873 C, 37.  
1873 D, 640.  
1874 A, 117.  
Hesse, H. 1907 A, 210.  
Huxley, T. H. 1867 A, 430 ("cranes").  
1867 C, 275 ("cranes").  
1868 C, 314, 317.

Knowlton, F. H. 1909 B, 327.  
Lambrecht, K. 1914 A, 67.  
Lebedinsky, N. G. 1913 A.  
Leunis and Ludwig 1883 A, 477.  
Lobley, J. L. 1908 A, 202, 207.  
Lühder, W. 1871 A, 336 (Grues).  
Lydekker, R. 1891 A, 160.  
Martin, W. 1835 A, 156 ("cranes").  
Mitchell, P. C. 1915 A, 413 ("cranes").  
Parker, W. K. 1869 A, 503 ("cranes").  
1888 D, 467, 473.  
Pycraft, W. P. 1902 A, 311 ("cranes").  
1910 A, 52 ("cranes").  
Reichenow, A. 1913 A, 227.  
Ridgway, R. 1887 A, 134.  
Seeböhm, H. 1883 A, 419, 429.  
Shufeldt, R. W. 1894 A, 22.  
1904 B, 851.  
1915 C.  
Steiner, H. 1916 A, 499 (Gruinæ).  
1918 A, 348, 441, 492.  
Taschenberg, O. 1890 A, 4092.  
Wallace, A. R. 1876 A, 11, 356.  
Wetmore, A. 1927 A, 11.

*GRUINÆ Bonaparte.*

Bonaparte, C. L. 1831 A, 34.  
Knowlton, F. H. 1909 B, 328.

Wetmore and Miller 1926 A, 342 (Megalornithinæ).

*GRUS Pallas. Type Ardea grus Linnæus.*

Pallas, P. S. 1766, Misc. Zool., 66.  
Hay, O. P. 1902 A, 527.  
Adolphi, H. 1922 A, 143, fig. 46.  
Allen, J. A. 1893 B, 99.  
Ardt, T. 1907 D, 210, 213.  
Beddard, F. E. 1898 A, 540.  
Bignon, F. 1889 A, 300.  
Bonsdorff, E. J. 1871 A, 311, pl. ii.  
Chandler, A. C. 1916 C, 273, 350.  
Cuvier, G. 1805 A.  
Dabbene, R. 1910 A, 477.  
Eimer, G. H. T. 1901 A, 232.  
Evans, A. H. 1899 A, 254.  
Fürbringer, M. 1888 A, pls. ii-iv, vi.  
Garrod, A. H. 1873 C, 36.  
1876 A, 275.  
Gegenbaur, C. 1871 A, 179.  
Giebel, C. G. 1855 B, 30 ("kranich").  
Gray, G. R. 1841, List of genera of birds, 85 (Megalornis).  
Harting, P. 1866 A, 24.  
Heilprin, A. 1887 A, 332, 333 ("crane").  
Hesse, H. 1907 A, 210, pl. vii, fig. 3.  
Kessler, K. T. 1841 A, 650, 686.

Knowlton, F. H. 1909 B, 329.  
Lühder, W. 1871 A, 325.  
Magnan, A. 1922 A, 131, pl. i (Megalornis).  
Magnus, H. 1871 A, 24.  
Meckel, J. F. 1825 A.  
Mitchell, P. C. 1915 A, 421 (Grus).  
Newton and Gadow 1896 A, 1069.  
Owen, R. 1866 B, figs. 99, 100 ("crane").  
1868 A, 882.  
Pallas, P. S. 1766, Misc. Zool., 527.  
Peters, J. L. 1925 A, 120.  
Reichenow, A. 1913 A, 228.  
Ridgway, R. 1887 A, 134, pl. xxxix.  
Shufeldt, R. W. 1895 A, 21, fig. 3.  
1915 C, 740.  
Sundevall, C. J. 1886 A, 401.  
Virchow, H. 1918 A, 105, figs. 1-11.  
Wagner, R. 1843 A ("kraniche").  
Weitzel, A. 1865 A, 337.

*Grus americanus (Linnæus).*

Linnæus, C. 1758 A, 142 (Ardea).  
A. O. U. 1910 A, 100.  
Hay, O. P. 1927 D, 150, 186.

Le Conte, J. 1882 B, 9 (This species?).  
 Louderback, G. D. 1907 A, 212 ("crane"?).  
 Miller, L. H. 1921 C, 130.  
     1925 B, 77.  
     1928 A, 120.  
 Stejneger, L. 1885 A, 123, fig. 59.  
     Recent; North America: Pleistocene (Early);  
     California.

### **Grus canadensis (Linnæus).**

Linnæus, C. 1758 A, 141 (Ardea).  
 Chandler, A. C. 1916 C, 348, pl. xxvi, fig. 50.  
 Hay, O. P. 1927 D, 186 (M. canadensis, M.  
   minor).  
 Knowlton, F. H. 1909 B, 332.  
 Lambrecht, K. 1921 A, 65 (G. minor).  
 Merriam, J. C. 1909 C, 12, fig. ("crane").  
 Miller, L. H. 1910 A, 448 (G. canadensis); 446,  
   fig. 1 (G. minor).  
     1912 A, 78, 113 (G. canadensis, G. minor).  
     1925 B, 76 (Grus canadensis, G. minor).  
     1928 A, 120.  
 Osborn, H. F. 1925 D, 542.  
 Shufeldt, R. W. 1894 A, 31, fig. 3.  
 Wetmore, A. 1928 C, 1 (Megalornis).  
     Recent; North America: Pleistocene (La  
     Brea, McKittrick); California.

### **Grus marshi Shufeldt.**

Shufeldt, R. W. 1915 D, 41, pl. xv, figs. 144-  
 147.

Lambrecht, K. 1921 A, 64.  
     Middle Eocene (Bridger); Wyoming.

### **Grus mexicanus (Müller).**

Müller, P. L. S. Natursyst. Suppl., 1776, 110  
 (Ardea).  
 Hay, O. P. 1902 A, 527 (Grus haydeni).  
 Lambrecht, K. 1921 A, 64 (Grus haydeni).  
 Peters, J. L. 1925 A, 120-122 (M. canadensis  
   pratensis).  
 Shufeldt, R. W. 1915 D, 41, 65, 76, 77, pl. ii,  
   fig. 21; pl. viii, fig. 67 (Grus haydeni).  
 A. O. U. 1910 A, 100.  
 Wetmore, A. 1928 A, 154 ("sandhill crane").  
     Recent; southern part of United States:  
     Pliocene (Upper Snake Creek); Nebraska.

### **Grus prentici (Loomis).**

Loomis, F. B. 1906 B, 481 (Gallinuloides).  
 Lambrecht, K. 1921 A, 64.  
 Loomis, F. B. 1907 B, 356 (Gallinuloides).  
 Shufeldt, R. W. 1915 D, 42.  
     Lower Eocene (Wasatch); Wyoming.

### **Grus proavus Marsh.**

Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1921 A, 65.  
 Miller, L. H. 1910 A, 448 (G. parvus).  
 Shufeldt, R. W. 1915 D, 5, 41, 65, 77.  
     Pleistocene; New Jersey.

## **ALETORNIS Marsh. Type *A. nobilis* Marsh.**

Hay, O. P. 1902 A, 527.  
 Shufeldt, R. W. 1915 D, 28.  
 Zittel and Schlosser 1911 A, 322.  
     1923 A, 399.

### **Aletornis bellus Marsh.**

Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1921 A, 51 (Tringa).  
 Shufeldt, R. W. 1915 D, 29, pl. vi, fig. 46  
 (Aletornis); 76 (Tringa?).  
     Middle Eocene (Bridger); Wyoming.

### **Aletornis gracilis Marsh.**

Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1921 A, 53 (Philohela).  
 Shufeldt, R. W. 1915 D, 30, 76, pl. vi, fig. 45  
 (To Philohela?).  
     Middle Eocene (Bridger); Wyoming.

### **Aletornis nobilis Marsh.**

Hay, O. P. 1902 A, 528.  
 Lambrecht, K. 1921 A, 64 (Grus).  
 Shufeldt, R. W. 1915 D, 30, 76, pl. ii, fig. 15;  
   pl. vi, fig. 43 (To Grus).  
     Middle Eocene (Bridger); Wyoming.

### **Aletornis pernix Marsh.**

Hay, O. P. 1902 A, 528.  
 Lambrecht, K. 1921 A, 63.  
 Shufeldt, R. W. 1915 D, 31, 77, pl. vi, fig. 47.  
     Middle Eocene (Bridger); Wyoming.

### **Aletornis venustus Marsh.**

Hay, O. P. 1902 A, 528.  
 Lambrecht, K. 1921 A, 68 (Fulica).  
 Shufeldt, R. W. 1915 D, 31, 76, pl. vi, fig. 41  
 (To Fulica?).  
     Middle Eocene (Bridger); Wyoming.

## **ARAMIDÆ.**

A. O. U. 1910 A, 101.  
 Coues, E. 1884 A, 667.  
 Fürbringer, M. 1888 A, 1187-1196; 1201-1203.  
 Garrod, A. H. 1876 A, 275, 3 figs. (Aramus).  
 Knowlton, F. H. 1909 B, 336 (Araminæ).

Ridgway, R. 1887 A, 134, 135.  
 Shufeldt, R. W. 1894 A, 23, 25, 26, 29, 33.  
 Stejneger, L. 1885 A, 127.  
 Wetmore, A. 1926 A, 1.

## **ARAMORNIS Wetmore. Type *A. longurio* Wetmore.**

Wetmore, A. 1926 A, 1.  
     1928 C, 5.

### **Aramornis longurio Wetmore.**

Wetmore, A. 1926 A, 1, figs. 1-4.  
     1926 E, 526 ("limpkn").  
     1928 A, 153.  
     Middle Miocene (Sheep Creek); Nebraska.

## Suborder RALLIFORMES.

Coues, E. 1834 A, 669.  
 Dabbene, R. 1910 A, 487.  
 Fürbringer, M. 1888 A, 1541, 1551, 1556.  
 1902 B, 664, 669.

Shufeldt, R. W. 1894 A, 25.  
 1904 B, 852.  
 1915 C, 731.

*Superfamily RALLOIDÆ, new form.*

Shufeldt, R. W. 1894 A, 33 (Ralloidea).  
 1904 B, 852 (Ralloidea).

Wetmore and Miller 1926 A, 342 (Rallides).

## RALLIDÆ Vigors.

Vigors, N. A. 1825 A, 488.  
 Hay, O. P. 1902 A, 528.  
 Adolphi, H. 1922 A, 136.  
 Allen, J. A. 1871 A.  
 Arldt, T. 1907 D, 878.  
 1912 A, 686, 687, 710, 754.  
 Beddard, F. E. 1898 A, 323.  
 Bonaparte, C. L. 1831 A, 34.  
 1832 A, 309 (Macrodaetyli, Rallidæ).  
 Brandt, J. F. 1840 A, 197.  
 Burckhardt, R. 1902 A, 513 (Ralli).  
 Carus, V. 1875 A, 339.  
 Chandler, A. C. 1916 C, 350, 391.  
 Cuvier, G. 1805 A ("rales").  
 Dabbene, R. 1910 A, 487.  
 Evans, A. H. 1899 A, 243.  
 Fürbringer, M. 1902 B, 665, 669.  
 Gadow, H. 1893 A, 182.  
 Garrod, A. H. 1873 C, 38.  
 1873 D, 640.  
 1874 A, 116, 121.  
 Gegenbaur, C. 1871 A, 186 ("ralliden").  
 Heilmann, G. 1915 A, 97.  
 Hesse, H. 1907 A, 210.  
 Hilzheimer, M. 1913 A, 517.  
 Hoernes, R. 1886 A, 643.  
 Huxley, T. H. 1867 A, 430 ("rails").

Huxley, T. H. 1867 C, 274 ("rails").  
 Knowlton, F. H. 1909 B, 321.  
 Lambrecht, K. 1914 A, 67.  
 Lebedinsky, N. G. 1913 A.  
 Leunis and Ludwig 1883 A, 473.  
 Lobley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 324.  
 Lydekker, R. 1891 A, 144.  
 Magnus, H. 1871 A.  
 Newton and Gadow 1896 A, 1080 (Rallus).  
 Owen, R. 1866 B, 26 ("rails").  
 Parker, W. K. 1869 A, 504 ("rails").  
 1890 A, 57.  
 Pycraft, W. P. 1900 C, 1019 ("rails").  
 1910 A, 52, 444 ("rails").  
 Reichenow, A. 1913 A, 201.  
 Ridgway, R. 1887 A, 134, 136.  
 Seebohm, H. 1888 A, 418, 429.  
 Shufeldt, R. W. 1894 A, 21.  
 1904 B, 852.  
 1915 C.  
 Steiner, H. 1918 A, 348, 440.  
 Taschenberg, O. 1899 A, 4264.  
 Wallace, A. R. 1876 A, II, 351.  
 Weitzel, A. 1865 A, 338 (Rallus).  
 Wetmore, A. 1927 A, 11.  
 Wetmore and Miller 1926 A, 342.

## FULICINÆ.

A. O. U. 1910 A, 106.  
 Coues, E. 1834 A, 676.  
 Reichenow, A. 1913 A, 216.

Shufeldt, R. W. 1894 A, 25.  
 Wetmore and Miller 1926 A, 342.

FULICA Linnæus. Type *F. atra* Linnæus.

Linnæus, C. 1758 A, 152.  
 Hay, O. P. 1902 A, 528.  
 Adolphi, H. 1922 A, 141.  
 Allen, J. A. 1893 B, 99.  
 Beddard, F. E. 1898 A, 540.  
 Bittner, F. 1912 A, 5.  
 Brandt, J. F. 1840 A, 174, 197, 200, 202, pl. xi,  
 figs. 1-7.  
 Bronn, H. G. 1848 A, 506.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 476.  
 Diethelm, M. 1907 A, 41.  
 Eimer, G. H. T. 1901 A, 207.  
 Evans, A. H. 1899 A, 250.  
 Eyton, T. C. 1867 A, 201.  
 Fürbringer, M. 1888 A, pls. ii, vi, vii.  
 Gegenbaur, C. 1871 A, 186.  
 Heilmann, G. 1926 A, 97, fig. 79.  
 Hesse, H. 1907 A, 211, pl. x, fig. 14.  
 Hommes, J. H. 1924 A, 15.  
 Kessler, K. T. 1841 A, 657, 688.

Knopfli, W. 1917 A, 51.  
 Knowlton, F. H. 1909 B, 326.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 67, pl. viii.  
 Lebedinsky, N. G. 1917 A, 331, figs. 17, 18.  
 Leunis and Ludwig 1883 A, 475.  
 Lühder, W. 1871 A, 329.  
 Mackie, S. J. 1863 C, 109 (This genus?).  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A.  
 Newton and Gadow 1896 A, 1068.  
 Retterer, E. 1908 A, 487.  
 Ridgway, R. 1887 A, 136, 141, pl. xl.  
 Selenka, E. 1869 A, 40, 42.  
 Shufeldt, R. W. 1894 A, 29, 32.  
 1915 C, 739.  
 Taschenberg, O. 1899 A, 4063.  
 Voit, M. 1923 A, 69.  
 Wagner, R. 1843 A.  
 Weitzel, A. 1865 A, 339.

**Fulica americana** Gmelin.

Gmelin, J. F. 1789, Syst. Nat. I, II, 704.

Hay, O. P. 1902 A, 528.

1927 D, 244.

Knowlton, F. H. 1909 B, 326, fig. 107.

Miller, L. H. 1912 A, 81, 113.

Shufeldt, R. W. 1913 B, 175, pl. xxxix, fig. 480.

Recent; whole of North America: Pleistocene (Fossil Lake); Oregon.

**Fulica minor** Shufeldt.

Hay, O. P. 1902 A, 528.

1927 D, 244.

Lambrecht, K. 1921 A, 69.

Miller, L. H. 1912 A, 81, 113.

Shufeldt, R. W. 1913 B, 155.

Pleistocene (Fossil Lake); Oregon.

**RALLINÆ** Bonaparte.

Bonaparte, C. L. 1838 B, 119.

A. O. U. 1910 A, 101.

Coues, E. 1884 A, 670.

Fürbringer, M. 1888 A, 1235.

Reichenow, A. 1913 A, 202.

Sundevall, C. J. 1886 A, 404.

Wetmore and Miller 1926 A, 342.

**RALLUS** Linnæus. Type *R. aquaticus* Linnæus.

Linnæus, C. 1758, A, 153.

A. O. U. 1910 A, 101.

Brandt, J. F. 1840, 174, 197.

Coues, E. 1884 A, 671.

Fürbringer, M. 1888 A, pls. iv, vii.

Knowlton, F. H. 1909 B, 321.

Lydekker, R. 1891 A, 144.

Magnan, A. 1922 A, 171.

Reichenow, A. 1913 A, 212, fig. 114.

Ridgway, R. 1887 A, 136, pl. xl.

Shufeldt, R. W. 1894 A, 28, fig. 2.

Zittel, K. A. 1890 A, 846.

**Rallus virginianus** Linnæus.

Linnæus, C. 1768, Syst. Nat. ed. 12, I, 263.

A. O. U. 1910 A, 103.

Coues, E. 1884 A, 673.

Hay, O. P. 1927 D, 198.

Knowlton, F. H. 1909 B, 321.

Miller, L. H. 1925 A, 320.

Osborn, H. F. 1925 D, 542.

Recent; North America: Pleistocene (McKittrick); California.

**CRECCHOIDES** Shufeldt. Type *C. osbornii* Shufeldt.

Hay, O. P. 1902 A, 528.

**Creccoides osbornii** Shufeldt.

Hay, O. P. 1902 A, 528.

Dumble, E. T. 1894 A, 559.

Gidley, J. W. 1903 C, 627.

Lambrecht, K. 1921 A, 67 (Creccoides).

Pliocene (Blanco); Texas.

**TELMATORNIS** Marsh. Type *T. priscus* Marsh.

Hay, O. P. 1902 A, 528.

Arlt, T. 1907 D, 86.

Fürbringer, M. 1888 A, 1141.

1902 B, 629.

Lambrecht, K. 1916 C, 493.

Shufeldt, R. W. 1915 D, 25.

Van den Broeck, E. 1900 A, 77.

Wetmore, A. 1928 A, 150.

Young, G. W. 1915 A, 250.

Zittel and Schlosser 1911 A, 323.

1923 A, 399.

**Telmatornis affinis** Marsh.

Hay, O. P. 1902 A, 528.

Lambrecht, K. 1921 A, 69.

Shufeldt, R. W. 1915 D, 27, 77, pl. vi, fig. 36.

Upper Cretaceous (Hornerstown?); New Jersey.

**Telmatornis priscus** Marsh.

Hay, O. P. 1902 A, 528.

Lambrecht, K. 1921 A, 69.

Shufeldt, R. W. 1915 D, 26, 77, pl. vi, fig. 37.

Upper Cretaceous; New Jersey.

**Telmatornis rex** Shufeldt.

Shufeldt, R. W. 1915 D, 27, 77, pl. xiii, fig. 101.

Lambrecht, K. 1921 A, 70.

Upper Cretaceous; New Jersey.

**GALLINULINÆ** Gray.

Gray, G. R. 1840, List of genera of birds, 72.

A. O. U. 1910 A, 105.

Coues, E. 1884 A, 675.

Fürbringer, M. 1888 A, 1235.

Knowlton, F. H. 1909 B, 323 ("gallinules").

Reichenow, A. 1913 A, 213.

Shufeldt, R. W. 1894 A, 25, 29.

**GALLINULA** Brisson. Type *G. gallinula* Brisson.

Brisson, T. P. 1760, Orn., VI, 2.

A. O. U. 1910 A, 105.

Fürbringer, M. 1888 A, pl. iv.

Knowlton, F. H. 1909 B, 323.

Reichenow, A. 1913 A, 214.

Ridgway, R. 1887 A, 136, 141, pl. xlii.

Shufeldt, R. W. 1894 A, 28.

**Gallinula** sp. indet.

Hay, O. P. 1927 D, 136. Pleistocene; Arizona.

Wetmore, A. 1924 A, 11. Pliocene? (San Pedro Valley); Arizona.

PALEOCREX Wetmore. Type *P. fax* Wetmore.

Wetmore, A. 1927 A, 9.

**Paleocrex fax** Wetmore.

Wetmore, A. 1927 A, 9, figs. 15-18.

1928 A, 152.

Oligocene (Chadron); Colorado.

## Suborder CHARADRIIFORMES Gartod.

Garrod, A. H. 1874 A, 117, 122.

Hay, O. P. 1902 A, 526 (Grallæ, in part); 523 (Cecomorpha, in part).

Adolphi, H. 1922 A, 330.

Ardt, T. 1907 D, 645.

Beddard, F. E. 1898 A, 336, fig. 169 (Limicolæ).

Blainville, H. M. D. 1821 A, 208 (Grallæ, in part).

Bonaparte, C. L. 1840 A, 28 (Grallæ, in part).

Carus, V. 1875 A, 331 (Grallæ, in part).

Chandler, A. C. 1914 B, 141 (Limicolæ).

Cope, E. D. 1891 N, 60 (Grallæ, in part).

Cuvier, G. 1805 A (Grallæ, in part).

Dabbene, R. 1910 A, 472.

Duméril, A. M. C. 1806 A, 58 (Grallæ, in part).

Evans, A. H. 1899 A, 268.

Fürbringer, M. 1888 A (Charadriomorphæ, Charadriiformes, Limicolæ).

1902 B, 650 (Charadriornithes); 669 (Charadriiformes).

Gadow, H. 1893 A, 194.

1910 B, 977.

Gaupp, E. 1905 D, 1026 (Grallæ).

Hilzheimer, M. 1913 A, 517 (Charadriornithes).

Hoernes, R. 1886 A, 642 (Grallæ, in part).

Huxley, T. H. 1867 A, 457 (Charadriomorphæ).  
1868 B, 361 (Charadriomorphæ).

Knopfi, W. 1917 A, 51 (Laro-Limicolæ).

Knowlton, F. H. 1909 B, 350.

Lambrecht, K. 1914 A, 68, 73.

Lebedinsky, N. G. 1913 A.

1918 A, 37 (Charadriiformes).

1918 B, 142, 146.

Linnaeus, C. 1758 A, 139 (Grallæ, in part).

Lobley, J. L. 1908 A, 198 (Grallæ, in part).

Lühder, W. 1871 A, 324 (Grallatores).

Lydekker, R. 1879 A, 26 (Charadriomorphæ).  
1891 A, 168 (Limicolæ).

Marinelli, W. 1928 A, 155.

Meckel, J. F. 1825 A ("grallen").

Miller, W. D. 1924 A, 2 ("sandpipers").

Parker, W. K. 1875 A, 699, 713 (Charadriomorphæ).

Pycraft, W. P. 1910 A, 52, 53, 445.

Ridgway, R. 1887 A, 143 (Limicolæ).

1919 A, 1.

Seeböhm, H. 1888 A, 416, 422, 427 (Grallæ, in part).

Selenka, E. 1869 A (Grallæ, in part).

Sharpe, R. B. 1891 A, 72.

Shufeldt, R. W. 1894 A, 22 (Grallæ, in part).  
1903 A, 70.

1904 B, 851.

1909 A, 171, 227 (Charadriomorphæ); 252 (Grallæ, in part).

Steiner, H. 1918 A, 328.

1922 A, 343 (Laro-Limicolæ).

Stejneger, L. 1885 A, 85 (Pluviales).

Vialleton, L. 1918 A, 6.

Wagner, R. 1843 A, 79 (Grallæ, in part).

Wallace, A. R. 1876 A, i, 494; ii, 351-362.  
(Grallæ, in part).

Wetmore and Miller 1926 A, 343.

Zittel, K. A. 1890 A, 855.

Zittel and Lucas 1902 A, 273 (Grallæ, in part).

Zittel and Schlosser 1911 A, 322 (Grallæ).

1923 A, 399 (Grallæ).

## Superfamily CHARADRIOIDÆ, new name.

Hay, O. P. 1902 A, 526 (Scolopacoidea).

Adolphi, H. 1922 A, 330 (Limicolæ).

Beddard, F. E. 1898 A, 336, fig. 169 (Limicolæ).

Chandler, A. C. 1916 C (Limicolæ).

Clark, H. L. 1901 A, 377 (Scolopacoidea).

Evans, A. H. 1899 A, 268 (Limicolæ).

Fürbringer, M. 1902 B, 638 (Limicolæ).

Gadow, H. 1893 A, 195 (Limicolæ).

1910 B, 977 (Limicolæ).

Garrod, A. H. 1873 C, 37 (Limicolæ).

Gervais, P. 1856 A, 13 ("limicoles").

Gegenbaur, C. 1871 A, 184 ("scolopacinen").

Huxley, T. H. 1867 C, 273 (Charadriomorphæ).

Knowlton, F. H. 1909 B, 351 (Limicolæ).

Lambrecht, K. 1914 A, 68 (Limicolæ).

Pycraft, W. P. 1901 A, 349 (Charadrii).

Reichenow, A. 1913 A, 165 (Limicolæ).

Ridgway, R. 1919 A, 24 (Charadrii).

Sharpe, R. B. 1891 A, 73 (Charadrii).

Shufeldt, R. W. 1903 A, 15, 70 (Limicolæ).

1904 B, 851 (Limicolæ).

1909 A, 227 (Limicolæ).

1915 C, 733 (Limicolæ).

Steiner, H. 1918 A, 328, 441, 492 (Limicolæ).

Wetmore and Miller 1926 A, 343 (Charadrii, Charadriides).

## CHARADRIIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 33 (Charadriidæ).

Hay, O. P. 1902 A, 526.

Adolphi, H. 1922 A, 330 (Charadriidæ).

Allen, J. A. 1871 A (Charadriidæ).

Altmann, F. 1925 A, 102, figs. 16-20 (Vanellus).

Ardt, T. 1907 D, 645.

1912 A, 686, 687, 708, 754.

Bonaparte, C. L. 1832 A, 308 (Pressirostres, Charadriidæ).

Carus, V. 1875 A, 337.

Chandler, A. C. 1916 C, 357.

Dabbene, R. 1910 A, 472.

Evans, A. H. 1899 A, 272.

Forbes, W. A. 1882 A, 389.



Forbes, W. A. 1882 E, 388.  
 Fürbringer, M. 1888 A, 1420.  
     1902 B, 650, 669.  
 Gadow, H. 1893 A, 200.  
 Garrod, A. H. 1874 A, 117, 123.  
 Gegenbaur, C. 1871 A, 184 (Charadriadæ).  
 Graul, W. 1907 A, 154, pls. vi, vii (Vanellus).  
 Heilmann, G. 1913 B, 69.  
 Hesse, H. 1907 A, 207.  
 Huxley, T. H. 1867 A, 430, 455.  
 Knowlton, F. H. 1909 B, 351.  
 Leunis and Ludwig 1883 A, 466.  
 Lobley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 327 (Charadriadæ).  
 Magnus, H. 1871 A (Charadriadæ).  
 Newton and Gadow 1896 A, 733.

Pycraft, W. P. 1910 A, 53, 445.  
 Reichenow, A. 1913 A, 166.  
 Ridgway, R. 1887 A, 143, 172.  
     1919 A, 61.  
 Seebohm, H. 1888 A, 415, 418.  
 Shufeldt, R. W. 1903 A, 70.  
     1904 B, 851.  
 Steiner, H. 1916 A, 493 (Grallæ).  
     1918 A, 328, 492.  
 Sundevall, C. J. 1886 A, 404 (Charadriacæ).  
 Sushkin, P. P. 1899 B, 153.  
 Vigors, N. A. 1825 A, 489 (Charadriadæ).  
 Wallace, A. R. 1876 A, xi, 355.  
 Wetzel, A. 1865 A, 338 (Charadrius).  
 Wetmore and Miller 1926 A, 343.

## CHARADRIINÆ Bonaparte.

Bonaparte, C. L. 1838 B, 118 (Charadriinæ).  
 Adolphi, H. 1922 A, 330 (Charadriidæ).  
 Fürbringer, M. 1888 A, 1420.

Knowlton, F. H. 1909 B, 370 ("true plovers").  
 Reichenow, A. 1913 A, 171.  
 Wetmore and Miller 1926 A, 343.

CHARADRIUS Linnæus. Type *Tringa squatarola* Linnæus.

Hay, O. P. 1902 A, 526.  
 Abel, O. 1912 F, 284.  
 Adolphi, H. 1922 A, 330.  
 Allen, J. A. 1893 B, 99, 108.  
 Arldt, T. 1907 D, 155, 213.  
 Beddard, F. E. 1898 A, 537, fig. 168.  
 Bignon, F. 1889 A.  
 Blainville, H. M. D. 1821 A, 210 (Charadrias).  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 472, figs. 37, 48.  
 Foote, J. S. 1916 A, 62, pl. v.  
 Garrod, A. H. 1873 C, 36.  
 Hesse, H. 1907 A, 207.  
 Kessler, K. T. 1841 A, 645.  
 Knowlton, F. H. 1909 B, 357.  
 Köstlin, O. 1844 A.  
 Leunis and Ludwig 1883 A, 469.  
 Magnan, A. 1922 A, 189, pls. i, xii, xiv.  
 Meckel, J. F. 1825 A.

Newton and Gadow 1896 A, 1063.  
 Owen, R. 1866 B, 86.  
 Ridgway, R. 1887 A, 172, pl. lv.  
     1919 A, 114.  
 Selenka, E. 1869 A.  
 Shufeldt, R. W. 1903 A, 21, figs. 1-9.  
 Sundevall, C. J. 1886 A.  
 Wagner, R. 1843 A.  
 Zittel and Schlosser 1911 A, 322.  
     1923 A, 399.

**Charadrius sheppardianus** Cope.

Hay, O. P. 1902 A, 526.  
 Cockerell, T. D. A. 1906 A, 163.  
 Lambrecht, K. 1916 C, 491.  
     1921 A, 50.  
 Wetmore, A. 1928 A, 152.  
     Miocene (Florissant); Colorado.

OXYECHUS Reichenbach. Type *Charadrius vociferus* Linnæus.

Reichenbach, H. G. 1852, Syst. Avium, xviii.  
 A. O. U. 1910 A, 128.  
 Coues, E. 1884 A, 600 (Ægialites).  
 Ridgway, R. 1887 A, 174, pls. lxi, liii (Ægialitæ).

**Oxyechus vociferus** (Linnæus).

Linnæus, C. 1758 A, 150 (Charadrius).  
 A. O. U. 1910 A, 128.

Coues, E. 1884 A, 600, fig. 419 (Ægialites).  
 Hay, O. P. 1927 D, 198.  
 Knowlton, F. H. 1909 B, 356, fig. 118.  
 Miller, L. H. 1925 A, 321.  
 Osborn, H. F. 1925 D, 542.  
 Ridgway, R. 1887 A, 174 (Ægialitis).

Recent; North and South America: Pleistocene (McKittrick); California.

## SCOLOPACIDÆ Vigors.

Vigors, N. A. 1825 A, 488.  
 Hay, O. P. 1902 A, 526.  
 Abel, O. 1919 A, 707 (Charadriiformes).  
 Arldt, T. 1907 D, 681.  
 Blainville, H. M. D. 1821 A, 210 ("courlis").  
 Bonaparte, C. L. 1831 A, 34.  
     1832 A, 309 (Limicolæ, Scolopacidæ).  
 Carus, V. 1875 A, 334.  
 Cuvier, G. 1805 A ("bécasses").  
 Giebel, C. G. 1855 B, 31 ("schnepfen").  
 Hesse, H. 1907 A, 207.  
 Hoernes, R. 1886 A, 643.

Leunis and Ludwig 1883 A, 459.  
 Lobley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 327.  
 Lydekker, R. 1891 A, 171.  
 Magnus, H. 1871 A.  
 Marinelli, W. 1928 A, 135, pl. xiv; text-figs. 1, 2 ("schnepfe").  
 Pycraft, W. P. 1893 A, 364.  
 Reichenow, A. 1913 A, 183.  
 Ridgway, R. 1887 A, 143, 147.  
     1919 A, 143.  
 Shufeldt, R. W. 1893 B, 563.

Shufeldt, R. W. 1903 A, 70.  
1904 B, 851.  
Steiner, H. 1916 A, 493 (Limicola).  
Taschenberg, O. 1899 A, 4275.

Wallace, A. R. 1876 A, II, 353.  
Weitzel, A. 1885 A, 338 (Scolopax).  
Wetmore and Miller 1926 A, 343.

## SCOLOPACINÆ Bonaparte.

Bonaparte, C. L. 1831 A, 34.  
Adolphi, H. 1922 A, 243.  
Bonaparte, C. L. 1838 B, 119.  
Fürbringer, M. 1888 A, 1217-1420.  
Gadow, H. 1893 A, 201.  
Huxley, T. H. 1867 A, 457.

Knowlton, F. H. 1909 B, 370.  
Newton and Gadow 1896 A, 734.  
Reichenow, A. 1913 A, 196.  
Ridgway, R. 1887 A, 147.  
Sundevall, C. J. 1838 A (Tringariæ).  
Wetmore and Miller 1926 A, 343.

MACRORHAMPHUS T. Forster. Type *Scolopax grisea* (Gmelin).

Forster, T. 1817, Cat. Brit. Birds, 22.  
A. O. U. 1910 A, 111.  
Coues, E. 1884 A, 622.  
Ridgway, R. 1887 A, 149, 150, pl. xlii.

**Macrorhamphus griseus** (Gmelin).

Gmelin, J. F. 1889, Syst. Nat. I, ii, 658 (Scolopax).  
Coues, E. 1884 A, 422, fig. 437.

Hay, O. P. 1927 D, 198.  
Knowlton, F. H. 1909 B, 373.  
Miller, L. H. 1925 A, 321.  
1928 A, 120.  
Osborn, H. F. 1925 D, 542.  
Ridgway, R. 1887 A, 151.  
Recent; Eastern North and South America:  
Pleistocene (McKittrick); California.

CAPELLA Frenzel. Type *Scolopax caelestis* Frenzel.

Frenzel, J. S. T. 1801, Beschreib. Vög. u. ihrer  
Eyer. Wittenb., Naturges. Churkreises, 58.  
Knowlton, F. H. 1909 B, 371 (Gallinago).  
Koch, C. L. 1816, Syst. baier. Zool., I, 312  
(Gallinago).  
Leunis and Ludwig 1883 A, 460 (Gallinago).  
Matthews and Iredale 1920, Austral Avian Rec.,  
IV, 130-132.  
Newton and Gadow 1896 A, 1068 (Gallinago).  
Owen, R. 1866 B, 60 ("snipes").

Ridgway, R. 1887 A, 147, 150, pl. xlv (Gallinago).

**Capella** sp. indet.

Cope, E. D. 1871 I, 98 ("snipe").  
1899 A, 280 (Gallinago).  
Hay, O. P. 1923 A, 314 (Gallinago).  
Wheatley, C. M. 1871 B, 385 ("Scolopax").  
Pleistocene (Port Kennedy); Pennsylvania.

## TRINGINÆ Bonaparte.

Bonaparte, C. L. 1840 A, 275.  
Knowlton, F. H. 1909 B, 362.

Ridgway, R. 1887 A, 148.  
Taschenberg, O. 1899 A, 4339 (Tringa).

PELIDNA Cuvier. Type *Tringa alpina* (Linnaeus).

Cuvier, G. 1817, Règne Anim., 490.  
A. O. U. 1910 A, 115.  
Coues, E. 1884 A, 631.  
Knowlton, F. H. 1909 B, 362 (Tringa).  
Ridgway, R. 1887 A, 159 (Subgenus of Tringa).

**Pelidna alpina** (Linnaeus).

Linnaeus, C. 1758 A, 149 (Tringa).  
A. O. U. 1910 A, 115.

Coues, E. 1884 A, 631, fig. 439.  
Hay, O. P. 1927 D, 198.  
Knowlton, F. H. 1909 B, 363 (Tringa).  
Miller, L. H. 1925 A, 321.  
1928 A, 120.  
Osborn, H. F. 1925 D, 542.  
Recent; Eastern Hemisphere; accidental in  
North America: Pleistocene (McKittrick);  
California.

MICROPALAMA Baird. Type *Tringa himantopus* Bonaparte.

Baird, S. F. Ann. Lyc. Nat. Hist., N. Y.  
1826, 157.  
A. O. U. 1910 A, 112.  
Nichols, J. T. 1923 A, 592.  
Ridgway, R. 1887 A, 149, 152, pl. xliii.  
Wetmore, A. 1924 A, 13.

**Micropalama hesterna** Wetmore.

Wetmore, A. 1924 A, 11, figs. 6, 7.  
Hay, O. P. 1927 D, 136.  
Wetmore, A. 1923 A, 154.  
Pliocene? (San Pedro Valley); Arizona.

TOTANUS Bechstein. Type *Scolopax totanus* Linnaeus.

Bechstein, J. M. 1803, Orn. Taschenb. Deutschl.,  
II, 282.  
A. O. U. 1910 A, 120.  
Coues, E. 1884 A, 638.  
Fürbringer, M. 1888 A.  
Huxley, T. H. 1867 A, 430.

Lydekker, R. 1891 A, 172.  
Nichols, J. T. 1923 A, 592.  
Owen, R. 1866 B, 26.  
Ridgway, R. 1887 A, 149, 164, pl. L.  
Taschenberg, O. 1899 A, 4336.  
Zittel, K. A. 1890 A, 845.

**Totanus melanoleucus** (Gmelin).

- Gmelin, J. F.* 1789, Syst. Nat., I, ii, 659 (Scolopax).  
 A. O. U. 1910 A, 120.  
 Coues, E. 1884 A, 638, fig. 445.  
 Hay, O. P. 1927 D, 198.

- Knowlton, F. H. 1909 B, 365.  
 Miller, L. H. 1925 A, 321.  
     1928 A, 120.  
 Osborn, H. F. 1925 D, 542.  
 Ridgway, R. 1887 A, 165.  
     Recent; North and South America: Pleistocene (McKittrick); California.

**LIMOSA** Brisson. Type *Scolopax limosa* Linnæus.

- Brisson, M. J.* 1760, Orn., v, 261.  
 A. O. U. 1910 A, 118.  
 Coues, E. 1884 A, 616, 634.  
 Knowlton, F. H. 1909 A, 364.  
 Lambrecht, K. 1914 A, 68.  
 Owen, R. 1866 B, 23.

- Ridgway, R. 1887 A, 149, 162, pl. xlix.  
 Weitzel, A. 1865 A, 338.

**Limosa vanrossemi** Miller.

- Miller, L. H.* 1925 C, 116, pl. vi.  
 Wetmore, A. 1928 A, 153.  
     Miocene (Temblor); California.

**PALÆOTRINGA** Marsh. Type *P. littoralis* Marsh.

- Hay, O. P. 1902 A, 527.  
 Fürbringer, M. 1888 A, 1141.  
     1902 B, 629.  
 Heilprin, A. 1887 A, 330.  
 Van den Broeck, E. 1900 A, 77.  
 Wetmore, A. 1928 A, 150.  
 Zittel and Schlosser 1911 A, 323.  
     1923 A, 398.  
     Position in this subfamily doubtful.

**Palæotringa littoralis** Marsh.

- Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1921 A, 56.  
 Shufeldt, R. W. 1915 D, 23, 77, pl. vi, fig. 35.  
     Upper Cretaceous (Hornerstown); New Jersey.

**Palæotringa vagans** Marsh.

- Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1921 A, 56.  
 Shufeldt, R. W. 1915 D, 24, 77, pl. vi, fig. 40;  
     76 (Phalacrocorax).  
     Upper Cretaceous (Hornerstown?); New Jersey.

**Palæotringa vetus** Marsh.

- Hay, O. P. 1902 A, 527.  
 Lambrecht, K. 1916 C, 492.  
     1921 A, 56.  
 Shufeldt, R. W. 1915 D, 24, 76, pl. viii, fig. 59.  
 Wetmore, A. 1928 A, 148.  
     Upper Cretaceous; New Jersey.

**LIMICOLAVIS** Shufeldt. Type *L. pluvianella* Shufeldt.

- Shufeldt, R. W. 1915 D, 55.  
     Position in this subfamily doubtful.

**Limicolavis pluvianella** Shufeldt.

- Shufeldt, R. W. 1915 D, 55, pl. xv, fig. 129.  
 Lambrecht, K. 1921 A, 55.  
     Oligocene?; Oregon.

**RECURVIROSTRIDÆ** Bonaparte.

- Bonaparte, C. L.* 1840 A, 276.  
 A. O. U. 1910 A, 109.  
 Bonaparte, C. L. 1831 A, 34 (Recurvirostrinæ).  
 Coues, E. 1884 A, 609.

- Knowlton, F. H. 1909 B, 358.  
 Ridgway, R. 1887 A, 143, 146.  
 Stejneger, L. 1885 A, 107 (Recurvirostrinæ).  
 Wetmore and Miller 1926 A, 343.

**RECURVIROSTRA** Linnæus. Type *R. avocetta* Linnæus.

- Linnæus, C.* 1858 A, 151.  
 A. O. U. 1910 A, 108.  
 Coues, E. 1884 A, 610.  
 Fürbringer, M. 1888 A, 140, 145, 168, pls. ii, iv, vii.  
 Huxley, T. H. 1867 A, 457.  
 Knowlton, F. H. 1909 B, 358.  
 Owen, R. 1866 B, 61.  
 Selenka, E. 1869 A, 19.  
 Wetmore, A. 1926 B, 397.

**Recurvirostra americana** Gmelin.

- Gmelin, J. F.* 1789, Syst. Nat. I, ii, 693.  
 A. O. U. 1910 A, 108.  
 Coues, E. 1884 A, 611, fig. 424.  
 Hay, O. P. 1927 D, 198.  
 Knowlton, F. H. 1909 B, 358, fig. 119.  
 Miller, L. H. 1925 A, 320.  
     Recent; North America: Pleistocene (McKittrick); California.

**PHALAROPODIDÆ** Bonaparte.

- Bonaparte, C. L.* 1831 A, 34.  
 Coues, E. 1884 A, 612.  
 Knowlton, F. H. 1909 B, 360 ("phalaropes").  
 Ridgway, R. 1887 A, 143.

- Shufeldt, R. W. 1903 A, 17 ("phalaropes"); 70.  
     1904 B, 851.  
 Wertzel, A. 1865 A, 338 (Phalaropus).  
 Wetmore and Miller 1926 A, 343.

LOBIPES Cuvier. Type *Tringa lobata* Linnæus.

- Cuvier, G. 1817 Règne Anim., 1, 495.  
 Hay, O. P. 1902 A, 527 (Phalaropus).  
 A. O. U. 1910 A, 107.  
 Coues, E. 1884 A, 613.  
 Cuvier, G. 1805 A (Phalaropus).  
 Newton and Gadow 1896 A, 1078 (Phalaropus).

**Lobipes lobatus** (Linnæus).

- Linnæus, C. 1758 A, 148, 824 (Tringa).

- Hay, O. P. 1902 A, 527 (Phalaropus).  
 A. O. U. 1910 A, 107.  
 Coues, E. 1884 A, 613 (L. hyperboreus).  
 Hay, O. P. 1927 D, 244.  
 Miller, L. H. 1912 A, 81, 113.  
 Shufeldt, R. W. 1903 A, 17 (Phalaropus).  
 1913 B, 155.

Recent; Northern and Southern hemispheres:  
 Pleistocene (Fossil Lake); Oregon.

## CEDICNEMIDÆ.

- Fürbringer, M. 1888 A, 1217-1220.  
 Knowlton, F. H. 1909 B, 380.  
 Lydekker, R. 1891 A, 169.

- Reichenow, A. 1913 A, 181 (Cedieneminiæ).  
 Wetmore, A. 1927 A, 11.

## BATHORNITHINÆ Wetmore.

- Wetmore, A. 1927 A, 13.

BATHORNIS Wetmore. Type *B. veredus* Wetmore.

- Wetmore, A. 1927 A, 11.

**Bathornis veredus** Wetmore.

- Wetmore, A. 1927 A, 11, figs. 19-24.  
 1928 A, 152.  
 Oligocene (Chadron); Colorado.

## PRESBYORNITHIDÆ Wetmore.

- Wetmore, A. 1926 B, 396.

PRESBYORNIS Wetmore. Type *P. pervetus* Wetmore.

- Wetmore, A. 1926 B, 396.  
 1928 A, 151.

**Presbyornis pervetus** Wetmore.

- Wetmore, A. 1926 B, 396, pl. xxxvii, figs. 10-20.  
 Eocene (Green River); Utah.

## Superfamily LAROIDÆ, new form.

- Hay, O. P. 1902 A, 525 (Laroidea).  
 Adolphi, H. 1922 A, 350 (Lari).  
 Bonaparte, C. L. 1832 A, 310 (Longipennes).  
 Dabbene, R. 1910 A, 479 (Lariformes).  
 Gadow, H. 1893 A, 205 (Lari).  
 1910 B, 977 (Lari).  
 Huxley, T. H. 1867 A, 457 (Cecomorphæ, in part).  
 Knowlton, F. H. 1909 B, 385 (Lari).  
 Lebedinsky, N. G. 1913 A (Lariformes).  
 Lydekker, R. 1891 A, 176 (Gaviæ).

- Parker, W. K. 1875 A, 699 (Cecomorphæ, in part).  
 Pyecraft, W. P. 1901 A, 349 (Lari).  
 Ridgway, R. 1919 A, 3, 447 (Lari).  
 Sharpe, R. B. 1891 A, 72 (Lariformes).  
 Shufeldt, R. W. 1893 D, 233 (Longipennes).  
 1904 B, 850 (Lariformes).  
 Steiner, H. 1918 A, 332, 441, 492 (Lari).  
 Viellot, J. 1816, Analyse Ornith. elem., 16 (Pelagii).  
 Wetmore and Miller 1926 A, 343 (Lari).

## LARIDÆ Vigors.

- Vigors, N. A. 1825 A, 498.  
 Hay, O. P. 1902 A, 525.  
 Adolphi, H. 1922 A, 350.  
 Allen, J. A. 1871 A.  
 A. O. U. 1910 A, 35.  
 Arldt, T. 1907 D, 661.  
 1912 A, 686, 687, 708, 754.  
 Beddard, F. E. 1896 A, 542, 543.  
 1898 A, 350.  
 Bittner, F. 1912 A, 2.  
 Bonaparte, C. L. 1831 A, 34.  
 1832 A, 310 (Laridæ, Larinæ).  
 Brandt, J. F. 1840 A, 92, 165, 185.  
 Bruch, P. 1853 A, 96.  
 Carus, V. 1875 A, 361.  
 Chandler, A. C. 1916 C, 356, 391.  
 Evans, A. H. 1899 A, 300.

- Forbes, W. A. 1881 A, 4.  
 1882 D, 62.  
 Fürbringer, M. 1902 B, 650, 669.  
 Gadow, H. 1893 A, 201.  
 Garrod, A. H. 1873 C, 37.  
 1874 A, 117.  
 Gervais, P. 1856 A, 13 ("laridés").  
 Hesse, H. 1907 A, 202.  
 Huxley, T. H. 1867 A, 430, 458.  
 1867 C, 274.  
 Knowlton, F. H. 1909 B, 386 (Larinæ).  
 Lebedinsky, N. G. 1913 A.  
 Leunis and Ludwig 1883 A, 506.  
 Lilienthal, G. 1917 A, 266, figs. 5, 6 ("möven").  
 Lohley, J. L. 1908 A, 202, 207.  
 Lühder, W. 1871 A, 324, 329.  
 Lydekker, R. 1891 A, 177.

Magnus, H. 1871 A.  
 Mehnert, E. 1887 B, 212 ("lariden").  
 Miller, L. H. 1924 A, 173.  
 Newton and Gadow 1896 A, 1089 ("gulls").  
 Owen, R. 1866 B, 70 ("gulls").  
 Parker, W. K. 1888 D, 469, 470.  
 1890 A, 3, 57.  
 Pycraft, W. P. 1910 A, 54.  
 Reichenow, A. 1913 A, 106.  
 Reynolds, S. H. 1897 A, 328, 335 ("gulls").  
 Ridgway, R. 1887 A, 20, 23.

Ridgway, R. 1919 A, 561.  
 Saunders, H. 1878 A, 83.  
 Seebohm, H. 1888 A, 418.  
 Shufeldt, R. W. 1893 D, 233.  
 Steiner, H. 1916 A, 493.  
 1918 A, 332, 333, 492 (Laridæ, Larinæ).  
 Strasser, H. 1885 A, 245 ("möven").  
 Taschenberg, O. 1899 A, 4124.  
 Wallace, A. R. 1876 A, II, 364.  
 Wamich, P. 1913 A, 14.  
 Wetmore and Miller 1926 A, 343.

## LARINÆ Bonaparte.

Bonaparte, C. L. 1831 A, 34.  
 Adolphi, H. 1922 A, 350.  
 A. O. U. 1910 A, 35.  
 Beddard, F. E. 1896 A, 543.  
 Fürbringer, M. 1888 A, 1158.

Knowlton, F. H. 1909 B, 386.  
 Miller, R. C. 1923 A, 5-15, 10 figs. ("gulls").  
 Reichenow, A. 1913 A, 106.  
 Ridgway, R. 1887 A, 23.  
 Wetmore and Miller 1926 A, 343.

CHROICOCEPHALUS Eyton. Type *Larus capistratus* Temminck.

Eyton, T. C. 1836, Cat. Brit. Birds, 53.  
 Ridgway, R. 1919 A, 635.

## Chroicocephalus philadelphia (Ord).

Ord, G. 1815, Guthrie's Geog. 2d Amer. ed., 319 (Sterna).  
 Hay, O. P. 1902 A, 525 (Larus).

Hay, O. P. 1927 D, 244 (Larus).  
 Miller, L. H. 1912 A, 80, 112 (Larus).  
 Ridgway, R. 1919 A, 645.  
 Shufeldt, R. W. 1913 B, 155 (Larus).  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

LARUS Linnæus. Type *Larus canus* Linnæus.

Linnaeus, C. 1758 A, 136.  
 Hay, O. P. 1902 A, 525.  
 Adolphi, H. 1922 A, 351, figs. 52, 53.  
 Aebv, C. 1873 A, 702.  
 Allen, J. A. 1893 B, 99.  
 A. O. U. 1910 A, 36.  
 Arldt, T. 1907 D, 155.  
 Beddard, F. E. 1898 A, 542, fig. 82.  
 Beebe, C. W. 1906 A, 490 ("gulls").  
 Bignon, F. 1889 A.  
 Bonsdorff, E. J. 1871 A, 310.  
 Brandt, J. F. 1840 A, 187, 218.  
 Brauns, D. 1890 A, 201.  
 Braus, H. 1906 A, 276, fig. 239.  
 Bronn, H. G. 1849 A, 696.  
 Bruch, P. 1853 A, 98.  
 Chandler, A. C. 1916 C, 357, pl. xxviii.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 479.  
 Diethelm, M. 1907 A, 44.  
 Döderlein, L. 1923 A, 142, 162.  
 Eaton, G. F. 1910 A, pl. ix, fig. 1.  
 Evans, A. H. 1899 A, 306.  
 Eyton, T. C. 1867 A, 225.  
 Fürbringer, M. 1888 A, pls. iii-v.  
 Garrod, A. H. 1873 C, 34, 37, fig. 2.  
 Gegenbaur, C. 1871 A, 177.  
 Giebel, C. G. 1855 B, 33.  
 Harting, P. 1866 A, 24.  
 Heilmann, G. 1913 B, 17, fig. 62.  
 1926 A, 205, fig. 135.  
 Hesse, H. 1907 A, 202, pl. viii, fig. 5.  
 Hommes, J. H. 1924 A, 14.  
 Huxley, T. H. 1876 C, 252, fig. 11.  
 Kessler, K. T. 1841 A, 667, 690.  
 Knowlton, F. H. 1909 B, 387.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 68, pl. viii.

Lebedinsky, N. G. 1913 B, 193.  
 1917 A, 330, figs. 14-16.  
 1921 A, 13.  
 Leunis and Ludwig 1883 A, 507.  
 Lydekker, R. 1891 A, 177.  
 Mackie, S. J. 1863 C, 109.  
 Magnan, A. 1922 A, 145, pls. v, xi; text-fig. 9.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A.  
 Meek, A. 1912 A, 213, figs. 1-3.  
 Mehnert, E. 1887 B, 218.  
 Miller, L. H. 1924 A.  
 Newton and Gadow 1896 A, 1072.  
 Noordenbos, W. 1905 B, 376.  
 Parker, W. K. 1875 A, 724.  
 1888 D, 469.  
 Pycraft, W. P. 1910 A, 44, fig. 14.  
 Ridgway, R. 1887 A, 23, 25, pls. viii, ix.  
 1919 A, 580.  
 Rosenberg, F. T. 1911 A, 213.  
 Shufeldt, R. W. 1893 D, 233.  
 Steiner, H. 1921 A, 538.  
 Strasser, H. 1885 A, 204.  
 Sundevall, C. J. 1836 A, 405.  
 Szalay, E. L. 1902 A, 12, pl. ii.  
 Wallace, A. R. 1876 A, II, 364.  
 Wamich, P. 1913 A, 14.  
 Weitzel, A. 1865 A, 341.  
 Zittel and Schlosser 1911 A, 322.  
 1923 A, 398.

## Larus argentatus Pontoppidan.

Pontoppidan, E. L. 1763, Danske Atlas, I, 622.  
 Hay, O. P. 1902 A, 525.  
 Adolphi, H. 1922 A, 351.  
 A. O. U. 1910 A, 38.  
 Brandt, J. F. 1840 A, 218.  
 Chandler, A. C. 1916 C, 357.

Evans, A. H. 1899 A, 306.  
 Forbes, W. A. 1881 A, 4, fig. 2.  
 Gegenbaur, C. 1871 A, 177, pl. vi, fig. 15.  
 Hay, O. P. 1927 D, 244.  
 Hommes, J. H. 1924 A, 15.  
 Knowlton, F. H. 1909 B, 388.  
 Miller, L. H. 1912 A, 80, 112.  
 Ridgway, R. 1919 A, 612.  
 Shufeldt, R. W. 1909 A, 313.  
     1913 B, 155.  
     1914 C, 19.  
 Recent; Northern Hemisphere: Pleistocene  
 (Fossil Lake); Oregon.

### **Larus californicus** Lawrence.

Lawrence, G. N. 1854, Ann. Lyc. Nat. Hist.  
 N. Y., vi, 79.  
 Hay, O. P. 1902 A, 525.  
 A. O. U. 1910 A, 39.  
 Coues, E. 1884 A, 745.  
 Hay, O. P. 1927 D, 244.  
 Miller, L. H. 1912 A, 80, 112 (This species?).  
 Ridgway, R. 1919 A, 620.  
 Shufeldt, R. W. 1913 B, 155.  
 Recent; western North America: Pleisto-  
 cene (Fossil Lake); Oregon.

### **Larus oregonus** Shufeldt.

Hay, O. P. 1902 A, 525.  
 1927 D, 244.

Lambrecht, K. 1921 A, 55.  
 Miller, L. H. 1912 A, 80, 112.  
 Shufeldt, R. W. 1913 B, 155.  
 Pleistocene (Fossil Lake); Oregon.

### **Larus pristinus** Shufeldt.

Shufeldt, R. W. 1915 D, 54, pl. xiv, fig. 112  
 Lambrecht, K. 1921 A, 54.  
 Oligocene? (John Day); Oregon.

### **Larus robustus** Shufeldt.

Hay, O. P. 1902 A, 525.  
     1927 D, 244.  
 Lambrecht, K. 1921 A, 55.  
 Miller, L. H. 1912 A, 80, 112.  
 Shufeldt, R. W. 1913 B, 155.  
 Pleistocene (Fossil Lake); Oregon.

### **Larus vero** Shufeldt.

Shufeldt, R. W. 1917 B, 40, pl. ii, fig. 21.  
 Hay, O. P. 1923 A, 382.  
 Shufeldt, R. W. 1916 E, 18 (Insufficient descrip-  
 tion).  
 Pleistocene (Middle?); Florida.

### **Larus sp. indet.?**

Hay, O. P. 1923 A, 382. Pleistocene (Early);  
 Florida.  
 Shufeldt, R. W. 1917 B, 38, pl. i, figs. 1, 2  
 (This genus?). Pleistocene (Middle?); Florida

## **XEMA** Leach. Type *Larus sabini* (Sabini).

Leach, W. E. 1819 Ross's Voy. Baffins Bay,  
 App., lviii.  
 Hay, O. P. 1902 A, 525.  
 A. O. U. 1910 A, 41.  
 Bruch, P. 1853 A, 103.  
 Knowlton, F. H. 1909 B, 389.  
 Ridgway, R. 1887 A, 23, 37, pl. ix.  
     1919 A, 662.  
 Shufeldt, R. W. 1893 D, 233.  
 Wallace, A. R. 1876 A, ii, 364.

### **Xema sabini** (Sabini).

Sabine, J. 1819, Trans. Linn. Soc. Lond., xii,  
 pt. 2, 522, pl. xxix.  
 Hay, O. P. 1902 A, 525 (X. sabinii).  
 A. O. U. 1910 A, 41.  
 Hay, O. P. 1927 D, 244.  
 Knowlton, F. H. 1909 B, 389.  
 Miller, L. H. 1912 A, 80, 112.  
 Ridgway, R. 1919 A, 663.  
 Shufeldt, R. W. 1913 B, 155.  
 Recent; Arctic regions to South America:  
 Pleistocene (Fossil Lake); Oregon.

## **STERNINÆ** Bonaparte.

Bonaparte, C. L. 1838 B, 119.  
 A. O. U. 1910 A, 42.  
 Beddard, F. E. 1898 A, 356.  
 Carus, V. 1875 A, 362.  
 Coues, E. 1884 A, 734, 734.  
 Evans, A. H. 1899 A, 310.  
 Fürbringer, M. 1888 A, 1158.  
 Gadow, H. 1891 A, 205.

Knowlton, F. H. 1909 B, 390.  
 Reichenow, A. 1882, Vög. Zool. Gart., i, 27  
 (Sternidae).  
     1913 A, 113.  
 Ridgway, R. 1919 A, 458.  
 Taschenberg, O. 1899 A, 4302.  
 Wetmore and Miller 1926 A, 343.

## **STERNA** Linnæus. Type *Sterna hirundo* Linnæus.

Linnæus, C. 1758 A, 137.  
 Hay, O. P. 1902 A, 525.  
 Adolphi, H. 1922 A, 357.  
 Allen, J. A. 1893 B, 99.  
 A. O. U. 1910 A, 42.  
 Anthony, R. 1910 A, 780 ("sternes").  
 Arldt, T. 1907 D, 155.  
 Beddard, F. E. 1898 A, 547.  
 Beebe, C. W. 1906 A, 495 ("terns").  
 Brandt, J. F. 1840 A, 88, 218, 221, pl. i, fig. 8.

Chandler, A. C. 1916 C, 357.  
 Cuvier, G. 1805 A.  
 Dabbene, R. 1910 A, 489.  
 Döderlein, L. 1923 A, 142, 162.  
 Evans, A. H. 1899 A, 311.  
 Eyton, T. C. 1867 A, 226.  
 Fürbringer, M. 1888 A, pls. ii, iv, v.  
 Garrod, A. H. 1873 C, 37.  
 Harting, P. 1866 A, 24.  
 Hase, A. 1913 A, 139, fig. 58.

Heilmann, G. 1914 A, 63, fig. 147.  
 1926 A, 207, fig. 70 (Sterna).  
 Kessler, K. T. 1841 A, 668, 690.  
 Kingsley, J. S. 1925 A, 288, fig. 312.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 68.  
 Leighton, V. L. 1894 A, 63, pl. i.  
 Leunis and Ludwig 1883 A, 510.  
 Magnan, A. 1922 A, 135, text-fig. 2.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A.  
 Mehnert, E. 1887 B, 213.  
 Newton and Gadow 1896 A, 1084.  
 Owen, R. 1886 B, 70.  
 Plieninger, F. 1906 A, 404.  
 Ridgway, R. 1887 A, 24, 39, pls. x, xi.  
 1919 A, 485.

Shufeldt, R. W. 1893 D, 233.  
 Sieglbauer, F. 1911 A, 275.  
 Steiner, H. 1922 A, 310.  
 Sundevall, C. J. 1886 A, 403.  
 Wallace, A. R. 1876 A, II, 364.  
 Weitzel, A. 1865 A, 341.

### ***Sterna forsteri?* Nuttall.**

Nuttall, T. 1834, Manual Ornith., 274.  
 Hay, O. P. 1902 A, 525.  
 1927 D, 244.  
 Miller, L. H. 1912 A, 80, 112.  
 Ridgway, R. 1919 A, 490.  
 Shufeldt, R. W. 1913 B, 155.  
 Recent; North America: Pleistocene (Fossil Lake); Oregon.

### **THALASSEUS Boie. Type *T. cantiaica* Gmelin.**

Boie, H. 1822, Isis, VIII, 563, 880.  
 Ridgway, R. 1919 A, 486.

### ***Thalasseus elegans* (Gambel).**

Gambel, W. 1848 (1849), Proc. Acad. Nat. Sci. Phila., IV, 129 (Sterna).  
 Hay, O. P. 1902 A, 525 (Sterna).

Hay, O. P. 1927 D, 244 (Sterna).  
 Miller, L. H. 1912 A, 80, 112 (Sterna).  
 Ridgway, R. 1919 A, 472.  
 Shufeldt, R. W. 1913 B, 155 (Sterna).

Recent: Pacific coast from San Francisco to Chili: Pleistocene (Fossil Lake); Oregon.

### **CHLIDONIAS Rafinesque. Type *Sterna nigra* Linnæus.**

Rafinesque, C. S. 1822, Kentucky Gazette, I, No. 8, 3.

Unless otherwise indicated the authors, as cited, use for this genus the name *Hydrochelidon*.

Hay, O. P. 1902 A, 525.  
 Boie, F. 1922, Isis, x, 563.  
 Evans, A. H. 1899 A, 314.  
 Hesse, H. 1907 A, 202.  
 Leunis and Ludwig 1883 A, 512.  
 Newton and Gadow 1896 A, 955.  
 Ridgway, R. 1919 A, 526.  
 Steiner, H. 1918 A, 333, fig. 31.

### ***Chlidonias nigra surinamensis* (Gmelin).**

Gmelin, J. F. 1789, Syst. Nat., I, 604 (Sterna surinamensis).  
 Hay, O. P. 1902 A, 525 (Hydrochelidon nigra).  
 A. O. U. 1910 A, 47 (Hydrochelidon).  
 Evans, A. H. 1899 A, 314 (Hydrochelidon nigra).  
 Hay, O. P. 1927 D, 244 (Hydrochelidon).  
 Miller, L. H. 1912 A, 80, 112 (Hydrochelidon).  
 Ridgway, R. 1919 A, 532, (Hydrochelidon).  
 Shufeldt, R. W. 1913 B, 155 (Hydrochelidon).

Recent, North and South America; Pleistocene (Fossil Lake); Oregon.

### **Superfamily ALCOIDÆ, new form.**

Hay, O. P. 1902 A, 524 (Alcoidea).  
 Beddard, F. E. 1898 A, 359 (Alcæ).  
 Dabbene, R. 1910 A, 138 (Alcoiformes).  
 Evans, A. H. 1899 A, 315 (Alcæ).  
 Huxley, T. H. 1867 A, 458 (Cecomorphæ, in part).

Lebedinsky, N. G. 1913 A (Alcoiformes).  
 Parker, W. K. 1875 A, 699 (Cecomorphæ, in part).  
 Ridgway, R. 1919 A, 3, 700 (Alcæ).  
 Sharpe, R. B. 1891 A, 72 (Alcoiformes).  
 Wetmore and Miller 1926 A, 343 (Alcæ).

### **ALCIDÆ Bonaparte.**

Bonaparte, C. L. 1831 A, 35.  
 Hay, O. P. 1902 A, 524.  
 Adolphi, H. 1922 A, 360.  
 Allen, J. A. 1871 A.  
 1893 B, 105.  
 A. O. U. 1910 A, 25.  
 Andrews, C. W. 1916 B, 524.  
 Arldt, T. 1907 D, 686.  
 1912 A, 708, 754.  
 Beddard, F. E. 1896 A, 543.  
 Bonaparte, C. L. 1832 A, 312 (Alcinæ).  
 Brandt, J. F. 1840 A, 165 (Alcadesæ).  
 Carus, V. 1875 A, 366.  
 Chandler, A. C. 1916 C.  
 Coues, E. 1868 A, 2, 14.

Cuvier, G. 1805 A ("alques").  
 Evans, A. H. 1899 A, 315.  
 Forbes, W. A. 1881 A, 4.  
 1882 A, 389.  
 Fürbringer, M. 1888 A.  
 1902 B, 651, 669.  
 Gadow, H. 1893 A, 206.  
 Garrod, A. H. 1873 C, 87.  
 1874 A, 117, 120.  
 Hoernes, R. 1886 A, 640.  
 Huxley, T. H. 1867 A, 458.  
 1867 C, 274.  
 Knowlton, F. H. 1909 B, 396.  
 Lebedinsky, N. G. 1913 A.  
 1921 A, 10, figs. 2-4 (Alca).

Leunis and Ludwig 1883 A, 515.  
 Lobley, J. L. 1908 A, 202.  
 Lühder, W. 1871 A, 324 (Alcæ).  
 Lydekker, R. 1891 A, 193.  
 Meckel, J. F. 1825 A (Alcæ).  
 Newton and Gadow 1896 A, 1059 (Alca).  
 Parker, W. K. 1888 D, 470.  
 1890 A, 56.  
 Pycraft, W. P. 1900 C, 1019.  
 1906 A, 401.

Pycraft, W. P. 1910 A, 54, 450.  
 Reichenow, A. 1913 A, 82.  
 Ridgway, R. 1887 A, 8.  
 1919 A, 701.  
 Seebohm, H. 1888 A, 418.  
 Steiner, H. 1918 A, 333, 492.  
 Sushkin, P. P. 1899 B, 153.  
 Wallace, A. R. 1876 A, II, 367.  
 Wamich, P. 1913 A, 14.

## ALCINÆ Bonaparte.

*Bonaparte, C. L.* 1831 A, 35.  
 A. O. U. 1910 A, 31.  
 Fürbringer, M. 1888 A, 1148 (Alcinæ, Uriinæ).

Knowlton, F. H. 1909 B, 396.  
 Wetmore and Miller 1926 A, 343.

CERORHINCA Bonaparte. Type *Alca monocerata* Pallas.

*Bonaparte, C. L.* 1828, Ann. Lyc. Nat. Hist., N. Y., II, 427.  
 A. O. U. 1910 A, 27.  
 Coues, E. 1884 A, 805, figs. 536-538 (Cerato-rhina).  
 Ridgway, R. 1887 A, 9, 11, pl. vi.

**Cerorhinca dubia** Miller.

*Miller, L. H.* 1925 C, 115, pl. ii a.  
 Miocene (Temblor); California.

URIA Brisson. Type *Uria uria* Brisson.

*Brisson, M. J.* 1760, Ornith., VI, 70.  
 Hay, O. P. 1902 A, 524.  
 Adolphi, H. 1922 A, 361.  
 A. O. U. 1910 A, 31.  
 Bignon, F. 1889 A.  
 Bonsdorff, E. J. 1871 A, 310.  
 Coues, E. 1868 A, 14, 67.  
 Dabbene, R. 1910 A, 201 (Catarrhactes).  
 Fürbringer, M. 1888 A, pls. ii, iv, vii.  
 Garrod, A. H. 1873 C, 36 (Catarrhactes).  
 Giebel, C. G. 1855 B, 33.  
 Heilmann, G. 1926 A, 85, figs. 66, 69.  
 Knowlton, F. H. 1909 B, 400.  
 Leunis and Ludwig 1883 A, 517.  
 Magnan, A. 1922 A, 170, pl. v.  
 Newton and Gadow 1896 A, 1086.  
 Owen, R. 1866 B, 31, 82.  
 Parker, W. K. 1890 A, 58, pls. vi-viii.  
 Pycraft, W. P. 1900 C, 1040.  
 Ridgway, R. 1887 A, 10, 17, pl. ii.  
 1919 A, 717.

Rosenberg, F. T. 1911 A, 209.  
 Selenka, E. 1869 A, pl. xvii.  
 Sundevall, C. J. 1886 A.  
 Weitzel, A. 1865 A, 339.  
 Zittel and Schlosser 1923 A, 398.

**Uria affinis** (Marsh).

Hay, O. P. 1902 A, 524.  
 A. O. U. 1910 A, 379.  
 Lambrecht, K. 1921 A, 57.  
 Shufeldt, R. W. 1915 D, 69, 76, pl. viii, fig. 60.  
 Pleistocene; Maine.

**Uria antiqua** (Marsh).

Hay, O. P. 1902 A, 524.  
 A. O. U. 1910 A, 379.  
 Lambrecht, K. 1921 A, 57.  
 Miller and Stephenson 1912 A, 57 (Catarrhactes).  
 Shufeldt, R. W. 1915 D, 63, 76, pl. viii, fig. 56.  
 Miocene (St. Mary's); North Carolina.

PINGVINUS Bonnaterre. Type *Alca impennis* Linnæus.

*Bonnaterre, J. P.* 1790, Tabl. Ency. Meth., 28.  
 Hay, O. P. 1902 A, 524 (Plautus).  
 Abel, O. 1912 F, 354 (Alca).  
 Beddard, F. E. 1898 A, 141, 360, fig. 79 (Alca).  
 Evans, A. H. 1899 A, 315 (Alca).  
 Fürbringer, M. 1888 A (Plautus, Alca).  
 Garrod, A. H. 1873 C, 36 (Alca).  
 Harting, P. 1866 A, 24 (Alca).  
 Hay, O. P. 1902 B, 255 (Plautus).  
 Heilprin, A. 1887 A, 69 (Alca).  
 Knowlton, F. H. 1909 B, 403 (Plautus).  
 Owen, R. 1866 B, 17-25 (Alca).  
 Ridgway, R. 1919 A, 710.  
 Steiner, H. 1918 A, 337, fig. 32 (Alca).

**Pinguinus impennis** (Linnæus).

Hay, O. P. 1902 A, 524 (Plautus).  
 Blasius, W. 1885 A, 398 (Alca).

Blasius, W. 1900 A, 434 (Alca).  
 Blatchley, W. S. 1902 A, 175, figs. 53, 54 (Plautus).  
 Coues, E. 1868 A, 15 (Alca).  
 Eimer, G. H. T. 1901 A, 164 (Alca).  
 Evans, A. H. 1899 A, 315 (Plautus).  
 Eyton, T. C. 1867 A, 215 (Alca).  
 Fürbringer, M. 1888 A, pls. iv, v (Plautus, Alca).  
 Garrod, A. H. 1873 C, 34, fig. 1 (Alca).  
 Grieve, S. 1883 A, 479, pl. ix (Alca).  
 Hay, O. P. 1902 B, 255 (Plautus).  
 Hoernes, R. 1886 A, 640 (Alca).  
 Hull, E. 1908 A, 152 ("great auk").  
 Huxley, T. H. 1867 A, 455 (Plautus).  
 Lambrecht, K. 1921 A, 56 (Alca).  
 Lankester, E. R. 1905 A, 23, figs. 15, 15a (Alca).  
 Lucas, F. A. 1903 B, 311 ("great auk").  
 Meunier, S. 1903 A, 772 (Alca).



Michahelles, C. 1833 A, 648 (Alca).  
 Mivart, St. G. 1871 B, 392, pl. liii, fig. 11 (Plautus).  
 Moreau, L. J. 1900 A, 109 (Alca).  
 Owen, R. 1868 A, 759 (Alca).  
 Pycraft, W. P. 1910 A, 120 ("great auk").  
 Ridgway, R. 1919 A, 711.  
 Scharff, R. W. 1907 A, 37, fig. 11 (Alca).

Serres, M. 1880 A, 303 (Alca).  
 Shufeldt, R. W. 1886 D, 362, fig. (Alca).  
 1896 A, 358 (Plautus).  
 Strasser, O. z. 1910 A, 134, 2 pls. (Plautus).  
 Formerly on coasts and islands of North Atlantic from Arctic Circle south to Ireland and Massachusetts: Found at bottom of shell heaps in Florida.

#### SYNTHLIBORAMPHUS Brandt. Type *Alca antiqua* Gmelin.

Brandt, J. F. 1837, Bull. Sci. Acad. Imp. St. Pétersb., II, 347.  
 Beddard, F. E. 1896 A, 544.  
 Coues, E. 1868 A, 55.  
 1884 A, 811.  
 Ridgway, R. 1919 A, 756.

#### *Synthliboramphus antiquus* (Gmelin).

Gmelin, J. F. 1789, Syst. Nat., I, II, 554. (Alca).

A. O. U. 1910 A, 29.  
 Coues, E. 1868 A, 56, fig. 13.  
 1884 A, 811, fig. 549.  
 Hay, O. P. 1927 D, 172.  
 Miller, L. H. 1914 A, 34.  
 1928 A, 120.  
 Ridgway, R. 1919 A, 757.  
 Recent; coasts and islands of north Pacific: Pleistocene (San Pedro); California.

#### MANCALLA Lucas. Type *M. californiensis* Lucas.

Lucas, F. A. 1901 G, 428.  
 Zittel and Schlosser 1911 A, 322.

#### *Mancalla californiensis* Lucas.

Lucas, F. A. 1901 G, 428.  
 Lambrecht, K. 1921 A, 56.  
 Lucas, F. A. 1901 E, 133, figs. 1, 2.

Merrill, G. P. 1907 A, 5.  
 Miller, L. H. 1911 D, 117.  
 1912 A, 65, 67.  
 Yates, L. G. 1904 A, 8.  
 Zittel and Lucas 1902 A, 273.  
 Upper Miocene; California.

#### NAUTILORNITHINÆ Wetmore.

Wetmore, A. 1926 B, 394.

#### NAUTILORNIS Wetmore. Type *N. avus* Wetmore.

Wetmore, A. 1926 B, 392.  
 1928 A, 151.

#### *Nautilornis avus* Wetmore.

Wetmore, A. 1926 B, 392.  
 Eocene (Green River); Utah.

#### *Nautilornis proavitus* Wetmore.

Wetmore, A. 1926 B, 394, pl. xxxvi, fig. 9.  
 Eocene (Green River); Utah.

#### Suborder COLUMBIFORMES Fürbringer.

Fürbringer, M. 1888 A, 1567.  
 Adolphi, H. 1922 A, 365 (Columbæ).  
 A. O. U. 1910 A, 147 (Columbæ).  
 Arldt, T. 1907 D, 647.  
 Beddard, F. E. 1897 A, 470 (Columbæ).  
 Blainville, H. M. D. 1816, Bull. Soc. Philomat., 110 (Giratores).  
 Bonaparte, C. L. 1831 A, 58 (Columbini).  
 Carus, V. 1868 A, 311 (Gyrantes).  
 Chandler, A. C. 1916 C, 359 (Columbæ).  
 Coues, E. 1884 A, 561 (Columbæ).  
 Duméril, A. M. C. 1806 A, 52 (Columbini).  
 Elliot, D. G. 1885 A, 236 (Columbæ).  
 Fürbringer, M. 1888 A (Columbæ, Peristeromorphæ).  
 1902 B, 614, 681.  
 Gadow, H. 1891 A (Columbæ).  
 1892 A, 247.  
 1893 A, 210.  
 1910 B, 977 (Columbæ).  
 Garrod, A. H. 1873 D, 639 (Columbæ).  
 1874 A, 117 (Columbæ).  
 1874 B, 252 (Columbæ).  
 Gaupp, E. 1905 D, 1026 (Columbæ).

Hilzheimer, M. 1913 A, 517 (Columbinæ).  
 Huxley, T. H. 1867 A, 456, 459, 460 (Peristeromorphæ).  
 1867 C, 276 (Peristeromorphæ).  
 Knowlton, F. H. 1909 B, 408 (Columbæ).  
 Leunis and Ludwig 1883 A, 434 (Columbinæ).  
 Lohley, J. L. 1908 A, 197 (Columbæ).  
 Lühder, W. 1871 A, 327 (Columbæ).  
 Lydekker, R. 1879 A, 12 (Peristeromorphæ).  
 1891 A, 123 (Columbæ).  
 Miller, L. H. 1925 B, 80 (Columbæ).  
 Newton, A. 1885 A, 46 (Columbæ).  
 Newton and Gadow 1896 A, 1064 (Columbæ).  
 Owen, R. 1866 B, 10 (Columbacei, Gemitores).  
 Parker, W. K. 1875 A, 700 (Peristeromorphæ).  
 Parker and Haswell 1897 A, 389 (Columbæ).  
 Reichenow, A. 1913 A, 323 (Gyrantes).  
 Ridgway, R. 1887 A, 210 (Columbæ).  
 1916 A, 275.  
 Selater, P. L. 1858 A (Columbæ).  
 Seebohm, H. 1888 A, 419, 422, 426 (Columbæ).  
 Sharpe, R. B. 1891 A, 70.  
 Shufeldt, R. W. 1901 D, 487, 506 (Columbæ).  
 Steiner, H. 1916 A, 493, 496 (Columbæ).

- Steiner, H. 1918 A, 271, 339, 441, 492 (Columbæ).  
 Strasser, H. 1905 B ("tauben").  
 1905 C ("tauben").  
 Sundevall, C. J. 1886 A, 406 (Pygopodes).  
 Vialleton, L. 1916 A, 7 (Columbæ).  
 Wallace, A. R. 1876 A, i, 492; ii, 331, 335 (Columbæ).  
 Wetmore, A. 1926 A, 5 ("columbiform birds").  
 Wetmore and Miller 1926 A, 343.  
 Zittel, K. A. 1890 A, 848.  
 Zittel and Schlosser 1911 A, 324 (Columbæ).

*Superfamily COLUMBOIDÆ*, new name.

- Adolphi, H. 1922 A, 365 (Columbæ).  
 Gadow, H. 1892 A, 248 (Columbæ).  
 Wetmore and Miller 1926 A, 343 (Columbæ, Columbides).

COLUMBIDÆ Vigors.

- Vigors, N. A. 1825 A, 480.  
 Adolphi, H. 1922 A, 365 (Columbinae).  
 Boie, F. 1826 A, col. 977.  
 Bonaparte, C. L. 1831 A, 32.  
 Arldt, T. 1907 D, 647.  
 Beebe, C. W. 1915 B, 44 (Columba).  
 Bignon, F. 1889 A.  
 Blanchard, E. 1857 A, 98 ("pigeons").  
 Chandler, A. C. 1916 C, 360.  
 Coues, E. 1884 A, 562.  
 Cuvier, G. 1805 A ("pigeons").  
 Elliot, D. G. 1835 A, 242.  
 Engelmann, O. 1910 A, 487 (Columba).  
 Filatoff, D. 1906 A, 626 (Columba).  
 Finn, F. 1894 B, 454 ("pigeons").  
 Fürbringer, M. 1888 A, 1217-1420.  
 1902 B, 681.  
 Gadow, H. 1892 A, 248.  
 1893 A, 210.  
 1910 B, 977.  
 Garrod, A. H. 1874 B, 258.  
 Gegenbaur, C. 1871 A, 170 ("tauben").  
 Gervais, P. 1856 A, 15 ("pigeons").  
 Giebel, C. G. 1855 B, 35 ("tauben").  
 Harting, P. 1866 A, 24.  
 Heilprin, A. 1887 A, 66.  
 Hesse, H. 1907 A, 214.  
 Huxley, T. H. 1867 A, 434, 455, 459, fig. 16.  
 Huxley, T. H. 1867 C, 252.  
 Knopff, W. 1917 A, 51 (Columba).  
 Knowlton, F. H. 1909 B, 413.  
 L'Hermannier, F. 1836 A, 110 ("pigeons").  
 Leunis and Ludwig 1833 A, 436.  
 Lobley, J. L. 1908 A, 201, 206.  
 Lydekker, R. 1891 A, 124.  
 Magnus, H. 1871 A ("tauben").  
 Meckel, J. F. 1825 A ("tauben").  
 Owen, R. 1866 B, 53, 70.  
 Parker, W. K. 1888 D, 473 ("pigeons").  
 Parker and Haswell 1897 A, 351, figs. 963-971, 973-982.  
 Pycraft, W. P. 1902 B, 324 ("pigeons").  
 Reichenow, A. 1913 A, 331 (Columbidae); 343 (Columbinae).  
 Ridgway, R. 1887 A, 210.  
 Selenka, E. 1869 A, 33, pls. vii, xiii (Columba).  
 Shufeldt, R. W. 1891 E, 194.  
 1901 D, 483.  
 1904 C, 315.  
 Steiner, H. 1918 A, 492.  
 Strasser, H. 1885 A, 243 ("tauben").  
 1905 B ("tauben").  
 1905 C ("tauben").  
 Wallace, A. R. 1894 A, 442.  
 Wetzel, A. 1885 A, 333, 357 ("tauben").  
 Wetmore and Miller 1926 A, 343.

COLUMBA Linnæus. Type *C. palumbus* Linnæus.

- Linnæus, C. 1758 A, 162.  
 Beer, G. R. 1926 A, 323, fig. 96 (Columbia).  
 Carus and Engelmann 1861 A, 1724.  
 Coues, E. 1884 A, 564.  
 Döderlein, L. 1923 A, 142, 162.  
 Elliot, D. G. 1835 A, 252.  
 Fürbringer, M. 1888 A, pls. ii, iv.  
 Heilmann, G. 1926 A, 11, figs. 5, 6, 131 (Columba); 206 ("pigeons").  
 Hommes, J. H. 1924 A, 16.  
 Kingsbury, B. F. 1926 A, 103.  
 Knowlton, F. H. 1909 A, 419.  
 Lambrecht, K. 1914 A, 68, pl. viii.  
 Lappincott, W. A. 1920 A, 535.  
 Lurje, M. 1906 A, 1-61, pls. i-x ("tauben").  
 Magnan, A. 1922 A, 142, pl. iii; text-fig. 6.  
 Miller, W. D. 1924 A, 5, fig. 8.  
 Owen, R. 1866 B, 49, 66.  
 Reichenow, A. 1913 A, 343.  
 Ridgway, R. 1887 A, 210, 211, pl. lxii.  
 Selenka, E. 1869 A, pls. vii, xiii.  
 Sundevall, C. J. 1886 A, 406.  
 Taschenberg, O. 1899 A, 4000.  
 Wetzel, A. 1885 A, 333.  
**Columba fasciata Say.**  
 Say, T. 1823, Long's Exped., ii, 10.  
 A. O. U. 1910 A, 147.  
 Coues, E. 1884 A, 565.  
 Hay, O. P. 1927 D, 186.  
 Knowlton, F. H. 1909 A, 419.  
 Miller, L. H. 1925 B, 80.  
 Recent; western U. S. to Nicaragua; Pleistocene (La Brea); California.  
**Columba micula (Wetmore).**  
 Wetmore, A. 1924 A, 13, figs. 8, 9 (Chloroenas).  
 Hay, O. P. 1927 D, 136 (Chloroenas).  
 Wetmore, A. 1923 A, 154 (Chloroenas).  
 Generic change made by Wetmore.  
 Pliocene? (San Pedro Valley); Arizona.

ZENAIDEA Bonaparte. Type *Columba carolinensis* Linnæus.

- Bonaparte, C. L. 1854, Consp. Avium, ii, 84.  
 A. O. U. 1910 A, 148.  
 Coues, E. 1884 A, 568.  
 Garrod, A. H. 1874 B, 259.

Knowlton, F. H. 1909 B, 426.  
 Ridgway, R. 1887 A, 210, 212, pl. lxiii.  
 1916 A, 339.  
 Shufeldt, R. W. 1901 D, 494.

**Zenaidura macroura carolinensis** (Linnaeus).

Linnaeus, C. 1766, Syst. Nat. ed. 12, i, 286 (Columba).  
 Chandler, A. C. 1916 C, 359 (Z. macroura).  
 Coues, E. 1884 A, 568, fig. 392 (Z. carolinensis).

Hay, O. P. 1927 D, 198 (Z. macroura); 186 (Z. m. carolinensis).  
 Knowlton, F. H. 1909 B, 426 (Z. macroura).  
 Miller, L. H. 1912 A, 84 (Z. macroura).  
 1925 A, 322 (Z. macroura).  
 1925 B, 80 (Z. macroura).  
 Osborn, H. F. 1925 D, 542 (Z. macroura).  
 Ridgway, R. 1916 A, 340.  
 Recent; North America: Pleistocene (McKittrick); California.

**Suborder PSITTACIFORMES Fürbringer.**

Fürbringer, M. 1888 A, 1552, 1567.

Unless otherwise indicated the writers, as cited, use for this suborder the name Psittaci.  
 Adolphi, H. 1922 A, 375.  
 A. O. U. 1910 A, 179.  
 Beddard, F. E. 1897 A, 470 ("parrots").  
 Coues, E. 1884 A, 494.  
 Gadow, H. 1892 A, 231, 249.  
 1910 B, 977.  
 Huxley, T. H. 1867 A, 465 (Psittacomorphæ).  
 Knowlton, F. H. 1909 B, 454.  
 Lambrecht, K. 1914 A, 69.  
 Miller, W. D. 1924 A, 2 ("parrots").  
 Parker, W. K. 1875 A, 700, 712, 714 (Psittacomorphæ).

Reichenow, A. 1913 A, 434.  
 Ridgway, R. 1887 A, 268.  
 Sharpe, R. B. 1891 A, 83 (Psittaciformes).  
 Steiner, H. 1922 A, 328.  
 Stejneger, L. 1885 A, 349.  
 Taschenberg, O. 1899 A, 4252.  
 Thompson, d'A. W. 1899 A, 9-46 ("parrots").  
 Wetmore, A. 1926 A, 5 ("psittaciform birds").  
 Wetmore and Miller 1926 A, 343 (Psittaciformes).  
 Zittel, K. A. 1890 A, 849, 856.  
 Zittel and Schlosser 1911 A, 324.  
 1923 A, 401.

**PSITTACIDÆ Vigors.**

Vigors, N. A. 1825 A, 452.  
 Adolphi, H. 1922 A, 376.  
 Aebly, C. 1873 A, 702, pl. xii (Psittacus).  
 A. O. U. 1910 A, 179.  
 Bignon, F. 1889 A.  
 Bonsdorff, E. J. 1871 A, 310, 311 (Psittacinæ).  
 Coues, E. 1884 A, 496.  
 Fürbringer, M. 1888 A, 1133.  
 Gaupp, E. 1905 D, 1028 ("papageien").  
 Knobel, E. M. 1924 A, 789 ("parrots").  
 Knowlton, F. H. 1909 B, 455.  
 Lydekker, R. 1891 A, 10.  
 Mivart, St. G. 1895 A, 162.

Owen, R. 1848 B, 42, 157.  
 1866 B, 51, fig. 30.  
 Reichenow, A. 1913 A, 464 (Psittacidæ); 484 (Conurine).  
 Ridgway, R. 1887 A, 268.  
 Selenka, E. 1869 A, 32, 34, 47, 64, pls. iv, xiv, xvi ("papageien").  
 Sundevall, C. J. 1886 A, 406 (Psittaci).  
 Thompson, d'A. W. 1899 A, 32 (Psittacinæ).  
 Weitzel, A. 1865 A, 332 (Psittacus).  
 Wetmore, A. 1926 A, 3.  
 Wetmore and Miller 1926 A, 344.

**CONUROPIS Salvadori. Type *Psittacus carolinensis* Linnaeus.**

Salvadori, T. A. 1891, Cat. Birds Brit. Mus., xx, 203.  
 A. O. U. 1910 A, 179.  
 Coues, E. 1884 A, 494 (Conurus).  
 Knowlton, F. H. 1909 B, 469.  
 Ridgway, R. 1887 A, 268, 269, pl. lxxvii (Conurus).  
 Shufeldt, R. W. 1886 C, 407 (Conurus).  
 Stejneger, L. 1885 A, 365 (Conurus).  
 Wetmore, A. 1926 A, 3.  
 1926 E, 526 ("parquet").

**Conuropsis carolinensis** (Linnaeus).

Linnaeus, C. 1758 A, 97 (Psittacus).

Bignon, F. 1889 A, 290, 291, 295.  
 Ridgway, R. 1887 A, 270 (Conurus).  
 Shufeldt, R. W. 1886 C, 407, pls. ix, x (Conurus).  
 Stejneger, L. 1885 A, 366, fig. 170.  
 This form not found as a fossil.  
 Probably extinct; once ranged over much of eastern half of United States.

**Conuropsis fratercula** Wetmore.

Wetmore, A. 1926 A, 3, figs. 5, 6.  
 1928 A, 153.  
 Middle Miocene (Sheep Creek); Nebraska.

**Suborder CUCULIFORMES Coues.**

Coues, E. 1884 A, 446, 467.  
 Adolphi, H. 1922 A, 372.  
 Arldt, T. 1907 D, 646 (Coccygiformes).

Beddard, F. E. 1897 A, 470 (Cuculi).  
 Chandler, A. C. 1916 C, 363.  
 Cope, E. D. 1891 N, 58, 60 (Coccygomorphæ).

Coues, E. 1884 A, 446, 467.  
 Furbringer, M. 1888 A, 1567 (Coccygiformes).  
 1902 B, 684, 724 (Coccygiformes).  
 Gadow, H. 1893 A, 212, 300.  
 1910 B, 977.  
 Gegenbaur, C. 1871 A, 192 (Coccygomorphæ).  
 Heilmann, G. 1926 A, 20 (Coccygomorphæ).  
 Huxley, T. H. 1867 A, 466 (Coccygomorphæ).  
 1867 C, 284 (Coccygomorphæ).  
 Knowlton, F. H. 1909 B, 50, 441.  
 Lambrecht, K. 1914 A, 69, 73.  
 Leunis and Ludwig 1883 A, 337 (Coccygomorphæ).  
 Lydekker, R. 1879 A, 27 (Coccyges).

Newton and Gadow 1896 A, 11, 147, 879 (Coccyges); 1064 (Coccygomorphæ).  
 Parker, W. K. 1875 A, 700, 712, 715 (Coccygomorphæ).  
 Pycraft, W. P. 1903 A, 258, 288 (Cuculiformes, Cuculi).  
 Ridgway, R. 1887 A, 271 (Coccyges).  
 1916 A, 1 (Coccygiformes).  
 Sharpe, R. B. 1891 A, 82 (Coccyges).  
 Shufeldt, R. W. 1901 C, 5 (Coccygomorphæ).  
 Steiner, H. 1918 A, 492.  
 Stejneger, L. 1885 A, 371 (Cuculoides).  
 Sundevall, C. J. 1886 A (Coccyges).  
 Wetmore and Miller 1926 A, 344.  
 Zittel, K. A. 1890 A, 850, 856 (Coccygiformes).

### Superfamily CUCULOIDÆ, new form.

Adolphi, H. 1922 A, 373 (Cuculi).  
 Gadow, H. 1893 A, 223 (Coccyges).  
 1910 B, 977 (Cuculi).  
 Knowlton, F. H. 1909 B, 50, 441 (Cuculi).  
 Lambrecht, K. 1914 A, 69 (Cuculi).

Pycraft, W. P. 1903 A, 258, 288 (Cuculi).  
 1910 A, 52, 59 (Cuculi).  
 Stejneger, L. 1885 A, 371 (Cuculoides).  
 Wetmore and Miller 1926 A, 344 (Cuculi).

### CUCULIDÆ Vigors.

Vigors, N. A. 1825 A, 453.  
 Adolphi, H. 1922 A, 373.  
 A. O. U. 1910 A, 180.  
 Arldt, T. 1907 D, 648.  
 Blanchard, E. 1859 A, 139.  
 Bonaparte, C. L. 1831 A, 30 (Cuculidæ, Cuculinæ).  
 1832 A, 297 (Cuculinæ).  
 1840 A, 272.  
 Chandler, A. C. 1916 C, 364.  
 Coues, E. 1884 A, 470.  
 Fürbringer, M. 1888 A, pls. iii, iv, vi, vii (Cuculus).  
 Gadow, H. 1891 A.  
 1893 A, 214.  
 Garrod, A. H. 1874 A, 116, 119.  
 Gaupp, E. 1905 D, 1026 (Cuculus).  
 Giebel, C. G. 1855 B, 37 ("kukuk").  
 Hesse, H. 1907 A, 221.

Huxley, T. H. 1867 A, 444, 455, 466.  
 1867 C, 262, 265, 285, fig. 26.  
 Knowlton, F. H. 1909 B, 442.  
 Leunis and Ludwig 1883 A, 342.  
 Lobley, J. L. 1908 A, 201, 206.  
 Magnus, H. 1871 A, 70.  
 Parker, W. K. 1875 D ("cuculine birds").  
 Pycraft, W. P. 1903 A, 258, 288.  
 Reichenow, A. 1914 A, 7.  
 Ridgway, R. 1887 A, 271.  
 Selenka, E. 1869 A, pl. xvi.  
 Shufeldt, R. W. 1901 C, 9.  
 Steiner, H. 1918 A, 492.  
 Stejneger, L. 1885 A, 373.  
 Taschenberg, O. 1899 A, 4018.  
 Weitzel, A. 1865 A, 330 (Cuculus).  
 Wetmore and Miller 1926 A, 344 (Cuculidæ, Cuculinæ).

### NEOMORPHINÆ.

A. O. U. 1910 A, 180.  
 Knowlton, F. H. 1909 B, 448.  
 Reichenow, A. 1914 A, 10.

Shelley, G. E. 1891, Cat. Birds Brit. Mus. xix, 414.  
 Wetmore and Miller 1926 A, 344.

### Geococcyx Wagler. Type *Saurothera californiana* Lesson.

Wagler, J. G. 1831, Isis, xxiv, 524.  
 A. O. U. 1910 A, 180.  
 Coues, E. 1884 A, 473.  
 Huxley, T. H. 1867 A, 444, 445.  
 Owen, R. 1866 B, 34, 36.  
 Reichenow, A. 1914 A, 12.  
 Ridgway, R. 1887 A, 271, 272, pl. lxxix.  
 Shufeldt, R. W. 1886 B, 466.  
 Stejneger, L. 1885 A, 381.

### *Geococcyx californianus* (Lesson).

Lesson, R. P. 1829, Compl. Oeuvres Buffon, vi, 420 (*Saurothera*).  
 A. O. U. 1910 A, 181.

Coues, E. 1884 A, 474, fig. 325.  
 Hay, O. P. 1927 D, 187, 198.  
 Knowlton, F. H. 1909 B, 448.  
 Miller, L. H. 1921 C, 130 ("Geococcyx").  
 1925 A, 325.  
 1925 B, 104 (This species?).  
 1927 A, 156.

Osborn, H. F. 1925 D, 542 (This species?).  
 Shufeldt, R. W. 1886 B, 466, pls. xlii-xlv.  
 Stejneger, L. 1885 A, 381, fig. 184.  
 Recent; Sacramento Valley to Mexico, east to Kansas and Texas: Pleistocene (La Brea, McKittrick); California.

NEOMORPHUS Gloger. Type *N. geoffroyi* Temminck.

Gloger, C. W. L. 1827, in Froriep's Notiz., xvi, 278.

Carus, V. 1875 A, 235.

Miller, L. H. 1912 A, 98 (Neomorpha).

Owen, R. 1866 B, 32, 36 (Neomorpha).

Reichenow, A. 1914 A, 12.

Shelley, G. E. 1891, Cat. Birds Brit. Mus., xix, 415.

**Neomorpus** sp. indet.

Hay, O. P. 1927 D, 187. Pleistocene; California.

Miller, L. H. 1912 A, 78, 93 (Neomorpha?).

Osborn, H. F. 1925 D, 542 (Neomorpha?).

## Suborder STRIGIFORMES Shufeldt.

Shufeldt, R. W. 1904 B, 854.

Unless otherwise indicated the authors, as below cited, use the name *Striges* for this suborder.

Hay, O. P. 1902 A, 536.

Adolph, H. 1922 A, 391.

Arlt, T. 1907 D, 145.

Barrows, W. B. 1885 A, 321 ("owls").

Beddard, F. E. 1888 B, 335.

1898 A, 244.

Bittner, F. 1912 A, 2 ("eulen").

Blainville, H. M. D. 1821 A, 193 ("oiseaux de proie nocturnes").

Bonaparte, C. L. 1832 A, 296 (Striginæ).

1833 A, 1047 ("hibous").

Brandt, J. F. 1853 A, 225 ("rapaces nocturnæ").

Carus, V. 1868 A, 75, 303 (Strigomorphæ).

Chandler, A. C. 1914 B, 141.

1916 C.

Dabbene, R. 1910 A, 489 (Strigiformes).

Diethelm, M. 1907 A, 1 (Strigiformes).

Duméril, A. M. C. 1906 A, 34 (Nocturni).

Evans, A. H. 1899 A, 397.

Fürbringer, M. 1888 A.

1902 B, 690.

Gadow, H. 1893 A, 235.

1910 B, 977.

Gemminger, M. 1852 A, 216 ("eulen").

Grote, H. 1902 A, 60 ("eulen").

Heusinger, C. F. 1822 A.

Knowlton, F. H. 1909 B, 511.

Köstlin, O. 1844 A ("eulen").

Lambrecht, K. 1914 A, 70, 71.

Lebedinsky, N. G. 1913 A (Strigiformes).

Lebedinsky, N. G. 1913 A, 37 (Strigiformes).

1913 B, 140, 146 (Strigiformes).

Lydekker, R. 1891 A, 12.

Macartney, J. 1802, Lectures on Comp. Anat., tab. ii (Nycterides).

Miller, L. H. 1925 B, 103.

Miller, W. D. 1924 A, 2 ("birds of prey").

Müller, W. 1907 A, 406.

Newton, A. 1885 A, 47.

Newton and Gadow 1896 A, 1084.

Owen, R. 1866 B (Raptore).

Pander and Alton 1838 A, 17 ("nachtraubvögel").

Pycraft, W. P. 1902 A, 292, 314.

1903 B, 1.

1910 A, 60, 439.

Rafinesque, C. S. 1815 A, 69 (Ornyctia).

Ridgway, R. 1914 A, 594.

Scalder, P. L. 1879 A, 346, 451.

Sharpe, R. B. 1891 A, 79.

Shufeldt, R. W. 1896 A, 370 ("owls").

1900 B, 719.

1909 A, 7.

Steiner, H. 1916 A, 493, 499.

1918 A, 389, 441, 494.

1922 A, 328.

Sushkin, P. P. 1899 A, 500.

1899 B, 153.

Taschenberg, O. 1899 A, 4305.

Vialleton, L. 1916 A, 7.

Wagler, J. G. 1830, Syst. Amph., 80.

Wagner, R. 1843 A, 79 ("eulen").

Wetmore and Miller 1926 A, 344.

Wilbrand, J. B. 1823 A, 511 ("raubvögel").

Wray, R. S. 1887 A, 348.

## TYTONIDÆ Ridgway.

Ridgway, R. 1914 A, 600.

A. O. U. 1910 A, 168 (Aluconidæ).

Coues, E. 1884 A, 498, 500 (Aluconidæ).

Gadow, H. 1891 A, 236, 301 (Striginæ).

Knowlton, F. H. 1909 B, 514 (Striginæ).

Ridgway, R. 1887 A, 255 (Strigidæ).

Wetmore and Miller 1926 A, 344.

TYTO Billberg. Type *Strix flammea* Linnæus.

Billberg, G. J. 1828, Synop. Fauna Scand., i, pt. ii, tab. A.

Knowlton, F. H. 1909 B, 514 (Strix).

Magnan, A. 1922 A, 131, pls. i, ii, xii, xiv; text-fig. 2.

Newton and Gadow 1896 A, 1084 (Strix).

Pander and Alton 1838 A, 19 (Strix).

Ridgway, R. 1887 A, 255, pl. lxxiv (Strix).

1914 A, 600.

Shufeldt, R. W. 1900 D, 147, pls. xvii, xviii (Syrnium).

Wetmore, A. 1922 A, 458.

**Tyto perlata** pratincola (Bonaparte).

Bonaparte, C. L. 1838, Geol. and Comp. List, 7 (Strix).

A. O. U. 1910 A, 168 (Aluco).

Fürbringer, M. 1888 A, pl. vi (Strix pratincola).

Hay, O. P. 1923 A, 382 (Aluco pratincola).

1927 D, 187 (T. pratincola).

Knowlton, F. H. 1909 B, 514, fig. 159 (Strix pratincola).

Miller, L. H. 1909 B, 306 (Aluco).

1910 C, 11 (Aluco pratincola).

1912 A, 78, 84, 114 (Aluco).

Miller, L. H. 1916 B, 99 (Aluco).  
 1925 B, 103 (Aluco pratincola).  
 Osborn, H. F. 1925 D, 541 (T. pratincola).  
 Ridgway, R. 1887 A, 255 (Strix pratincola).  
 1914 A, 605.

Shufeldt, R. W. 1900 B, 672, 675, fig. 3 (Aluco).  
 1916 E, 18 (Tito).  
 1917 B, 33, pl. i, figs. 7, 8 (Tito).  
 Recent; North America; Pleistocene (Rancho  
 La Brea); California; Florida.

## STRIGIDÆ Vigors.

Vigors, N. A. 1825 A, 425.  
 Hay, O. P. 1902 A, 536.  
 Adolphi, H. 1922 A, 392 (Buboninæ).  
 Allen, J. A. 1871 A.  
 Ardt, T. 1907 D, 683.  
 1912 A, 708, 752.  
 Barrows, W. B. 1885 A, 325 (Striginæ).  
 Beddard, F. E. 1888 B, 335.  
 Beebe, C. W. 1906 A, 492 ("owls").  
 Beyer, H. 1908 A, 247, fig. 18 (Strix).  
 Blanchard, E. 1859 A, 60 (Strix).  
 Bonaparte, C. L. 1831 A, 30 (Striginæ).  
 1838 B, 116 (Buboninæ).  
 1840 A, 261 (Buboninæ).  
 Brandt, J. F. 1853 A, 226 (Strigidæ); 230 (Buboninæ).  
 Dabbene, R. 1910 A, 489.  
 Engelmann, O. 1910 A, 487 (Strix).  
 Evans, A. H. 1899 A, 398 (Strigidæ); 404 (Buboninæ).  
 Fürbringer, M. 1888 A (Strigidæ); 1306 (Striginæ, Asioninæ).  
 1902 B, 691 (Bubonidæ); 724 (Strigidæ).  
 Gadow, H. 1893 A, 235.  
 Garrod, A. H. 1873 D, 635.  
 1874 A, 117.  
 Gegenbaur, C. 1863 A, 471 (Strix).  
 1871 A, 189 ("strigidæ").  
 Gervais, P. 1856 A, 8 ("strigidés").  
 Giebel, C. G. 1855 B, 38 ("eulen").  
 Hesse, H. 1907 A, 219.

Heusinger, C. F. 1822 A, 177 ("eulen").  
 Huxley, T. H. 1867 A, 462.  
 1867 C, 280.  
 Kessler, K. T. 1841 A, 489 ("eulen").  
 Kleinschmidt, O. 1902 A, 640, figs. 1, 2 ("eulen").  
 Knowlton, F. H. 1909 B, 516, 521 (Buboninæ).  
 Lebedinsky, N. G. 1913 A (Strigidæ, Buboninæ).  
 Leunis and Ludwig 1883 A, 417 (Strigidæ).  
 L'Herminier, F. 1836 A ("chouettes").  
 Lobley, J. L. 1908 A, 201, 207.  
 Lühder, W. 1871 A, 329.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A ("eulen").  
 Newton and Gadow 1896 A, 1076 ("owls").  
 Owen, R. 1868 A, 909.  
 Parker, W. K. 1875 D, 138 (Strigidæ).  
 Pycraft, W. P. 1902 A, 292 (Bubonidæ); 293 (Strigidæ).  
 1902 B, 324 ("owls").  
 1903 A, 38 (Asioninæ); 39 (Asionidæ).  
 1903 B, 39 (Strigidæ); 2, 39 (Buboninæ).  
 Reichenow, A. 1913 A, 415.  
 Ridgway, R. 1887 A, 218, 255 (Bubonidæ).  
 1914 A, 617.  
 Selater, P. L. 1879 A, 346, 351.  
 Shufeldt, R. W. 1881 D, 117.  
 1900 D, 119 (Strigidæ).  
 1904 B, 854 (Strigidæ, Bubonidæ).  
 1909 A, 7.  
 Wallace, A. R. 1894 A, i, 441; ii, 350.

OTUS Pennant. Type *O. bakkamæna* Pennant.

Pennant, T. 1769, Indian Zoology, 3.  
 A. O. U. 1910 A, 172.  
 Beyer, H. 1907 B, 301, fig. 15.  
 Blanchard, E. 1859 A, 62.  
 Cuvier, G. 1805 A.  
 Eyton, T. C. 1867 A, 30.  
 Huxley, T. H. 1867 C, 280, fig. 23.  
 Leunis and Ludwig 1883 A, 419.  
 Ridgway, R. 1887 A, 256, 260 (Megascops).  
 1914 A, 681.  
 Selenka, E. 1869 A, 54.  
 Weitzel, A. 1865 A, 326 (Strix).

**OTUS asio bendirei** (Brewster).

Brewster, W. 1882, Bull. Nuttall Orn. Club, vii, 31 (Scops).

A. O. U. 1910 A, 173.  
 Hay, O. P. 1927 D, 187 (O. asio).  
 Knowlton, F. H. 1909 B, 527, fig. 164 (Megascops).  
 Miller, L. H. 1911 C, 395, 399 (O. asio).  
 1912 A, 71, 78, 84, 114 (O. asio).  
 1916 B, 100.  
 1925 B, 103 (O. asio).  
 Osborn, H. F. 1925 D, 541 (O. asio).  
 Parker, W. K. 1875 A, 713 (Asio otus).  
 Ridgway, R. 1887 A, 262 (Megascops).  
 1914 A, 701.

Recent; southwestern Oregon and California:  
 Pleistocene (La Brea and caves); California.

BUBO Duméril. Type *Strix bubo* Linnæus.

Duméril, A. M. C. 1806, Zool. Analyt., 34.  
 Hay, O. P. 1902 A, 536.  
 Adolphi, H. 1922 A, 398, fig. 62.  
 Aebly, C. 1873 A, 702 (Strix).  
 Allen, J. A. 1893 B, 99.  
 Barrows, W. B. 1885 A, 327.  
 Beddard, F. E. 1888 B, 336, fig. 2.  
 1898 A, 536, figs. 126, 128.

Beebe, C. W. 1915 B, 46.  
 Bignon, F. 1889 A.  
 Blanchard, E. 1859 A, 63.  
 Brandt, J. F. 1853 A, 231.  
 Chandler, A. C. 1916 C, 371, pl. xxxii, fig. 84a.  
 Dabbene, R. 1910 A, 251.  
 Diethelm, M. 1907 A, 6, figs. 2a, 2c.  
 Döderlein, L. 1902 A, 438.

- Eyton, T. C. 1867 A, 31, pl. iv, fig. 9.  
 Fürbringer, M. 1888 A, pls. iii, vi, vii.  
 Gaillard, C. 1908 A, 34.  
 Gegenbaur, C. 1871 A, 190.  
 Giebel, C. G. 1855 B, 38 (Strix).  
 Heusinger, C. F. 1822 A, 179 ("schuhu").  
 Knowlton, F. H. 1909 B, 521.  
 Leunis and Ludwig 1883 A, 419.  
 Mackie, S. J. 1863 C, 106.  
 Magnan, A. 1922 A, 177, pls. iv, xi.  
 Miller, L. H. 1916 B, 100.  
     1921 B, 263.  
 Newton and Gadow 1896 A, 1062.  
 Pander and Alton 1838 A, 20, 23 (Strix).  
 Pycraft, W. P. 1903 B, 4, 40.  
 Reichenow, A. 1913 A, 418.  
 Ridgway, R. 1887 A, 256, 262, pl. lxxvi.  
     1914 A, 736.  
 Selater, P. L. 1879 A, 349.  
 Shufeldt, R. W. 1900 B, 667.  
     1900 D, 124, 140.  
     1915 D, 45.  
 Sundevall, C. J. 1886 A, 392 (Strix); 410 (Bubo).  
 Wallace, A. R. 1876 A, ix, 350.  
 Weitzel, A. 1865 A, 827.  
 Zittel and Schlosser 1911 A, 325.  
     1923 A, 401.

### **Bubo leptosteus Marsh.**

- Hay, O. P. 1902 A, 538.  
 Lambrecht, K. 1921 A, 96.  
 Shufeldt, R. W. 1915 D, 33, 77, pl. ii, fig. 18.  
     Middle Eocene (Bridger); Wyoming.

### **Bubo sinclairi Miller.**

- Miller, L. H. 1911 C, 393, 399, figs. 4, 5.  
 Hay, O. P. 1927 D, 216.

- Miller, L. H. 1912 A, 71, 73, 114.  
     Pleistocene (Caves); California.

### **Bubo virginianus pacificus Cassin.**

- Cassin, J. 1854, Illustr. Birds Calif., etc., 178.  
 Hay, O. P. 1902 A, 536 (B. virginianus).  
     1927 D, 187, 198, 216, 244.  
 Husband, R. A. 1924 A, 220, figs. 54-56 (B. virginianus).  
 Knowlton, F. H. 1909 B, 521, fig. 162 (B. virginianus).  
 Lippincott, W. A. 1920 A, 535 (B. virginianus).  
 Miller, L. H. 1909 B, 306 (B. virginianus).  
     1910 C, 11 (B. virginianus).  
     1911 C, 393, 399 (B. virginianus).  
     1912 A, 73, 78, 81, 84, 114 (B. virginianus).  
     1916 B, 100, fig. 1 (B. v. pacificus).  
     1925 A, 324 (B. virginianus).  
     1925 B, 67 (B. pacificus, B. saturatus).  
     1927 A, 156 (B. virginianus).  
 Osborn, H. F. 1925 D, 541 (V. virginianus).  
 Ridgway, R. 1887 A, 263 (B. virginianus, B. v. saturatus).  
     1914 A, 745 (B. v. pacificus).  
 Shufeldt, R. W. 1881 D, 114 (B. virginianus).  
     1900 B, pls. x, xi; pl. xii, fig. 10; pl. xv, fig. 20; text-fig. 5 (B. virginianus).  
     1909 A, 75 (B. virginianus).  
     1913 B, 157 (B. virginianus).  
 Weitzel, A. 1865 A, 327, 359 (B. virginianus).  
     Recent; Bubo virginianus in greater part of North and South America. B. virginianus pacificus in California, Oregon: Pleistocene (Fossil Lake); Oregon; (La Brea and caves); California.

### **GLAUCIDIUM Boie. Type *Strix passerina* Linnæus.**

- Boie, F. 1826, Isis, xix, 970.  
 Adolphi, H. 1922 A, 404.  
 A. O. U. 1910 A, 177.  
 Barrows, W. B. 1885 A, 328, fig. 152.  
 Blanchard, E. 1859 A, 64.  
 Fürbringer, M. 1888 A, pls. iii, iv, vi, vii.  
 Gadow, H. 1891 A.  
 Knowlton, F. H. 1909 B, 538.  
 Lambrecht, K. 1914 A, 70.  
 Pycraft, W. P. 1903 B, 36, 41.  
 Reichenow, A. 1913 A, 429.  
 Ridgway, R. 1873 A, 91.  
     1887 A, 257, 266, pl. lxxv.  
     1914 A, 779.  
 Selenka, E. 1869 A, pl. xvi.  
 Shufeldt, R. W. 1900 D, 132, 136, pl. xv.  
     1916 A, 667.

### **Glaucidium gnoma Wagler.**

- Wagler, J. G. 1832, Isis, xxv, 275.  
 Hay, O. P. 1927 D, 187, 216.  
 Knowlton, F. H. 1909 A, 538.  
 Miller, L. H. 1911 C, 395, 400.  
     1912 A, 73, 84, 114.  
     1925 B, 104.  
 Ridgway, R. 1873 A, 93.  
     1887 A, 266.  
     1914 A, 785.  
     Recent; British Columbia to Guatemala: Pleistocene (Samwel cave); California.  
     This is probably *G. g. californicum* Selater. (Selater, 1857, Proc. Zool. Soc. Lond., 4, G. californicum).

### **MICROPALLAS Coues. Type *Athene whitneyi* Cooper.**

- Coues, E. 1889, Auk, vi, 71.  
 A. O. U. 1910 A, 178.  
 Knowlton, F. H. 1909 B, 539.  
 Ridgway, R. 1887 A, 257, 266, pl. lxxv (Micra-thene, preoccupied).  
     1914 A, 806.  
 Shufeldt, R. W. 1900 B, 718.  
     1916 A, 667.

### **Micropallas whitneyi (Cooper).**

- Cooper, J. G. 1861, Proc. Calif. Acad. Sci. 1, 118 (Athene).  
 A. O. U. 1910 A, 178.  
 Hay, O. P. 1927 D, 216.  
 Knowlton, F. H. 1909 A, 539.  
 Miller, L. H. 1911 C, 395, 400.

Miller, L. H. 1912 A, 73, 97, 114.  
 Ridgway, R. 1887 A, 267 (Micrathene).  
 1914 A, 807.

Shufeldt, R. W. 1900 B, 717, pl. xiv, figs. 17, 18.  
 Recent; southeastern United States and northern New Mexico: Pleistocene (Samwel Cave); California.

**SPEOTYTO** Gloger. Type *Strix cucularia* Molina.

Gloger, C. W. L. 1842, Hand- und Hilfsbuch, 226.  
 Allen, J. A. 1893 B, 110.  
 A. O. U. 1910 A, 177.  
 Barrows, W. B. 1885 A, 324, fig. 150.  
 Beddard, F. E. 1888 B, 336.  
 Fürbringer, M. 1888 A.  
 Knowlton, F. H. 1909 B, 536.  
 Pycraft, W. P. 1903 B, 2, 40.  
 Ridgway, R. 1887 A, 257, 265, pl. lxxvii.  
 1914 A, 812.  
 Shufeldt, R. W. 1880 A, 87.  
 1900 B, 683.  
 1909 A, 380.

**Speotyto cucularia hypugæa** (Bonaparte).

Bonaparte, C. L. 1825, Amer. Ornith., 72 (Strix).  
 A. O. U. 1910 A, 177 (S. c. hypogæa).  
 Coolidge, D. 1904 A, 330.

Hay, O. P. 1927 D, 187, 198 (S. cucularia).  
 Knowlton, F. H. 1909 B, 536 (S. cucularia).  
 Miller, L. H. 1909 B, 306 (S. cucularia).  
 1912 A, 73, 114.  
 1916 B, 104 (S. cucularia).  
 1925 A, 324 (S. cucularia).  
 1925 B, 104 (S. cucularia).  
 Osborn, H. F. 1925 D, 541 (S. cucularia).  
 Pycraft, W. P. 1903 B, 15, pl. i, figs. 4, 14, 16;  
 pl. ii, figs. 3, 6, 8 (S. cucularia).  
 Ridgway, R. 1887 A, 265 (S. c. hypogæa).  
 1914 A, 814.  
 Shufeldt, R. W. 1881 D, 87, pls. i, ii.  
 1900 B, 681 (S. cucularia).  
 Recent; Pacific Coast to Minnesota and Louisiana: Pleistocene (La Brea); California.

**Speotyto** sp. indet.

Miller, L. H. 1910 C, 11. Pleistocene (La Brea); California.

**ASIO** Brisson. Type *Asio asio* Brisson.

Brisson, M. J. 1760, Ornith., I, 477.  
 A. O. U. 1910 A, 169.  
 Beddard, F. E. 1888 B, 336.  
 1898 A, 252.  
 Eyton, T. C. 1887 A, pl. iv, fig. 7; pl. vi, fig. 12.  
 Foote, J. S. 1916 A, 72.  
 Gaillard, C. 1908 A, 85.  
 Lambrecht, K. 1914 A, 70.  
 Magnan, A. 1922 A, 166.  
 Miller, L. H. 1916 B, 102.  
 Newton and Gadow 1896 A, 1060.  
 Pycraft, W. P. 1903 A, 7, 39.  
 Ridgway, R. 1887 A, 256, 257, pl. lxxiv.  
 1914 A, 654.  
 Shufeldt, R. W. 1900 B, 667.  
 1900 D, 125, 142, pls. xv, xvi.  
 1909 A, 28, 80.  
 Steiner, H. 1918 A, 392.

**Asio flammeus** (Pontoppidan).

Pontoppidan, E. 1763, Danske Atlas, I, 617, pl. xxv (Strix).  
 Barrows, W. B. 1885 A, 346, fig. 157 (Aluco).  
 Bignon, F. 1889 A, 284 (Strix).  
 Fürbringer, M. 1888 A, pls. vi, vii (Strix).  
 Hay, O. P. 1927 D, 157.  
 Heusinger, C. F. 1822 A, 179 (Strix).  
 Knowlton, F. H. 1909 B, 516 (Strix).  
 Miller, L. H. 1909 B, 306 (A. accipitrinus).  
 1910 C, 11 (A. accipitrinus).  
 1912 A, 73, 114.  
 1916 B, 102, 103.  
 1925 B, 104.  
 Osborn, H. F. 1925 D, 541.  
 Pander and Alton 1838 A, 22, 23.

Parker, W. K. 1875 A, 713 (Aluco).  
 1875 D, 38, pl. xxiv, figs. 5-9 (Aluco).  
 Ridgway, R. 1887 A, 258 (A. accipitrinus).  
 1914 A, 661.  
 Selenka, E. 1869 A, pl. ii, fig. 11; pl. xvi, fig. 14 (Strix).  
 Shufeldt, R. W. 1900 B, 674, fig. 1.  
 1900 D, 130 (Strix).  
 Steiner, H. 1918 A, 392, fig. 38 (Asio otus).  
 Recent; nearly cosmopolitan: Pleistocene (La Brea); California.

**Asio wilsonianus** (Lesson).

Lesson, R. P. 1831, Traité d'Ornith., 110 (Otus).  
 Foote, J. S. 1916 A, 72, pl. vii.  
 Hay, O. P. 1927 D, 216.  
 Knowlton, F. H. 1909 B, 518.  
 Miller, L. H. 1909 B, 306.  
 1911 C, 395, 399.  
 1912 A, 73, 84, 114.  
 1916 B, 102, 103.  
 1925 B, 104.  
 Osborn, H. F. 1925 D, 541.  
 Ridgway, R. 1887 A, 257.  
 1914 A, 654.  
 Shufeldt, R. W. 1900 B, pl. xv, figs. 22, 23; pl. xvii, text-fig. 6.  
 1909 A, 28, 80.  
 Recent; temperate portion of North America: Pleistocene (La Brea, Samwel cave); California.

**Asio** sp. indet.

Miller, L. H. 1910 C, 11. Pleistocene (La Brea); California.



MINERVA Shufeldt. Type *M. antiqua* Shufeldt.

Shufeldt, R. W. 1915 D, 43.

Wetmore, A. 1922 A, 457.

Zittel and Schlosser 1923 A, 401.

**Minerva antiqua** Shufeldt.

Shufeldt, R. W. 1915 D, 42, pl. xv, figs. 131-136, 148-152, 154.

Lambrecht, K. 1921 A, 96.

Wetmore, A. 1922 A, 457.

Middle Eocene (Bridger); Wyoming.

**Minerva saurodosis** Wetmore.

Wetmore, A. 1922 A, 455, 2 figs.

Leidy, J. 1873 B, 182, pl. xv, fig. 14 (Saniva major, in part; humerus).

Wetmore, A. 1926 E, 525.

1928 A, 151.

Middle Eocene (Bridger); Wyoming.

## Suborder PICIFORMES Garrod.

Garrod, A. H. 1874 A, 117.

Hay, O. P. 1902 A, 536 (Picariæ).

Adolphi, H. 1922 A, 411 (Pici).

A. O. U. 1910 A, 185 (Pici).

Arlt, T. 1907 D, 673 (Picariæ).

Beddard, F. E. 1893 A, 507 ("woodpeckers").

Blanchard, E. 1859 A, 126 ("pics").

Carus, V. 1875 A, 242 (Pici).

Chandler, A. C. 1914 B, 141 (Picariæ).

Cope, E. D. 1891 N, 58, 60 (Picoidæ).

Coues, E. 1884 A, 476.

Dabbene, R. 1910 A, 485.

Evans, A. H. 1899 A, 445 (Pici).

Fürbringer, M. 1902 B, 716, 724 (Picariæ).

Gadow, H. 1892 A, 234, 253 (Pici).

1893 A, 259 (Pici).

1910 B, 978 (Pici).

Garrod, A. H. 1872 A, 357 ("woodpeckers").

Huxley, T. H. 1867 C, 235 (Celeomorphæ).

Illiger, C. 1811 A, 205 (Sagittilingues).

Kessler, K. T. 1841 A, 626 ("klettervögel").

Knowlton, F. H. 1909 B, 576 (Pici).

Lambrecht, K. 1914 A, 70, 73 (Pici).

Leunis and Ludwig 1883 A, 352 (Picariæ).

Lobley, J. L. 1908 A, 197 (Picariæ).

Lydekker, R. 1879 A, 13, 27 (Picariæ, Celeomorphæ).

Miller, W. D. 1924 A, 2 ("woodpeckers").

Newton, A. 1885 A, 47 (Pici).

Newton and Gadow 1896 A, 1078 (Picariæ).

Parker, W. K. 1875 A, 700, 716 (Celeomorphæ).

Pycraft, W. P. 1910 A, 59 (Pici).

Ridgway, R. 1887 A, 280 (Pici).

1914 A, 1 (Picariæ).

Sharpe, R. B. 1891 A, 84.

1891 D, 122 (Pici).

1896 A, 371 ("woodpeckers").

Shufeldt, R. W. 1900 C, 578 (Pici).

Steiner, H. 1916 A, 493 (Pici).

1918 A, 413, 441, 494 (Pici).

Stejneger, L. 1885 A, 368 (Picariæ).

Vialleton, L. 1916 A, 7.

Wagner, R. 1843 A, 79 (Picariæ).

Wallace, A. R. 1876 A, I, 500; II, 302, 322 (Picariæ).

Wetmore and Miller 1926 A, 344.

Zittel and Lucas 1902 A, 277 (Picariæ).

Zittel and Schlosser 1911 A, 324 (Picariæ).

1923 A, 401 (Picariæ).

*Superfamily PICOIDÆ, new name.*

Sharpe, R. B. 1891 A, 84 (Pici).

Wetmore and Miller 1926 A, 345 (Pici).

## PICIDÆ Vigors.

Vigors, N. A. 1825 A, 452.

Adolphi, H. 1922 A, 411.

Allen, J. A. 1871 A.

Blanchard, E. 1859 A, 127.

Bonaparte, C. L. 1831 A, 30.

1838 B, 117 (Picinæ).

1840 A, 271.

Carus, V. 1875 A, 245.

Dabbene, R. 1910 A, 485.

Evans, A. H. 1899 A, 457.

Fürbringer, M. 1888 A.

1902 B, 718.

Gadow, H. 1892 A, 253.

1893 A, 268.

1910 B, 978.

Garrod, A. H. 1874 A, 117.

Gaupp, E. 1905 D, 1026 (Picus).

Gemminger, M. 1852 A, 216 ("spechte").

Giebel, C. G. 1855 B, 36 ("spechte").

Hesse, H. 1907 A, 222.

Huxley, T. H. 1867 A, 450, 467, fig. 30.

1867 C, 267.

Knowlton, F. H. 1909 B, 587.

Köstlm, O. 1844 A ("klettervögel").

Leunis and Ludwig 1883 A, 354.

Lobley, J. L. 1908 A, 201, 206.

Lühder, W. 1871 A, 327.

Magnus, H. 1871 A, 46, 88.

Meckel, J. F. 1825 A ("klettervögel").

Owen, R. 1866 B, 58, fig. 33.

Parker, W. K. 1875 C.

Reichenow, A. 1914 A, 61.

Ridgway, R. 1887 A, 280.

1914 A, 4.

Selenka, E. 1869 A, 57.

Shufeldt, R. W. 1891 D, 128.

1900 C, 579.

Steiner, H. 1918 A, 494.

Stejneger, L. 1885 A, 426 (Picinæ).

Taschenberg, O. 1899 A, 4233.

Tristram, H. B. 1888 A, 208.

Wallace, A. R. 1894 A, 441.

Weitzel, A. 1865 A, 331 (Picus).

Wetmore and Miller 1926 A, 345 (Picidæ, Picinæ).

### UINTORNIS Marsh. Type *U. lucaris* Marsh.

Hay, O. P. 1902 A, 536.

Wallace, A. R. 1876 A, I, 163.

The systematic position of this bird is in doubt.

### *Uintornis lucaris* Marsh.

Hay, O. P. 1902 A, 536.

Lambrecht, K. 1921 A, 89.

Shufeldt, R. W. 1915 D, 50, 77, pl. vi, fig. 42.  
Middle Eocene (Bridger); Wyoming.

### COLAPTES Vigors. Type *Cuculus auratus* Linnæus.

Vigors, N. A. 1825 A, 457.

Allen, J. A. 1893 B, 117.

Leunis and Ludwig 1883 A, 357.

Newton and Gadow 1896 A, 1064.

Ridgway, R. 1887 A, 280, 295, pl. lxxxvi.  
1914 A, 12.

Shufeldt, R. W. 1891 D, 126.

1900 C, 581.

Wallace, A. R. 1876 A, II, 304.

Weitzel, A. 1865 A, 332.

### *Colaptes cafer collaris* Vigors.

Vigors, N. A. 1829, Zool. Jour., IV, 354.

Hay, O. P. 1927 D, 187, 216, 223.

Knowlton, F. H. 1909 B, 590.

Miller, L. H. 1911 C, 398, 400.

1912 A, 71, 73, 75, 78, 84.

1925 B, 105 (C. cafer).

1927 A, 156 (C. cafer).

Osborn, H. F. 1925 D, 542 (C. cafer).

Ridgway, R. 1914 A, 29.

Recent; Pacific Coast of United States:  
Pleistocene (La Brea and Caves); California.

### Suborder PASSERIFORMES Garrod.

Garrod, A. H. 1874 A, 117, 122.

Hay, O. P. 1902 A, 536 (Passeres).

Abel, O. 1919 A, 708.

Adolphi, H. 1922 A, 418.

Beddard, F. E. 1898 A, 172 (Passeres).

Beer, G. R. 1926 A, 322, figs. 94, 95, 97, 123  
(Passer).

Bittner, F. 1912 A, 2 (Passeres).

Bonaparte, C. L. 1831 A, 30 (Passeres).

1832 A, 296 (Passeres).

1833 A, 1042 ("passereaux").

Bonsdorff, E. J. 1871 A, 310 (Passeres).

Carus, V. 1875 A, 258 (Passerinæ).

Chandler, A. C. 1914 B, 141 (Passeres).

1916 C, 380, 391.

Clark, H. L. 1901 A, 373 ("passeriforms").

Cope, E. D. 1891 N, 60, 64 (Passeroidei).

Cuvier, G. 1805 A.

Dabbene, R. 1910 A, 484.

Eimer, G. H. T. 1901 A, 212 (Passeres).

Evans, A. H. 1899 A, 466.

Finn, F. 1894 B, 454 (Passeres).

Forbes, W. A. 1881 A, 5, fig. 6 ("passerine  
birds").

Fürbringer, M. 1902 B, 707, 724 (Passeres).

Gadow, H. 1893 A, 270.

1910 B, 978 (Passeres).

Gegenbaur, C. 1871 A, 198 (Coracomorphæ).

Gervais, P. 1856 A, 8 ("passereaux").

Giebel, C. G. 1855 B, 32 ("singvögel").

Hilzheimer, M. 1913 A, 517 (Coracomithes).

Hoernes, R. 1886 A, 645 (Passerinæ).

Huxley, T. H. 1867 A, 469 (Coracomorphæ).

1867 C, 267, 283 (Coracomorphæ).

Kessler, K. T. 1841 A, 493 (Passeres).

Knopfl, W. 1917 A, 51 (Passeres).

Knowlton, F. H. 1909 B, 603.

Köstlin, O. 1844 A ("passerineen").

Lambrecht, K. 1914 A, 72, 73.

Lebedinsky, N. G. 1913 A.

1918 A, 41.

1918 B, 144, 146

Leunis and Ludwig 1883 A, 364 (Passeres).

L'Hermier, P. 1836 A, 111 ("passereaux").

Lobley, J. L. 1908 A, 197 (Passeres).

Lucas, F. A. 1894 A, 208 (Passeres).

1902 H, 95 (Passeres).

Lydekker, R. 1879 A, 26 (Coracomorphæ).

Marinelli, W. 1928 A, 155.

Meckel, J. F. 1825 A ("singvögel").

Miller, L. H. 1925 B, 105 (Passeres).

Miller, W. D. 1924 A, 1, 2 (Passeres).

Mitchell, P. C. 1894 A, 213 (Passeres).

Newton, A. 1885 A.

Newton and Gadow 1896 A, 1077 (Passeres).

Nitzsch, C. L. 1862 A, 389 ("passerinen").

Parker, W. K. 1875 A, 700, 712, 720 (Coracomorphæ).

1875 D, 104 (Coracomorphæ).

1888 B, 323 (Passerinæ).

1888 D, 468 ("passerines").

Pycraft, W. P. 1901 A, 351.

1910 A, 56, 60 (Passeres).

Reynolds, S. H. 1897 A, 328 (Passeres).

Ridgway, R. 1887 A, 321 (Passeres).

1901 A, 12.

Sclater, P. S. 1858 A (Passeres).

Sharpe, R. B. 1891 A, 85.

Shufeldt, R. W. 1896 A, 362, 371 (Passeres).

1904 B, 855.

1904 C, 316 (Passeres).

Steiner, H. 1916 A, 493, 496 (Passeres).

1918 A, 420, 494 (Passeres).

1922 A, 326 (Passeres).

Sundevall, C. J. 1886 A, 402 (Passeres).

Vialleton, L. 1916 A, 7.

Wagner, R. 1843 A, 79 (Passerinæ).

Wallace, A. R. 1864 A, 37 (Passeres).

1876 A, I, 500, II, 255, 299 (Passeres).

Wetmore and Miller 1926 A, 345.

Wray, R. S. 1887 A, 348 (Passeres).

Zittel and Lucas 1902 A, 278 (Passeres).

Zittel and Schlosser 1911 A, 325 (Passeres).

1923 A, 401 (Passeres).

*Superfamily FORMICAROIDEÆ*, new form.

Reichenow, A. 1914 A, 229 (Formicariidæ).  
 Ridgway, R. 1907 A, 331 (Tracheophoneæ).

Stejneger, L. 1885 A, 460, 476 (Formicaroidæ).

## PTEROPTOCHIDÆ Cabanis and Heine.

Cabanis and Heine 1860, Mus. Heineanum, II  
 Theil, 20.

Gadow, H. 1893 A, 277.  
 1910 B, 978.

Knowlton, F. H. 1909 B, 638.  
 Reichenow, A. 1914 A, 234.  
 Ridgway, R. 1911 A, 7.  
 Shufeldt, R. W. 1913 D, 648.

HEBE Shufeldt. Type *H. schucherti* Shufeldt.

Shufeldt, R. W. 1913 D, 644.

The family position of this genus is doubtful.

*Hebe schucherti* Shufeldt.

Shufeldt, R. W. 1913 D, 644, fig. 10.  
 Lambrecht, K. 1921 A, 93.  
 Eocene (Green River); Wyoming.

*Superfamily FRINGILLOIDÆ*, new name.

Gadow, H. 1893 A, 276 (Oscines).  
 1910 B, 978 (Oscines).  
 Lambrecht, K. 1921 A, 89 (Passeridæ).  
 Leunis and Ludwig 1883 A, 369 (Oscines).  
 Lühder, W. 1871 A, 324 (Oscines).  
 Magnus, H. 1871 A (Oscines).  
 Newton, A. 1885 A, 47 (Oscines).

Ridgway, R. 1901 A, 17 (Oscines).  
 Sharpe, R. B. 1891 A, 85 (Oscines).  
 Steiner, H. 1918 A, 421, 494 (Oscines).  
 Stejneger, L. 1885 A, 481 (Passeroidæ).  
 Sundevall, C. J. 1886 A, 450 (Oscines).  
 Wetmore and Miller 1926 A, 345 (Oscines).

## ALAUDIDÆ Boie.

Boie, F. 1826 A, col. 974.  
 Bonaparte, C. L. 1831 A, 49 (Alaudinæ).  
 Carus, V. 1875 A, 279.  
 Coues, E. 1884 A, 280.  
 Harting, P. 1886 A, 24.  
 Hesse, H. 1907 A, 236.  
 Knowlton, F. H. 1909 B, 644.  
 Lambrecht, K. 1914 A, 72.  
 Leunis and Ludwig 1883 A, 380.  
 Lohley, J. L. 1908 A, 201, 206.

Parker, W. K. 1875 A, 716 (Alauda).  
 Ridgway, R. 1887 A, 321, 346.  
 1901 A, 23.  
 1907 A, 289.  
 Sharpe, R. B. 1891 A, 86.  
 Sundevall, C. J. 1886 A, 402 (Alaudæ).  
 Wallace, A. R. 1876 A, II, 289.  
 1894 A, 440.  
 Wetmore, A. 1925 A, 189, 191.  
 Wetmore and Miller 1926 A, 345.

OTOCORIS Bonaparte. Type *Alauda alpestris* Linnæus.

Bonaparte, C. L. 1838, Nuovi Ann. Sci. Nat.  
 (Bologna), II, 407.  
 Allen, J. A. 1893 B, 110.  
 A. O. U. 1910 A, 219.  
 Blanchard, E. 1859 A, 85 (Alauda).  
 Coues, E. 1884 A, 281 (Eremophila).  
 Fürbringer, M. 1888 A, 59 (Eremophila).  
 Kingsley, J. S. 1925 A, 56, fig. 63 (Eremophila).  
 Knowlton, F. H. 1909 B, 645.  
 Leunis and Ludwig 1883 A, 381 (Otocorys).  
 Newton and Gadow 1896 A, 1059 (Alauda).  
 Ridgway, R. 1887 A, 346, 347, pl. xcvi.  
 1907 A, 295.  
 Shufeldt, R. W. 1881 E, 119 (Eremophila).  
 Wallace, A. R. 1876 A, II, 444 (Eremophilus).

*Otocoris alpestris* (Linnæus).

Linnæus, C. 1758 A, 166 (Alauda).  
 A. O. U. 1910 A, 219.  
 Hay, O. P. 1927 D, 187.  
 Miller, L. H. 1912 A, 78, 114.  
 1921 C, 130.  
 Ridgway, R. 1887 A, 348.  
 1907 A, 303.  
 Shufeldt, R. W. 1881 E, 119, pl. iv (Eremophila).  
 Recent; North America and northern parts  
 of South America, Europe, Asia, and Africa:  
 Pleistocene (La Brea); California. Identity of  
 remains found at La Brea, California, doubtful.

*Otocoris* sp. indet.

Miller, L. H. 1925 B, 105 (This genus?). Pleis-  
 tocene (La Brea); California.

## HIRUNDINIDÆ Vigors.

Vigors, N. A. 1825 A, 468.  
 A. O. U. 1910 A, 290.  
 Coues, E. 1884 A, 319.  
 Huxley, T. H. 1887 A, 456 ("swallows").  
 Knowlton, F. H. 1909 B.  
 Lambrecht, K. 1914 A, 72.  
 Pycraft, W. P. 1907 A, 352.

Ridgway, R. 1887 A, 322, 457.  
 Selenka, E. 1869 A, 75, 80, pls. ii, iii, xvi  
 (Hirundo).  
 Stejneger, L. 1885 A, 507.  
 Sundevall, C. J. 1886 A, 404.  
 Wetmore and Miller 1926 A, 345.

PETROCHELIDON Cabanis. Type *Hirundo melanogaster* Swainson.

Cabanis, J. L. 1851, Mus. Hein., i, 47.  
A. O. U. 1910 A, 291.  
Coues, E. 1884 A, 323.  
Reichenow, A. 1914 A, 248.  
Ridgway, R. 1887 A, 457, 459, pl. cxiv.

**Petrochelidon lunifrons** (Say).

Say, T. 1823, in Long's Exped., ii, 47 (*Hirundo*).  
A. O. U. 1910 A, 291.

Coues, E. 1884 A, 323, fig. 183.  
Hay, O. P. 1927 D, 198.  
Knowlton, F. H. 1909 B, 709.  
Miller, L. H. 1925 A, 241.  
Osborn, H. F. 1925 D, 542.  
Ridgway, R. 1887 A, 460.  
Stejneger, L. 1885 A, 507.

Recent; North America: Pleistocene (McKittrick); California.

## CORVIDÆ Vigors.

Vigors, N. A. 1825 A, 445.  
Hay, O. P. 1902 A, 537.  
Allen, J. A. 1871 A.  
Arlt, T. 1907 D, 847.  
1912 A, 706, 752.  
Blainville, H. M. D. 1821 A, 203 ("corbeaux").  
Blanchard, E. 1859 A, 95 ("corbeaux").  
Bonaparte, C. L. 1831 A, 81.  
1840 A, 269.  
Dabbene, R. 1910 A, 473, figs. 41, 57.  
Evans, A. H. 1899 A, 552.  
Grote, H. 1902 A, 60 ("raben").  
Heilprin, A. 1887 A, 65.  
Hesse, H. 1907 A, 228.  
Knowlton, F. H. 1909 B, 770.  
Lambrecht, K. 1914 A, 72.  
Lebedinsky, N. G. 1913 A.

Leunis and Ludwig 1833 A, 413.  
Lobley, J. L. 1908 A, 201, 205.  
Magnus, H. 1871 A (Corvini).  
Pycraft, W. P. 1901 A, 352.  
Reichenow, A. 1914 A, 300.  
Ridgway, R. 1887 A, 322, 350.  
1901 A, 22.  
1904 A, 252.  
Sharpe, R. B. 1891 A, 85.  
Shufeldt, R. W. 1909 A, 102.  
Steiner, H. 1918 A, 421.  
Taschenberg, O. 1899 A, 4008.  
Wagner, R. 1843 A ("krähen").  
Wallace, A. R. 1876 A, ii, 272.  
1894 A, 440.  
Wetmore and Miller 1926 A, 345.

## GARRULINÆ Swainson.

Swainson, W. 1837 A, 105.  
A. O. U. 1910 A, 221.

Wetmore and Miller 1926 A, 345.

CYANOCITTA Strickland. Type *Corvus cristatus* Linnaeus.

Strickland, H. E. 1845, Ann. Mag. Nat. Hist., xv, 261, 260.  
A. O. U. 1910 A, 222.  
Knowlton, F. H. 1909 B, 780.  
Newton and Gadow 1896 A, 470.  
Reichenow, A. 1914 A, 314.  
Ridgway, R. 1887 A, 351, 353, pl. C.

**Cyanocitta stelleri** (Gmelin).

Gmelin, J. F. 1788, Syst. Nat., I, i, 370 (*Corvus*).  
Hay, O. P. 1927 D, 216, 223.  
Miller, L. H. 1911 C, 399, 400.  
1912 A, 73, 75, 80, 114.  
Ridgway, R. 1887 A, 353.  
Pleistocene (Caves); California.

## CORVINÆ Bonaparte.

Bonaparte, C. L. 1831 A, 42.  
A. O. U. 1910 A, 227.

Wetmore and Miller 1926 A, 345.

CORVUS Linnaeus. Type *C. corax* Linnaeus.

Linnaeus, C. 1758 A, 105.  
Hay, O. P. 1902 A, 537.  
Adolphi, H. 1922 A, 418, figs. 69, 70.  
Aeby, C. 1873 A, 702.  
Allen, J. A. 1893 B, 99.  
Arlt, T. 1907 D, 172.  
Beddard, F. E. 1898 A, 538, fig. 80.  
Bernstein, H. A. 1853 A, 1, pls. i, ii.  
Beyer, H. 1907 B, 302, fig. 16.  
Bignon, F. 1889 A.  
Bittner, F. 1912 A, 2.  
Blanchard, E. 1859 A, 95.  
Bonsdorff, E. J. 1871 A, 310.  
Bronn, H. G. 1848 A, 339.  
Chandler, A. C. 1916 C, 333, pl. xxxvii, fig. 115.  
Cuvier, G. 1805 A.

Diethelm, M. 1907 A, 44.  
Döderlein, L. 1923 A, 142, 162.  
Eyton, T. C. 1867 A, 145.  
Foote, J. S. 1916 A, 72, pl. vii.  
Fürbringer, M. 1888 A, pls. iii, iv, vii.  
Gegenbaur, C. 1871 A, 193.  
Gemminger, M. 1852 A, 219.  
Giebel, C. G. 1855 B, 38.  
Heilmann, G. 1926 A, 204, fig. 131.  
Heilprin, A. 1887 A, 79.  
Hesse, H. 1907 A, 229, pl. viii, fig. 6.  
Houssay and Magnan 1912 A, 39 ("corbeaux").  
Jacquemin, E. 1834 A, 277, pls. xiv, xv.  
1837 A, 565.  
Kessler, K. T. 1841 A, 634.  
Kingsley, J. S. 1925 A, 179, fig. 193.

- Knowlton, F. H. 1909 B, 771.  
 Köstlin, O. 1844 A.  
 Lambrecht, K. 1914 A, 59, 72, pl. viii; text-figs. 3, 4.  
 Lebedinsky, N. G. 1913 B, 193.  
     1917 A, 325, figs. 9-11.  
 Leunis and Ludwig 1883 A, 415.  
 Lilienthal, G. 1917 A, 271 ("krähe").  
 Lydekker, R. 1879 A, 13, pls. i, ii.  
 Mackie, S. J. 1883 C, 107.  
 Magnan, A. 1922 A, 167.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A.  
 Mehnert, E. 1887 B, 213.  
 Newton and Gadow 1896 A, 1064.  
 Owen, R. 1866 B, figs. 102, 104 ("raven").  
 Parker, W. K. 1875 A, 715, 716, fig. 26.  
     1875 D, 106, pl. i, figs. 8, 9.  
     1888 D, 467.  
 Reichenow, A. 1914 A, 304, fig. 159.  
 Ridgway, R. 1887 A, 360, pl. xovii.  
 Selenka, E. 1869 A.  
 Shufeldt, R. W. 1882 B, 327, fig. 2.  
 Sundevall, C. J. 1886 A, 402, 422.  
 Virchow, H. 1919 A, 327.  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A, II, 274.  
 Weitzel, A. 1865 A, 328.  
 Wetmore, A. 1924 A, 17.

### *Corvus brachyrhynchos* Brehm.

- Brehm, A. E. 1822, Beitr. Vögelkunde, II, 56.  
 Hay, O. P. 1927 D, 187.  
 Knowlton, F. H. 1909 B, 771.  
 Miller, L. H. 1911 C, 399, 400.  
     1912 A, 71, 78, 84, 114.  
     1925 B, 106.  
 Osborn, H. F. 1925 D, 542.  
 Ridgway, R. 1904 A, 267 (C. americanus); 746 (C. brachyrhynchos).  
 Wetmore, A. 1924 A, 17.  
     Recent; North America: Pleistocene (Caves and La Brea); California.

### *Corvus corax sinuatus* Wagler.

- Wagler, J. G. 1829, Isis, xxii, 748.  
 Abel, O. 1912 F, 22 (C. corax).  
 Chandler, A. C. 1916 C, 381 (C. corax).  
 Coues, E. 1884 A, 416, fig. 268 (C. corax).  
 Hay, O. P. 1927 D, 187, 198, 223 (C. corax).  
 Knowlton, F. H. 1909 B, 774 (C. corax).  
 Miller, L. H. 1909 B, 306 (C. corax).  
     1910 C, 11 (C. corax).  
     1911 C, 398, 400 (C. corax).  
     1912 A, 75, 78, 84, 114 (C. corax).  
     1925 A, 325 (C. corax).  
     1925 B, 106 (C. corax).  
     1927 A, 156 (C. corax).  
 Osborn, H. F. 1910 B, 470 (C. corax).  
     1925 D, 542 (C. corax).  
 Ridgway, R. 1904 A, 259 (C. corax).  
     Recent; Oregon to Honduras: Pleistocene (Caves and La Brea); California.

### *Corvus shufeldti* Sharpe.

- Sharpe, R. B. 1909, Hand-list Gen. and Spec. Birds, v, 599 (To replace C. annectens Shufeldt, not of Brüggeman).  
 Hay, O. P. 1902 A, 537 (C. annectens).  
     1927 D, 244.  
 Lambrecht, K. 1921 A, 90 (C. annectens).  
 Miller, L. H. 1912 A, 81, 114 (C. annectens).  
 Ridgway, R. 1904 A, 256.  
 Shufeldt, R. W. 1913 B, 157.  
 Wetmore, A. 1924 A, 15.  
     Pleistocene (Fossil Lake); Oregon.

### *Corvus* sp. indet.

- Hay, O. P. 1927 D, 136, 187. Pleistocene; Arizona, California.  
 Osborn, H. F. 1925 D, 542. Pleistocene (La Brea); California.  
 Wetmore, A. 1924 A, 15. Pliocene? (San Pedro Valley); Arizona.

## LANIIDÆ Strickland.

- Strickland, H. E. 1844, Ann. Nat. Hist., XIII, 415.  
 A. O. U. 1910 A, 296.  
 Bonaparte, C. L. 1838 B, 117 (Laniidæ).  
     1840 A, 280 (Laniidæ).  
 Coues, E. 1884 A, 336.  
 Hesse, H. 1907 A, 228.  
 Knowlton, F. H. 1909 B, 724.  
 Lambrecht, K. 1914 A, 72.  
 Leunis and Ludwig 1883 A, 403.  
 Lohley, J. L. 1908 A, 201, 206.  
 Magnus, H. 1871 A (Laniadæ).  
 Newton and Gadow 1896 A, 845.

- Pycraft, W. P. 1907 A, 356, 358, 377.  
 Reichenow, A. 1914 A, 277.  
 Ridgway, R. 1887 A, 323, 465.  
     1901 A, 22.  
     1904 A, 232.  
 Sharpe, R. B. 1891 A, 86.  
 Shufeldt, R. W. 1896 A, 357, 371.  
 Steiner, H. 1918 A, 421.  
 Sundevall, C. J. 1886 A, 402 (Lanni).  
 Wallace, A. R. 1876 A, II, 272.  
     1894 A, 439.  
 Wetmore and Miller 1926 A, 345.

## LANIINÆ Bonaparte.

- Bonaparte, C. L. 1831 A, 31 (Laninæ).  
 Reichenow, A. 1914 A, 279.

- Wetmore and Miller 1926 A, 346.

## LANTUS Linnæus. Type *L. excubitor* Linnæus.

- Linnæus, C. 1758 A, 98.  
 Allen, J. A. 1893 B, 111.  
 A. O. U. 1910 A, 296.

- Bignon, F. 1889 A.  
 Coues, E. 1884 A, 337.  
 Cuvier, G. 1805 A.

Fürbringer, M. 1888 A, 134, pl. iii.  
 Gemminger, M. 1852 A, 219.  
 Hesse, H. 1907 A, 228, pl. x, fig. 11.  
 Kessler, K. T. 1841 A, 500, 680.  
 Knowlton, F. H. 1909 B, 729.  
 Lambrecht, K. 1914 A, 72.  
 Leunis and Ludwig 1883 A, 404.  
 Magnan, A. 1922 A, 168.  
 Meckel, J. F. 1825 A.  
 Newton and Gadow 1896 A, 1072.  
 Pycraft, W. P. 1907 A, 360, fig. 103.  
 Reichenow, A. 1914 A, 279.  
 Ridgway, R. 1887 A, 465, pl. cxiii.  
 1904 A, 234.  
 Selenka, E. 1869 A, pl. xvi.  
 Shufeldt, R. W. 1881 C, 351.

**Lanius ludovicianus** (Linnæus).

*Linnæus, C.* 1766, Syst. Nat., ed. 12, i, 134.  
 A. O. U. 1910 A, 297.  
 Coues, E. 1884 A, 338.  
 Hay, O. P. 1927 D, 187.  
 Knowlton, F. H. 1909 B, 730.  
 Miller, L. H. 1912 A, 78, 114.  
 1925 B, 106.  
 Osborn, H. F. 1925 D, 542.  
 Ridgway, R. 1887 A, 467.  
 1904 A, 241.  
 Shufeldt, R. W. 1881 C, 351, pl. xiv.  
 Recent; New Brunswick to British Columbia,  
 south to Mexico and Florida: Pleistocene (La  
 Brea); California.

**ICTERIDÆ** Cabanis.

*Cabanis, J. L.* 1847, Archiv Naturges., i, 332.  
 Hay, O. P. 1902 A, 537.  
 Allen, J. A. 1871 A.  
 Arldt, T. 1907 D, 660.  
 1912 A, 706, 750.  
 Bonaparte, C. L. 1840 A, 270 (Icterinæ).  
 Chandler, A. C. 1916 C, 381.  
 Coues, E. 1884 A, 399.  
 Dabbene, R. 1910 A, 39, 179, 401.  
 Evans, A. H. 1899 A, 579.  
 Heilprin, A. 1887 A, 66, 79.  
 Hesse, H. 1907 A, 230.  
 Knowlton, F. H. 1909 B, 824.  
 Lebedinsky, N. G. 1913 A.

Leunis and Ludwig 1883 A, 408.  
 Lohley, J. L. 1903 A, 201, 205.  
 Miller, W. D. 1924 A, 3.  
 Parker, W. K. 1875 D, 110.  
 Reichenow, A. 1914 A, 364.  
 Ridgway, R. 1887 A, 321, 365.  
 1901 A, 19.  
 1902 A, 169.  
 Steiner, H. 1918 A, 421.  
 Sushkin, P. P. 1925 B, 38.  
 Wallace, A. R. 1876 A, ii, 281.  
 Wetmore, A. 1919 A, 190.  
 Wetmore and Miller 1926 A, 346.

**STURNELLA** Vieillot. Type *Alauda magna* Linnæus.

*Vieillot, L. J. P.* 1816 Analyse, 34.  
 A. O. U. 1910 A, 235.  
 Coues, E. 1884 A, 405.  
 Eyton, T. C. 1867 A, 136 (Sturnella).  
 Knowlton, F. H. 1909 B, 825.  
 Miller, L. H. 1914 A, 38.  
 Newton and Gadow 1896 A, 1084.  
 Reichenow, A. 1914 A, 375, fig. 201.  
 Ridgway, R. 1887 A, 365, 371, pl. civ.  
 1902 A, 353.  
 Shufeldt, R. 1888 D, 309-350.

**Sturnella neglecta** Audubon.

*Audubon, J. J. L.* 1844, Birds of Amer., vii, 339,  
 pl. 459.  
 Coues, E. 1884 A, 406.  
 Hay, O. P. 1927 D, 172.  
 Knowlton, F. H. 1909 B, 825.  
 Miller, L. H. 1912 A, 78, 84, 114.  
 1914 A, 37.  
 1925 B, 106.  
 Osborn, H. F. 1925 D, 542.  
 Ridgway, R. 1887 A, 372 (S. magna neglecta).  
 1902 A, 365.  
 Pleistocene (La Brea and San Pedro beds);  
 California.

**XANTHOCEPHALUS** Bonaparte. Type *Icterus xanthocephalus* Bonaparte.

*Bonaparte, C. L.* 1850, Consp. Avium, i, 451.  
 Allen, J. A. 1893 B, 111, 116, 131.  
 A. O. U. 1910 A, 232.  
 Ridgway, R. 1887 A, 365, 368, pl. ci.  
 1902 A, 346.  
 Wallace, A. R. 1876 A, ii, 282.

**Xanthocephalus xanthocephalus** (Bonaparte).

*Bonaparte, C. L.* 1826, Jour. Acad. Nat. Sci.  
 Phila., v, 223 (Icterus).

A. O. U. 1910 A, 232.  
 Hay, O. P. 1927 D, 187.  
 Miller, L. H. 1912 A, 78, 114.  
 1921 C, 130.  
 Ridgway, R. 1887 A, 368.  
 1902 A, 347.  
 Recent; western North America: Pleistocene  
 (La Brea); California.  
 Identity of remains found at La Brea doubtful.

**AGELAIUS** Vieillot. Type *Oriolus phœnicus* Linnæus.

*Vieillot, L. J. P.* 1816, Analyse, 33.  
 Chandler, A. C. 1916 C, 382.  
 Coues, E. 1884 A, 403 (Agelæus).

Eyton, T. C. 1867 A, 138.  
 Hesse, H. 1907 A, 230 (Agelæus).  
 Miller, L. H. 1925 B, 105 (Agelæus).

Newton and Gadow 1896 A, 457, 530 (*Agelaius*).  
 Reichenow, A. 1914 A, 373.  
 Ridgway, R. 1887 A, 365, 368, pl. ci.  
 1902 A, 319.  
 Wallace, A. R. 1876 A, II, 282.  
 Wetmore, A. 1919 A, 197.

***Agelaius gubernator* (Wagler).**

Wagler, J. G. 1832, Isis, IV, 281 (*Psarocolius*).  
 Hay, O. P. 1927 D, 187.  
 Miller, L. H. 1912 A, 78, 114.  
 1921 C, 130.

Nelson, E. W. 1897, Auk, XIX, 59 (*A. gubernator californicus*).  
 Ridgway, R. 1887 A, 370.  
 1902 A, 326 (*Scolecophagus*).

Recent; Washington to southern California and western Arizona: Pleistocene (La Brea); California.

Identity of remains found at La Brea, California, doubtful.

***Agelaius* sp. indet.**

Miller, L. H. 1925 B, 105 (This genus?). Pleistocene (La Brea); California.

**EUPHAGUS Cassin. Type *Psarocolius cyanocephalus* Wagler.**

Cassin, J. 1867, Proc. Acad. Nat. Sci., Phila., 1866 (1867), 413.  
 Hay, O. P. 1902 A, 537 (*Scolecophagus*).  
 Coues, E. 1884 A, 411 (*Scolecophagus*).  
 Miller, L. H. 1925 B, 105.  
 Reichenow, A. 1914 A, 369.  
 Ridgway, R. 1887 A, 366, 378, pl. civ (*Scolecophagus*).  
 1902 A, 244 (*Scolecophagus*).

***Euphagus affinis* Shufeldt.**

Hay, O. P. 1902 A, 537 (*Scolecophagus*).  
 A. O. U. 1910 A, 391.  
 Hay, O. P. 1927 D, 244.  
 Lambrecht, K. 1921 A, 93 (*Scolecophagus*).  
 Miller, L. H. 1912 A, 81, 114.  
 Shufeldt, R. W. 1913 B, 157.  
 Pleistocene (Fossil Lake); Oregon.

***Euphagus cyanocephalus* (Wagler).**

Wagler, J. 1829, Isis, XXXII, 758 (*Psarocolius*).  
 A. O. U. 1910 A, 239.  
 Coues, E. 1884 A, 411 (*Scolecophagus*).  
 Hay, O. P. 1927 D, 223.  
 Miller, L. H. 1911 C, 399, 400.  
 1912 A, 75, 84, 114.  
 1921 C, 130.

Ridgway, R. 1887 A, 379 (*Scolecophagus*).

1902 A, 248 (*Scolecophagus*).

Wetmore, A. 1919 A, 196.

Recent; western North America: Pleistocene (Caves, La Brea); California.

Identity of remains found at La Brea, California, doubtful.

**FRINGILLIDÆ Vigors.**

Vigors, N. A. 1835 A, 445.  
 Hay, O. P. 1902 A, 537.  
 Allen, J. A. 1871 A.  
 Anthony, R. 1910 A, 781 ("passereaux").  
 Arldt, T. 1907 D, 654.  
 1912 A, 706, 750.  
 Blanchard, E. 1859 A, 85 ("moineaux").  
 Bonaparte, C. L. 1831 A, 32.  
 Chandler, A. C. 1916 C, 381.  
 Cuvier, G. 1805 A (*Fringillæ*).  
 Dabbene, R. 1910 A, 476.  
 Evans, A. H. 1899 A, 582.  
 Harting, P. 1886 A, 24.  
 Heilprin, A. 1887 A, 66, 88, 100.  
 Hesse, H. 1907 A, 230.  
 Knowlton, F. H. 1909 B, 831.  
 Lambrecht, K. 1914 A, 72.  
 Lebedinsky, N. G. 1913 A.

Lebedinsky, N. G. 1917 A, 327 (*Passer*).  
 Leunis and Ludwig 1838 A, 372.  
 Lohley, J. L. 1908 A, 201, 206.  
 Magnus, H. 1871 A.  
 Meckel, J. F. 1825 A ("sperlingsvögel").  
 Reichenow, A. 1914 A, 404.  
 Ridgway, R. 1887 A, 321, 382.  
 1901 A, 19, 24.  
 Rosenberg, A. 1873 A, 151 ("sperling").  
 Ruhwandl, G. 1916 A, 75, pls. v, vi; 17 text-figs. (*Fringilla*).  
 Stellwaag, F. 1912 A, 627 (*Fringilla*).  
 Sushkun, P. P. 1925 B, 37.  
 Taschenberg, O. 1899 A, 4060.  
 Wallace, A. R. 1876 A, II, 284.  
 1894 A, 439.  
 Wetmore and Miller 1926 A, 346.

**FRINGILLINÆ Bonaparte.**

Bonaparte, C. L. 1831 A, 32, 52.

Wetmore and Miller 1926 A, 346.

**PIPILO Vieillot. Type *Fringilla erythrophthalma* Linnæus.**

Vieillot, L. J. P. 1816, Analyse, 32.  
 A. O. U. 1910 A, 279.  
 Coues, E. 1884 A, 395.  
 Ridgway, R. 1887 A, 384, 435, pl. cxi.

***Pipilo* sp. indet.**

Hay, O. P. 1927 D, 187. Pleistocene; California.  
 Miller, L. H. 1912 A, 78. Pleistocene (La Brea); California.  
 Osborn, H. F. 1925 D, 542. Pleistocene (La Brea); California.

PALÆOSTRUTHUS Wetmore. Type *Palæospiza hatcheri* Shufeldt.

Wetmore, A. 1925 A, 192.

**Palæostruthus hatcheri** (Shufeldt).

Shufeldt, R. W. 1913 C, 301 (Palæospiza ?).

Lambrecht, K. 1921 A, 92 (Palæospiza).

Wetmore, A. 1925 A, 192, figs. 1, 2.

Pliocene (Republican River); Kansas.

JUNCO Wagler. Type *J. phæonotus* Wagler.

Wagler, J. G. 1831, Isis, xxiv, 26.

Knowlton, F. H. 1909 B, 840, fig. 840.

Ridgway, R. 1887 A, 385, 422, pl. cix.

Stejneger, L. 1885 A, 547.

**Junco hyemalis** (Linnaeus).

Linnaeus, C. 1758 A, 183.

A. O. U. 1910 A, 266.

Knowlton, F. H. 1909 B, 840, fig. 232.

Ridgway, R. 1887 A, 422.

Wetmore, A. 1924 A, 18 (This species?).

Recent; North America: Pliocene? (San Pedro Valley); Arizona.

**Junco** sp. indet.

Hay, O. P. 1927 D, 136. Pliocene; Arizona.

## PALÆOSPIZIDÆ Wetmore.

Wetmore, A. 1925 A, 190.

PALÆOSPIZA Allen. Type *P. bella* Allen.

Hay, O. P. 1902 A, 537.

Ardt, T. 1907 D, 85.

Eastman, C. R. 1904 D, 670.

Heilprin, A. 1887 A, 331.

Lambrecht, K. 1916 C, 496.

Wetmore, A. 1925 A, 191.

Zittel and Lucas 1902 A, 278.

**Palæospiza bella** Allen.

Hay, O. P. 1902 A, 537.

Cockerell, T. D. A. 1906 A, 163.

Lambrecht, K. 1921 A, 92.

Lucas, F. A. 1902 B, 233.

Shufeldt, R. W. 1913 D, 634, fig. 8.

Wetmore, A. 1925 A, 183, pls. i-iv; text-figs. 1, 2.

1928 A, 152.

Miocene (Florissant); Colorado.

## BIRD REMAINS OF UNCERTAIN SYSTEMATIC POSITION.

CIMOLOPTERYX Marsh. Type *C. rarus* Marsh.

Hay, O. P. 1902 A, 537.

Fürbringer, M. 1902 B, 629.

Shufeldt, R. W. 1915 D, 11.

Williston, S. W. 1902 K, 953.

Zittel and Schlosser 1911 A, 323.

1923 A, 395.

**Cimolopteryx rarus** Marsh.

Hay, O. P. 1902 A, 537.

Bowen, C. F. 1915 A, 144.

Lambrecht, K. 1921 A, 50 (C. rara).

Osborn, H. F. 1902 I, 15.

Shufeldt, R. W. 1915 D, 11, 76, pl. vi, fig. 38.

Upper Cretaceous (Lance); Wyoming.

**Cimolopteryx retusus** Marsh.

Hay, O. P. 1902 A, 537.

Bowen, C. F. 1915 A, 144.

Lambrecht, K. 1921 A, 50 (C. retusa).

Osborn, H. F. 1902 I, 15.

Shufeldt, R. W. 1915 D, 12, 76, pl. vi, fig. 39.

Upper Cretaceous (Lance); Wyoming.

PALÆORNIS Emmons. Type *P. struthionoides* Emmons.

Emmons, E. 1857 A, 148.

**Palæornis struthionoides** Emmons.

Hay, O. P. 1902 A, 537.

Lambrecht, K. 1921 A, 98 (Palæornis).

Wetmore, A. 1928 A, 148.

Triassic?; North Carolina.

FONTINALIS Lesquereux. Type *F. pristina* Lesquereux.

Lesquereux, L. 1883, Rep. U. S. Geol. Surv.

Terrs., viii, 135 (Not *Fontinalis* of Linnaeus).

Knowlton, F. H. 1916, Proc. U. S. Nat. Mus.,

LI, 245.

**Fontinalis pristina** Lesquereux.

Lesquereux, L. 1883, Rep. U. S. Geol. Surv.

Terrs., viii, 135; pl. xxi, fig. 9.

Knowlton, F. H. 1916, Proc. U. S. Nat. Mus.,

LI, 245.

Wetmore, A. 1925 A, 184.

1928 A, 152.

Upper Miocene (Florissant); Colorado.

The type specimen was supposed by Lesquereux to be a moss.



YALAVIS Shufeldt. Type *Y. tenuipes* Shufeldt.

Shufeldt, R. W. 1913 D, 649.

**Yalavis tenuipes** Shufeldt.

Shufeldt, R. W. 1913 D, 649, figs. 11, 12.

Lambrecht, K. 1921 A, 93.

Lydekker, R. 1914 A, 633.

Miocene (Florissant); Colorado.

EOPTERYX O. Meyer. Type *E. mississippiensis* Meyer.

Meyer, O. 1887 A, 14.

**Eopteryx mississippiensis** Meyer.

Meyer, O. 1887 A, 14, pl. ii, figs. 22a-22c.

Lambrecht, K. 1916 C, 267 (*E. mississippiensis*).

Eocene (Jackson); Mississippi.

This species is based on a part of a single dorsal vertebra.

## FOSSIL EGGS.

Hay, O. P. 1902 A, 537.

Abel, O. 1926 B, 325, fig. 217.

Morgan and Tallmon 1904 A, 403, pls. xlviii, xlix.

O'Harra, C. C. 1910 A, 123.

Shufeldt, R. W. 1916 D, 80-91, pls. xxi-xxiv

Troxell, E. L. 1916 B, 422, figs. 1-5.

## Class MAMMALIA Linnæus.

Hay, O. P. 1902 A, 553.

Abel, O. 1901 A, 28 ("mammifères").

1907 E, (249) ("saugetiere").

1910 B, (185) ("saugetiere").

1913 B, 695-759.

1914 A, ("saugetiere").

1919 A, 710.

1920 A, 405.

1921 A, 143, 251, 265 ("saugetiere").

Adams, C. C. 1902 A, 116 ("mammals").

Adams, L. A. 1919 A, 102, 138.

Adolfi, P. 1901 C, 420 ("saugethiere").

1903 A, 357 ("saugethiere").

1904 B, 54 ("saugetiere").

1905 A, 333 ("saugetiere").

1906 A, 7 ("säuger").

1907 A, 530 ("saugetiere").

1910 B, 226 ("saugetiere").

1913 B, 188 ("mammalier").

1913 C, 7 ("saugetiere").

1915 A, 436 ("saugetiere").

1917 B, 348 ("saugetiere").

Agar, W. E. 1909 A, 877.

1918 A, 130 ("saugetiere").

1920 A, 178 ("saugetiere").

Agassiz, L. 1836 B, 24 ("mammifères").

1844 C, 253 ("mammifères").

1844 D, 137 (Mammifères).

Ahrens, H. 1912 B, 48 ("saugetiere").

Aichel, O. 1917 A, 97 ("saugetiere").

1919 A ("saugetiere").

Albrecht, P. 1833 A, 419 ("saugethiere").

Alexander, G. 1904 A ("säuger").

Allen, J. A. 1905 A, 662 ("mammals").

1908 A, 546.

1909 A, 744.

1912 A, 917.

1912 D, 250.

1912 E, 907.

1913 B, 453.

Allis, E. P. 1918 A, 244.

1919 A, 333, 385.

Allis, E. P. 1919 D, 209.

Altman, F. 1925 A, 87.

Ameghino, F. 1893 C, 77 ("mammifères").

1893 D, 13 ("mammifères").

1897 B, 256.

1898 B, 497 ("mammifères").

1901 A, 349 ("mammifères").

1905 A ("mamiferos").

1906 A, 77 ("mammifères").

1909 A, 82 ("mammifères").

Anderson, R. J. 1902 C, 785 ("mammals").

1908 A, 546.

1909 A, 744.

1912 A, 917.

1912 D, 250.

1912 E, 907.

1914 A, 533 ("mammals").

Andrews, C. W. 1911 C, 294.

Anthony, R. 1905 A, 853 ("mammifères").

1912 A.

1913 A, 243 ("mammifères").

Arlt, T. 1907 A, 233 ("saugetiere").

1907 C, 676 ("saugetiere").

1907 D, 664.

1907 E, 213 ("saugetiere").

Aulmann, G. 1909 A ("säuger").

Bärthold, — 1904 A, 365 ("saugetiere").

Baraldi, G. 1877 A, *passim* ("mamiferi").

Barbour, T. 1916 A, 6 ("mammals").

Bardleben, K. 1885 A, 27 ("saugethiere").

1885 B, 85 ("saugethiere").

1885 C, 149 ("saugethiere").

1889 A, 107 ("säuger").

1889 B, 259.

1893 A, 168 ("saugetiere").

1896 A, 115 ("saugetiere").

1901 A ("saugetiere").

1904 A, 109 ("saugetiere").

1905 A, 16 ("saugetiere").

1905 B, 138 ("säuger").

1905 C, 156 ("säuger").

1905 E, 104 ("saugetiere").

- Bardeleben, K. 1906 A, 140 ("säuger").  
1907 A, 34 ("säugetiere").
- Bardenfeth, K. S. 1913 A, 67 ("mammals").
- Barrell, J. 1907 A, 474 ("mammals").
- Bateson, W. 1892 A, 103 ("mammals").
- Baumgarten, H. 1892 A, 512 ("säugethiere").
- Baur, G. 1887 H, 47 ("säugethiere").  
1894 B, 350.
- Bayer, F. 1897 A, 147 ("mammi-fères").
- Beddard, F. E. 1902 A.
- Beecker, A. 1903 A, 596 ("säugethiere").
- Beer, G. R. 1926 A, 325.
- Behlen, H. 1906 A ("säuger").
- Bender, O. 1907 A, 38 ("säuger").  
1910 A, 122 ("säuger").
- Bensley, B. A. 1902 A, 1.  
1903 A, 84.
- Bergmann 1841 A, 204 ("säugethiere").
- Berry, E. W. 1920 A, 209 ("mammals").
- Beyer, H. 1907 A, 260 ("säugethiere").  
1908 A, 77, 87 ("säugethiere").
- Bittner, F. 1912 A, 4 ("säuger").
- Black, N. 1900 A, 4.
- Blainville, H. M. D. 1817 A, 106 ("mammi-fères").
- Blatschke, F. 1904 A, 151 ("säugetiere").
- Blendinger, W. 1904 A, 452 ("säugetiere").
- Bluntschli, H. 1912 B, 351 ("säugetiere").  
1913 B, 195 ("säuger").
- Boas, J. E. V. 1884 B, 389 ("säugethiere").  
1909 A, 524, fig. 1 ("säugetiere").  
1914 B, 548, 574 ("säugetiere").
- Böker, H. 1927 A, 24, 53, fig. 16 ("ursäugetier").
- Bogoljubsky, S. 1914 A, 659.
- Bojanus, L. H. 1819 A, 1362 ("säugthier").
- Bolk, L. 1912 A, 58 ("säuger").  
1912 B, 950 ("mammals").  
1913 A ("säugethiere").  
1914 A ("säugethiere").  
1915 A, 103 ("säugetiere").  
1916 A, 720 ("mammals").  
1921 C, 219 ("mammals").  
1922 A, 107 ("mammals").  
1922 B, 55 ("mammals").
- Bonaparte, C. L. 1832 A, 283.  
1840 A, 4.
- Boule, M. 1902 B, 910 ("mammi-fères").  
1905 A, 1662 ("mammi-fères").
- Boulenger, G. A. 1904 C, 480.  
1917 C, 457 ("mammi-fères").
- Bradley, O. C. 1903 B, 43 ("mammals").  
1906 B, 529 ("mammals").
- Branca, W. 1915 A, 7.
- Brandes, G. 1900 A, 103 ("säugethiere").
- Brandt and Woldrich 1887 A, 1 ("säugethiere").
- Branson and Mehl 1928 C, 489 ("mammals").
- Brauer, A. 1914 A ("säugetiere").
- Braus, H. 1906 A ("säuger").
- Broili, F. 1908 A, 6.  
1917 A, 565 ("säugetiere").
- Bronn, H. G. 1849 A, 781, seq.
- Broom, R. 1890 A, 409.  
1896 A, 477.  
1897 B, 231, 282.  
1901 A, 181 ("mammals").  
1902 B, 168 ("mammalian").  
1902 D, 548 ("mammals").  
1903 I, 545.
- Broom, R. 1904 A, 494.  
1904 B, 89.  
1905 E, 75 ("mammals").  
1905 F, 40 ("mammals").  
1906 A, 106 ("mammals").  
1906 C, 437.  
1906 E, 369 ("mammals").  
1908 A, 1047 ("mammals").  
1908 E, 114 ("mammals").  
1909 D, 211.  
1911 A, 917 ("mammals").  
1912 B, 419 ("mammalian").  
1913 G, 335 ("mammals").  
1913 L, 231 ("mammals").  
1913 M, 7 ("mammalian").  
1913 N, 87 ("mammals").  
1913 P, 225 ("mammals").  
1914 G, 302 ("mammals").  
1915 C, 1-48.  
1924 B, 64, fig. 13.  
1926 A, 257 ("mammals").
- Bruch, C. 1853 A, 371 ("säugethiere").  
1862 A, 77 ("säugethiere").
- Burckhardt, R. 1903 A, 107 ("säugethiere").  
1906 A, 167 ("säugetiere").
- Burlet, H. M. 1916 A, 8 ("säuger").
- Cahall, W. C. 1890 A, 231 ("mammals").
- Camerano, L. 1915 A, 1 ("mammi-fères").
- Capitan, L. 1901 A.
- Carter, J. T. 1905 A, 136 ("mammals").  
1922 A, 599.
- Carus, V. 1875 A, 39.
- Carus and Engelmann 1861 A, 1261-1305, 1576-1584, 1685-1688, 1698, 1703, 1764, 1805, 1821.
- Case, E. C. 1898 C, 623, 820.  
1909 C, 20 ("mammals").
- Chaine, J. 1918 A, 735 ("mammi-fères").
- Cleland, J. 1863 A, 118 ("mammals").  
1863 B, 289.
- Cope, E. D. 1884 KK, 32.  
1885 BB, 61, 71.  
1885 EE, 606, 614 ("mammals").  
1891 N, 7, 64.
- Coyle, R. F. 1909 A, 582.
- Cunningham, J. F. 1897 A, 486.
- Cuvier, F. 1807 A, 105 ("mammi-fères").  
1812 A, 268 ("mammi-fères").  
Cuvier, G. 1805 A.  
1815 A, 103 ("mammi-fères").
- Dana, J. D. 1863 B, 315 ("mammals").  
1863 C, 334 ("mammals").  
1863 D, 131 ("mammals").
- Daubeny, C. 1844 A, 289.
- Dawkins, W. B. 1915 A, 520.
- Deinse, A. B. van 1912 A, 347 ("mammals").  
1914 A, 289 ("mammals").
- Delsman, H. C. 1913 A, 689 ("säugethiere").
- Dendy, A. 1907 A, 305.
- Deninger, K. 1914 A, 193-214 ("säugethiere").  
1915 A, 187-191 ("säugetiere").
- Denker, A. 1901 A, 635 ("säugethiere").
- Dependort, T. 1907 A, 539 ("säuger").  
1907 C, 97 ("säuger").
- Depéret, C. 1905 A, 1517 ("mammi-fères").  
1905 B, 22 ("mammi-fères").  
1905 C, 702 ("mammi-fères").  
1906 A, 618 ("mammi-fères").  
1906 B, 1120 ("mammi-fères").

- Depéret, C. 1907 B ("mammifères").  
 1909 A, 140 ("mammifères").  
 Dieterich, K. 1841 A, 55 ("saugethiere").  
 Dollo, L. 1883 G, 579.  
 1885 C, 300 ("mammifères").  
 1889 E, 146, 184 ("mammifères").  
 1889 G, 674.  
 1919 A, 33 ("mammifères").  
 Dombrowski, B. A. 1925 A, 69, fig. 2 ("säugetiere").  
 Doran, A. H. G. 1878 A, 371.  
 Drüner, L. 1904 A, 257 ("säuger").  
 1906 A, 6 ("säugetiere").  
 Dublin, L. I. 1903 A, 731 ("mammals").  
 Dubreuil, G. 1913 A ("mammifères").  
 Duckworth, W. L. H. 1904 A, 13.  
 Dujardin, F. 1836 A, 318 ("mammifères").  
 Du Toit, P. J. 1911 A, 417 ("säugetiere").  
 Dwight, T. 1909 A, 369 ("mammals").  
 Earl, C. 1897 A, 574.  
 Eastman, C. R. 1912 C, 658 ("mammals").  
 1913 B, 678 ("mammals").  
 1914 B, 689 ("mammals").  
 1916 A, 656 ("mammals").  
 1917 A, 120.  
 Eastman, Gregory and Mathew 1917 A, 120.  
 Ebner, V. 1906 A ("säugetiere").  
 Eggeling, H. 1906 A, 103 ("säugetiere").  
 Eichwald, E. 1832 A, 864 ("säugethiere").  
 Eimer, G. H. T. 1901 A, 261 ("säuger").  
 Eisler, P. 1895 A ("säuger").  
 Elliot, D. G. 1901 A, 1.  
 Emery, C. 1890 A, 288 ("säugetiere").  
 1895 A, 226.  
 1897 D, 601 ("säugetiere").  
 1901 A, 674 ("säugethiere").  
 Eschricht, D. F. 1851 A, 111 ("säugethiere").  
 Fernandez, M. 1921 A, 506 ("säugetiere").  
 Filatoff, D. 1907 A, 311 ("säugetiere").  
 Filhol, H. 1889 A, 220 ("mammifères").  
 Fischer, E. 1901 A, 1 ("säuger").  
 1903 A, 337 ("säuger").  
 Fischer, J. B. 1829 A, 1.  
 Fleischmann, A. 1904 A, 483 ("säugetiere").  
 1910 A, 691.  
 Flower, W. H. 1870 A, 239.  
 Foote, J. S. 1913 A ("mammals").  
 1916 A, 20, 75 ("mammals").  
 Forster, A. 1905 A, 89-138.  
 Fraas, E. 1905 B, 347 ("säugetiere").  
 Frassetto, F. 1903 A.  
 1915 A ("mammiferi").  
 Frech, F. 1906 A, 493 ("säugetiere").  
 1907 A, 303 ("säugethiere").  
 Freund, L. 1902 A.  
 1906 A, 111 ("säugetiere").  
 1911 A, 377 ("säugetiere").  
 1912 A, 557 ("säugetiere").  
 Froriep, A. 1886 A, 69 ("säugethiere").  
 1905 A, 156 ("mammifères").  
 1905 B, 111 (Ovis, Bos).  
 Fuchs, H. 1905 B, 3 ("säugethiere").  
 1906 A, 1 ("säuger").  
 1907 A.  
 1907 C, 24 ("säugetiere").  
 1908 A, 353 ("säuger").  
 1908 B, 584 ("säuger").  
 1908 C ("säuger").  
 Fuchs, H. 1909 B, 141.  
 1909 C, 85 ("säuger").  
 1909 D, 1, 70 ("säuger").  
 1910 A, 34.  
 1910 C, 476 ("säuger").  
 1911 A, 34.  
 1911 B ("säuger").  
 1911 D, 97 ("säugetiere").  
 1912 A, 34, 68, 86.  
 1912 B, 82, 86.  
 1912 D, 143.  
 1914 A, 28 ("säugetiere").  
 1922 A, 291.  
 1926 B, 5.  
 Fürbinger, M. 1902 A, 210.  
 1904 A.  
 1905 A, 17 ("säugetiere").  
 Funcius, T. 1909 A, 370 ("säuger").  
 Gadow, H. 1901 A, 397.  
 1901 B, 990 ("säuger").  
 1902 B, 345.  
 1912 A, 817.  
 1913 A, 114 ("mammals").  
 1914 A, 508 ("mammals").  
 Gaskell, W. H. 1898 A, 553.  
 Gaudry, A. 1891 C.  
 1908 A, 1131 ("mammifères").  
 Gaupp, E. 1895 A, 57, seq. ("säuger").  
 1898 B ("säuger").  
 1899 A, 1004, 1109 ("säuger").  
 1900 A ("säuger").  
 1901 A, 43 ("säugetier").  
 1902 A, 163, 189 ("säuger").  
 1905 A, 273 ("säugetier").  
 1905 B, 16 ("säuger").  
 1905 C, 125 ("säuger").  
 1905 D, 1037 ("säuger").  
 1905 E, 159 ("säuger").  
 1906 A, 32 ("säuger").  
 1906 B ("säuger").  
 1908 A, 181 ("säuger").  
 1908 B ("säuger").  
 1908 C ("säuger").  
 1910 A, 529 ("säuger").  
 1910 B, 355 ("säuger").  
 1910 C, 310 ("säuger").  
 1910 D, 83 ("säuger").  
 1911 A, 418 ("säuger").  
 1911 B, 97 ("säuger").  
 1911 C, 445, 454 ("säuger").  
 1911 D, 609 ("säuger").  
 1911 E, 320 ("säuger").  
 1912 B, 215 ("säuger").  
 1913 A ("säuger").  
 Gegenbaur, C. 1864 B, 8 ("säugethiere").  
 1864 C, 175 ("säugethiere").  
 1865 C.  
 1867 B, 402 ("säugethiere").  
 1870 C, 398 ("säugethiere").  
 1871 A, 211 ("säugethiere").  
 1880 A, 586 ("mammalien").  
 1888 A ("säugethiere").  
 Geikie, J. 1914 A, 324 ("mammals").  
 Geoffroy St. Hilaire, E. F. 1807 E, 354 ("mammifères").  
 1817 A, 126 ("mammifères").  
 1817 B, 188 ("mammifères").  
 1822 A, 76 ("mammifères").

- Geoffroy St. Hilaire, E. F. 1824 D, 435 ("mam-  
mifères").  
1824 H, 254 ("mammifères").  
1825 B, 133 ("mammifères").  
1832 A, 354 ("mammifères").  
Gervais, P. 1853 B, 31 ("mammifères").  
1859 A ("mammifères").  
Gessner, I. 1921 A, 271 ("saugetiere").  
Ghigi, A. 1900 B, 98 ("mammiferi").  
Gidley, J. W. 1906 F, 106 ("mammals").  
1919 A, 273.  
Giebel, C. G. 1878 C, 853 ("saugethiere").  
1883 A.  
Gill T. 1873 E, 435.  
1881 A, 361.  
1886 C, 808.  
1898 B, 697 ("mammals").  
1902 A, 1034.  
1904 A, 537.  
1907 A, 491.  
1912 D, 789.  
Goodrich, E. S. 1916 A, 261, 266.  
Goodsir, J. 1857 A ("mammals").  
1868 A, 53.  
Gottlieb, H. 1914 A, 179 ("saugetiere").  
Grant, M. 1904 B.  
Gray, J. E. 1825 B, 337.  
Gruber, W. 1873 A, 338 ("saugethiere").  
Gregory, W. K. 1910 A, 21, 28.  
1910 C, 297.  
1910 D, 600.  
1911 C, 404.  
1913 E, 7, 37.  
1914 E, 525.  
1916 A, 239 ("mammals").  
1917 C, 975 ("mammals").  
1918 A, 4 ("mammals").  
1922 A, 539.  
1926 B, 405 ("mammals").  
1927 A, 601 ("mammals").  
1927 D, 225 ("mammals").  
1927 E, 337 ("mammals").  
1927 G, 270 ("mammalia").  
Gregory and Adams 1915 A, 704 ("mammals").  
Gregory and Noble 1924 A, 435 ("mammals").  
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1914 G, pl. vii.  
1918 A, 208 ("saugetiere").  
1925 C, 174 ("saugetiere").  
1925 D, 238.  
1926 A, 262 ("saugetiere").  
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1856 B, 194 ("mammals").  
1859 D, 394, 451.  
1859 H, 46.  
1862 A, 1.  
1863 E, 443, 527, 553.  
1863 F, 530, 579, 607, 633, 663.  
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1876 F, 183.  
1879 A, 395.  
1880 E, 457.  
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1909 A, 284 ("saugetiere").  
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1903 F, 85 ("saugetiere").  
1904 C, 183 ("saugethiere").  
1905 C, 134 ("saugetiere").  
1906 A, 28 ("saugetiere").  
1906 D, 188 ("saugetiere").  
1908 A, 140 ("saugetiere").  
1908 B, 466 ("saugetiere").  
1909 A, 193, 211.  
1909 C, 706 ("saugetiere").  
1910 D, 123.  
1911 A, 197.  
1912 A, 609.  
1913 B, 194 ("saugetiere").  
1913 C, 32 ("saugetiere").  
1916 A, 152, 168, 170.  
1922 A, 18.  
1926 C, 60 ("saugetiere").  
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 Keyes, C. A. 1922 A, pl. iii.  
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 1900 B, 167 ("mammals").  
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 Klaauw, C. J. 1924 B, 599.  
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 1902 B, 371 ("quadrupèdes").  
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 1903 E, 365 ("mammifères").  
 1903 G, 127 ("mammifères").  
 1906 B, 160 ("mammifères").  
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 1916 H, 11.  
 1916 I, 107 ("mammals").  
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 1903 F, 276.  
 1904 M, 257.  
 1905 I, 86.  
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 1907 E, 747 ("mammals").  
 1907 G, 11, 18-35, 37, 44, 91, 94, 96, 100, 219.  
 1907 H, 613.  
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 1916 E, 511, 602.  
 1917 B, 316.  
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 1899 I, 345 ("säugetiere").  
 1899 T, 452 ("säugetiere").  
 1900 C, 132 ("säuger").  
 1902 F, 134 ("mammals").  
 1902 J, 117 ("säugetiere").  
 1903 G, 144.  
 Schmalhausen, J. J. 1908 B, 373 ("säugetiere").  
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 1928 B, 257 ("mammals").  
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 1908 B, 377.  
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 1926 E, 6, 10.  
 1927 G, 259.  
 1928 C, 161.  
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 Tims, H. W. M. 1901 A, 265.  
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 1914 D, 168 ("mammals").  
 1914 J, 1037 ("mammalian").  
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 1917 A, 979.  
 1917 B, 49.  
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 1868 A.  
 1872 B.  
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 1917 C, 412 ("mammals").  
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 1917 D, lxxvii.

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## Subclass PROTOTHERIA Gill.

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 1910 B, 765.  
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 1907 G, 11, 100.  
 1907 H, 613.  
 Parker, W. K. 1885 C, 116.  
 1886 A, 269.  
 Reynolds, S. H. 1897 A, 346, 348.  
 Schuchert, C. 1915 A, 928.  
 Scott, W. B. 1913 A, 57, 59, 76.  
 Shufeldt, R. 1911 A, 72.  
 Smith, G. E. 1911 A, 293.  
 1912 A, 425.  
 1913 A, 560 ("prototherian").  
 Stromer, E. 1912 A, 162, 242.  
 Thomas, O. 1887 A, 312.  
 Weber, M. 1904 A, 317 (Monotremata); 302,  
 317 (Prototheria).  
 Winge, H. 1923 A, 92.  
 Woodward, H. 1904 B, 153.  
 Wortman, J. L. 1902 A, xiv, 21.

## Order PROTODONTA Osborn.

Hay, O. P. 1902 A, 555.  
 Branca, W. 1915 A, 4.  
 Broom, R. 1914 B, 133 (Protodontia).  
 Cope, E. D. 1891 N, 65, 66.  
 Gregory, W. K. 1910 A, 163, 464.  
 1922 A, 544.  
 Hennig, E. 1922 A, 258 ("protodonten").  
 Hilzheimer, M. 1913 A, 520.  
 Jaekel, O. 1911 A, 204 (Haplodontia); 205 (Pro-  
 todonti).  
 Koken, E. 1893 B, 572.

Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 Schwarz, E. 1924 A, 419.  
 Scott, W. B. 1913 A, 59.  
 Simpson, G. G. 1926 G, 88, 90, 107.  
 1928 C, 166.  
 Weber, M. 1904 A, 358, 361.  
 Weber and Abel 1928 A, 85, 86.  
 Zittel and Schlosser 1911 A, 358 (Syn. of Dro-  
 matheriidae).  
 1923 A, 437 (Syn.? Dromatheriidae).

## DROMATHERIIDÆ Gill.

Hay, O. P. 1902 A, 555.  
 Arldt, T. 1907 D, 651 (Dromatheriidae).  
 1912 A, 662 (Dromatheriidae).  
 Fuchs, H. 1911 B, 384.  
 Gregory, W. K. 1910 A, 164.  
 1922 A, 23.  
 Haeckel, E. 1893 A, xxiv (Dromatherida).  
 Hennig, E. 1919 A, 6.

Hennig, E. 1922 A, 260.  
 Lydekker, R. 1896 C, 277.  
 Trouessart, E. L. 1905 A, 863 (Dromatheri-  
 dae).  
 Weber, M. 1904 A, 361.  
 Winge, H. 1923 A, 91.  
 Zittel and Schlosser 1911 A, 358.  
 1923 A, 437, 442, 663.



DROMATHERIUM Emmons. Type *D. sylvestre* Emmons.

- Hay, O. P. 1902 A, 555.  
 Abel, O. 1913 B, 709.  
     1920 A, 406.  
 Adloff, P. 1903 A, 362, 369, fig. 4.  
 Bardenfleth, K. S. 1913 A, 75.  
 Beddard, F. E. 1902 A, 98.  
 Bolk, L. 1922 A, 111.  
 Branca, W. 1915 A, 4.  
 Broom, R. 1908 A, 1059.  
 Dependorf, T. 1907 C, 99.  
 Gidley, J. W. 1906 F, 98, fig. 11 (Dromotherium).  
 Gregory, W. K. 1910 A, 137, 163.  
     1910 C, 298.  
     1922 A, 534 (Dromotherium).  
 Hennig, E. 1919 A, 6.  
 Hertz, M. 1925 A, 544.  
 Hiltzheimer, M. 1913 A, 520.  
 Hobbs, W. H. 1901 A, 23.  
 Huene, F. 1918 A, 208, 210.  
     1925 C, 179.  
 Koken, E. 1893 B, 510.  
 Lankester, E. R. 1905 A, 189, fig. 136.  
 Lavocat, A. 1896 A, 26.  
 Lucas, F. A. 1902 B, 186, fig.  
 Matthew, W. D. 1928 B, 947.  
 Osborn, H. F. 1905 H, 209 (Dromotherium).  
     1905 I, 95 (Dromotherium).  
     1907 G, 18, 193, fig. 43.  
 Palmer, T. S. 1904 A, 245, 881.  
 Rice and Gregory 1906 A, 178 ("mammal").  
 Simpson, G. G. 1925 B, 336, fig. 6.  
     1926 A, 548.  
     1926 G, 87, 99.

- Simpson, G. G. 1928 E, 155, 165.  
 Steinmann, G. 1907 A, 465, fig. 807.  
 Thompson, A. H. 1900 A, 920 (Dromotherium).  
 Tims, H. W. M. 1903 A, 139.  
 Trouessart, E. L. 1905 A, 863 (Dromotherium).  
 Wallace, A. R. 1876 A, 1, 134, 160.  
 Weber, M. 1904 A, 358, 361.  
 Weber and Abel 1928 A, 85, fig. 48.  
 Williston, S. W. 1925 B, 245 (Dromotherium).  
 Woodward, M. F. 1894 B, 447 (Dromotherium).  
 Zittel and Schlosser 1911 A, 358.  
     1923 A, 437, 663.

By G. G. Simpson (1926 A, 548) this genus is referred to the cynodont reptiles.

**Dromatherium sylvestre** Emmons.

- Hay, O. P. 1902 A, 556.  
 Branca, W. 1915 A, 5, fig. 1.  
 Depéret, C. 1907 B.  
 Gregory, W. K. 1922 A, 23, fig. 15.  
 Koken, E. 1893 B, 283.  
 Lull, R. S. 1917 B, 544, fig. 171.  
 Lydekker, R. 1896 C, 278.  
 Osborn, H. F. 1904 F, 4.  
 Palacký, J. 1903 A, 4.  
 Philippi, E. 1903 A, 20, fig.  
 Ruschenberger and Tryon 1879 A, 91.  
 Schuchert, C. 1910 A, 579 (Dromotherium).  
 Simpson, G. G. 1926 G, 88, 93, figs. 1, 3.  
 Van den Broeck, E. 1900 A, 60 (D. sylvestre).  
 Zittel and Schlosser 1911 A, 358, fig. 515.  
     1923 A, 437, fig. 551.  
     Triassic; North Carolina.

MICROCONODON Osborn. Type *M. tenuirostris* Osborn.

- Hay, O. P. 1902 A, 556.  
 Abel, O. 1920 A, 406.  
 Adloff, P. 1903 A, 362, fig. 4.  
 Branca, W. 1915 A, 4.  
 Broom, R. 1908 A, 1059.  
 Depéret, C. 1907 B.  
 Gregory, W. K. 1910 A, 137, 163.  
     1922 A, 540.  
 Hennig, E. 1919 A, 6.  
 Hertz, M. 1925 A, 544.  
 Hiltzheimer, M. 1913 A, 520.  
 Hobbs, W. H. 1901 A, 23.  
 Koken, E. 1893 B, 283.  
 Matthew, W. D. 1928 B, 947.  
 Osborn, H. F. 1905 H, 209.  
     1905 I, 95.  
     1907 G, 18, 193, fig. 43.  
 Palmer, T. S. 1903 A, 873 (Tytthoconus).  
     1904 A, 421, 881 (Microconodon); 699, 881 (Tytthoconus).  
 Rice and Gregory 1906 A, 178 ("mammal").  
 Schlosser, M. 1899 I, 346.  
 Simpson, G. G. 1925 B, 338, fig. 6.  
     1926 A, 548.

- Simpson, G. G. 1926 G, 87, 93, 99.  
     1928 C, 211.  
     1928 E, 155, 165.  
 Thompson, A. H. 1900 A, 921 (Microconodon).  
 Tims, H. W. M. 1903 A, 139.  
 Trouessart, E. L. 1905 A, 863 (Tytthoconus).  
 Weber, M. 1904 A, 358, 361.  
 Woodward, M. F. 1894 B, 447.  
 By G. G. Simpson (1926 A, 548) this genus is referred to the cynodont reptiles.

**Microconodon tenuirostris** Osborn.

- Hay, O. P. 1902 A, 556.  
 Branca, W. 1915 A, 5, fig. 2.  
 Gregory, W. K. 1922 A, 24, fig. 15.  
 Osborn, H. F. 1904 F, 5.  
 Palacký, J. 1903 A, 4.  
 Philippi, E. 1903 A, 20, fig.  
 Schuchert, C. 1910 A, 579.  
 Simpson, G. G. 1926 G, 88, 97, figs. 2, 3.  
 Trouessart, E. L. 1905 A, 863 (Tytthoconus).  
 Van den Broeck, E. 1900 A, 60 (Microconodon).  
     Triassic; North Carolina.

## Subclass ALLOTHERIA Marsh. .

- Marsh, O. C. 1880 F, 239.  
 The writer acknowledges the aid of Dr. G. G. Simpson in arranging this subclass.

- Simpson, G. G. 1928 C, 171.  
 See also under the order Multituberculata.

## Order TRICONODONTA Zittel.

- Zittel, K. A. 1893 B, 97.  
 Abel, O. 1914 A, 45.  
 Beddard, F. E. 1902 A, 99.  
 Broom, R. 1914 B, 133 (Triconodontia).  
     1924 B, 64, fig. 13.  
 Gregory, W. K. 1910 A, 170, 172, 484.  
     1916 A, 240.  
     1922 A, 547.  
 Hertz, M. 1925 A, 558.  
 Osborn, H. F. 1893 A, 389 ("triconodonts").  
     1893 D, 389, 390 ("triconodonts").  
     1899 J, 415.  
     1907 G, 11, 21.  
 Owen, R. 1879 D, 149 ("triconodonts").
- Schwarz, E. 1924 A, 419.  
 Simpson, G. G. 1924 A, 39 ("triconodonts").  
     1925 A, 229 ("triconodonts").  
     1925 B, 148, 334, 354, 465, 466, 559, 560, 565  
     1926 E, 8 ("triconodonts").  
     1927 G, 259.  
     1928 C, 171, 183, 195.  
     1928 K, 462, 469.  
 Stromer, E. 1908 B, 168.  
 Weber and Abel 1928 A, 86.  
 This order is included in the Allotheria only provisionally.

## TRICONODONTIDÆ Marsh.

- Marsh, O. C. 1887 A, 341.  
 Hay, O. P. 1902 A, 566.  
 Abel, O. 1913 B, 710.  
 Arldt, T. 1907 C, 676.  
     1907 D, 686.  
     1911 A, 229 ("triconodontiden").  
 Case, E. C. 1898 C, 824.  
 Gregory, W. K. 1922 A, 42.  
     1926 B, 410 ("triconodonts").  
 Hennig, E. 1922 A, 259, 260 ("triconodonten").  
 Lydekker, R. 1896 C, 273.
- Matthew, W. D. 1915 A, 268.  
 Osborn, H. F. 1898 U, 686.  
 Palacký, J. 1903 A, 3 ("triconodontiden").  
 Palmer, T. S. 1904 A, 775, 887.  
 Simpson, G. G. 1925 B, 357, 465, 466.  
     1928 C, 67, 70.  
 Trouessart, E. L. 1905 A, 860.  
 Weber, M. 1904 A, 361.  
 Zittel and Schlosser 1911 A, 359.  
     1923 A, 437, 438, 442, 664.

## TRICONODONTINÆ Hay.

- Hay, O. P. 1902 A, 566.  
 Osborn, H. F. 1907 G, 22.
- Simpson, G. G. 1925 B, 357.  
     1928 C, 76.

TRICONODON Owen. Type *T. mordax* Owen.

- Hay, O. P. 1902 A, 567.  
 Abel, O. 1920 A, 418, fig. 635.  
 Adloff, P. 1903 A, 360.  
 Årnäck-Christie-Linde A, 1912 B, 275.  
 Bardenfeth, K. S. 1913 A, 71.  
 Beddard, F. E. 1902 A, 99.  
 Behlen, H. 1906 A, 210.  
 Bensley, B. A. 1903 A, 181.  
 Dependorf, T. 1907 C, 98.  
 Fuchs, H. 1911 B, 384.  
 Gidley, J. W. 1906 E, 665.  
     1906 F, 96, fig. 12.  
 Gregory, W. K. 1910 A, 173, 176.  
     1922 A, 547, fig. 22.  
 Heilprin, A. 1887 A, 335.  
 Hertz, M. 1925 A, 558, 569.  
 Lydekker, R. 1896 C, 273.  
     1899 B, 926.  
     1914 A, 630.  
 Matthew, W. D. 1922 A, xiii.  
 Osborn, H. F. 1904 G, 321.  
     1904 K, 256.  
     1907 G, 25, 218, 222, figs. 8, 207.  
 Owen, R. 1860 E, 317, 318.
- Owen, R. 1879 D, 149.  
 Röse, C. 1892 G, 147.  
 Simpson, G. G. 1924 A, 39.  
     1925 A, 229.  
     1925 B, 149, 152, 336, 352, 355, 466, 559, 565, figs. 6, 21.  
     1926 H, 212.  
     1927 G, 260, figs. 1, 4.  
     1928 C, 214, fig. 10.  
     1928 K, 462.  
 Thomas, O. 1888 A, 447.  
 Tims, H. W. M. 1903 A, 139.  
     1905 B, 1786.  
 Trouessart, E. L. 1905 A, 861.  
 Weber, M. 1904 A, 341, 343, 355, 358, 359, 361.  
 Weber and Abel 1928 A, 86, fig. 50.  
 Willett, E. W. 1881 A, 377, fig.  
 Woodward, A. S. 1912 B, 100, pl. xv.  
 Zittel and Schlosser 1911 A, 359.  
     1923 A, 437.  
*Triconodon bisulcus* having been referred to the genus *Trioracodon*, *Triconodon* is at present without a representative in North America.

TRIORACODON Simpson. Type *Triconodon ferox* Owen.

- Simpson, G. G. 1928 B, 88, fig. 19.  
 Consult also the citations under *Triconodon*.
- Trioracodon bisulcus** (Marsh).  
 Hay, O. P. 1902 A, 567 (Triconodon).  
 Gidley, J. W. 1906 F, 109, pl. v, figs. 1, 1a (Triconodon).  
 Gilmore, C. W. 1909 B, 39 (Triconodon).

Mook, C. C. 1916 A, 134 (Triconodon).  
 Simpson, G. G. 1925 B, 152, 357, figs. 1-4;  
 338, 351, 354, figs. 11, 12 (Triconodon. This  
 species?).

Simpson, G. G. 1928 B, 88, text-fig. 19.  
 1928 K, 462, fig. 1.  
 Upper Jurassic or Lower Cretaceous (Mor-  
 rison); Wyoming.

#### PRIACODON Marsh. Type *Tinodon ferox* Marsh.

Hay, O. P. 1902 A, 567.  
 Abel, O. 1922 C, 438, fig. 374.  
 Gregory, W. K. 1922 A, 44.  
 Hennig, E. 1919 A, 6.  
 Osborn, H. F. 1907 G, 25, fig. 8 (Triconodon).  
 Simpson, G. G. 1924 A, 39.  
 1925 A, 229.  
 1925 B, 149, 159, 336, 344, 355, 465, figs.  
 1, 2, 6, 15, 16; 559, 563, 564, figs. 1, 2.  
 1926 G, 102, fig. 3.  
 1926 H, 212.  
 1928 C, 195.  
 Trouessart, E. L. 1905 A, 861.  
 Van den Broeck, E. 1900 A, 61.  
 Weber, M. 1904 A, 361.  
 Zittel and Schlosser 1911 A, 359.  
 1923 A, 437.

#### *Priacodon ferox* Marsh.

Hay, O. P. 1902 A, 567.  
 Cannon, G. L. 1906 B, 196 (This species?).  
 Gilmore, C. W. 1909 B, 39 (Priacodon, Tino-  
 don).  
 Leche, W. 1902 A, 37 (Triconodon).  
 Lull, R. S. 1917 B, 545, fig. 172 (Triconodon)

Mook, C. C. 1916 A, 133.  
 Seeley, H. G. 1893 B, 275, fig. (Triconodon).  
 Simpson, G. G. 1925 B, 159, 165, 344, 357,  
 figs. 5, 15; 341, 342, figs. 13, 14 (This species?).  
 Woodward, A. S. 1923 C, 80, fig. 75.  
 Upper Jurassic or Lower Cretaceous (Mor-  
 rison); Wyoming, Colorado?

#### *Priacodon grandævus* Simpson.

Simpson, G. G. 1925 B, 350, 357, figs. 20, 27.  
 Upper Jurassic (Morrison); Wyoming.

#### *Priacodon lulli* Simpson.

Simpson, G. G. 1925 B, 346, 357, figs. 17, 18.  
 Upper Jurassic (Morrison); Wyoming.

#### *Priacodon robustus* (Marsh).

Hay, O. P. 1902 A, 567 (Tinodon).  
 Gilmore, C. W. 1909 B, 39 (Tinodon).  
 Mook, C. C. 1916 A, 134 (Tinodon).  
 Simpson, G. G. 1924 A, 39.  
 1925 A, 229.  
 1925 B, 162, 165, 357, figs. 6, 7.  
 Upper Jurassic or Lower Cretaceous (Mor-  
 rison); Wyoming.

#### AMPHILESTINÆ Osborn.

Osborn, H. F. 1888 G, 228.  
 Simpson, G. G. 1925 B, 357.

Weber, M. 1904 A, 361 (Amphilestidæ).

#### PHASCOLODON Simpson. Type *P. gidleyi* Simpson.

Simpson, G. G. 1925 B, 334, 467, 559, 565.  
 1926 H, 212.  
 1928 C, 213.

*Phascolodon gidleyi* Simpson.  
 Simpson, G. G. 1925 B, 334, 357, fig. 8.  
 Upper Jurassic (Morrison); Wyoming.

#### APLOCONODON Simpson. Type *A. comoënsis* Simpson.

Simpson, G. G. 1925 B, 148, 149, 336, 356, 559,  
 565.  
 1926 H, 212.  
 1928 C, 210.

#### *Aploconodon comoënsis* Simpson.

Simpson, G. G. 1925 B, 148, 149, 336, 356, 357,  
 figs. 9, 10.  
 Upper Jurassic (Morrison); Wyoming.

#### Order SYMMETRODONTA Simpson.

Simpson, G. G. 1925 B, 559, 563, 568, 569.  
 1928 C, 97, 175, 183, 195.  
 1928 K, 462, 469.

Weber and Abel 1928 A, 86.  
 This order is arranged only provisionally  
 in the Allotheria.

#### TINODONTIDÆ Marsh.

Marsh, O. C. 1879 F, 216.  
 Hay, O. P. 1902 A, 567 (Tinodontinæ).  
 Hennig, E. 1921 A, 261 (Tinodontidæ).  
 Marsh, O. C. 1887 F, 288 (Phascolotheriidæ).  
 Osborn, H. F. 1907 G, 22 (Phascolotheriine).

Palmer, T. S. 1904 A, 774, 887 (Tinodontidæ).  
 Simpson, G. G. 1925 B, 451, 465, 466, 469  
 (Spalacotheriidæ).  
 1928 C, 98, 175 (Spalacotheriidæ).

#### TINODON Marsh. Type *T. bellus* Marsh.

Hay, O. P. 1902 A, 567 (Tinodon); 568 (Mena-  
 codon).  
 Abel, O. 1914 A, 45.  
 1922 C, 437, fig. 368 (Tinodon); 437, fig.

370 (Menacodon).  
 Bardenheft, K. S. 1913 A, 71.  
 Bensley, B. A. 1902 A, 4.  
 Broom, R. 1909 C, 136 (Menacodon).

- Gidley, J. W. 1906 F, 101.  
 Gregory, W. K. 1910 A, 173 (Menacodon).  
     1916 A, 240, fig. 2 (Menacodon).  
     1922 A, 84 (Tinodon, Menacodon).  
 Hennig, E. 1919 A, 8 (Tinodon, Menacodon).  
 Osborn, H. F. 1907 G, 25, figs. 9, 43 (Menacodon); fig. 10 (Tinodon).  
 Palmer, T. S. 1904 A, 680, 887 (Tinodon); 409, 887 (Menacodon).  
 Simpson, G. G. 1925 B, 165, 451, 464-467, 563, 569, fig. 1.  
     1926 H, 212.  
     1928 C, 214.  
 Trouessart, E. L. 1905 A, 861 (Tinodon, Menacodon).  
 Van den Broeck, E. 1900 A, 61.  
 Weber, M. 1904 A, 361 (Tinodon, Menacodon).  
 Weber and Abel 1928 A, 38, 37, fig. 50.  
 Zittel and Schlosser 1911 A, 359 (Menacodon).  
     1923 A, 437 (Tinodon, Menacodon).

**Tinodon bellus Marsh.**

- Hay, O. P. 1902 A, 567.  
 Gilmore, C. W. 1909 B, 39.  
 Gregory, W. K. 1922 A, 47, fig. 24.

- Mook, C. C. 1916 A, 133.  
 Simpson, G. G. 1925 B, 451, 459, figs. 1-3; 569.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Tinodon lepidus Marsh.**

- Hay, O. P. 1902 A, 567 (T. lepidus); 568 (Menacodon rarus).  
 Gilmore, C. W. 1909 B, 39 (T. lepidus, Menacodon rarus).  
 Gregory, W. K. 1922 A, 47, fig. 24 (Menacodon rarus).  
 Merrill, G. P. 1907 A, 46 (Menacodon rarus).  
 Mook, C. C. 1916 A, 133 (T. lepidus, Menacodon rarus).  
 Simpson, G. G. 1925 B, 451, 456, 459, figs. 4, 5; 569.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Tinodon sp. indet.**

- Simpson, G. G. 1925 B, 158. Upper Jurassic (Morrison); Wyoming.

**AMPHIDONTIDÆ Simpson.**

- Simpson, G. G. 1925 B, 451, 460, 469, 569.

- Simpson, G. G. 1928 C, 98.

**AMPHIDON Simpson. Type *A. superstes* Simpson.**

- Simpson, G. G. 1925 B, 451, 460, 463, 469, 558, 563, 569, figs. 1, 2.  
     1926 H, 212.  
     1928 C, 209.  
 Weber and Abel 1928 A, 87.

**Amphidon æquicurius Simpson.**

- Simpson, G. G. 1925 B, 451, 463, 465, figs. 8, 9; 569.  
     Upper Jurassic (Morrison); Wyoming.

**Amphidon superstes Simpson.**

- Simpson, G. G. 1925 B, 451, 460, 465, figs. 6, 7; 569.  
     Upper Jurassic (Morrison); Wyoming.

**Order PANTOTHERIA Marsh.**

- Marsh, O. C. 1880 F, 239.  
 Gregory, W. K. 1910 A, 171, 172, 177, 196, 464 (Trituberculata).  
     1916 A, 241 (Trituberculata).  
     1922 A, 28, 31, 43, 55, 56, 59, 85, 99 (Trituberculata).  
 Hertz, M. 1925 A, 543 (Trituberculata).  
 Jaekel, O. 1911 A, 206 (Trituberculati).  
 Osborn, H. F. 1891 in Zittel, K. A., 1893 B, (1891), 96, 100 (Trituberculata).  
     1907 G, 12, 22, 115 (Trituberculata).  
     1910 B, 519 (Trituberculata).

- Schwarz, E. 1924 A, 419 (Trituberculata).  
 Simpson, G. G. 1926 B, 233 ("trituberculates").  
     1928 B, 306 ("pantotheres").  
     1928 C, 106, 214.  
     1928 K, 462, 469.  
 Weber and Abel 1928 A, 36 (Trituberculata).  
 Zittel and Schlosser 1911 A, 360 (Pantotheriidae).  
     1923 A, 438 (Pantotheriidae)  
     This order is placed in the Allotheria only provisionally.

**PAURODONTIDÆ Marsh.**

- Hay, O. P. 1902 A, 568.  
 Abel, O. 1913 B, 710.  
 Hennig, E. 1921 A, 261.  
 Leche, W. 1907 A, 47 (Peralestidae).  
 Osborn, H. F. 1907 G, 23.

- Simpson, G. G. 1927 C, 410.  
     1928 B, 306.  
     1928 C, 113, 120, 212.  
 Zittel and Schlosser 1911 A, 361 (Paurodontinae).  
     1923 A, 439 (Paurodontinae).

**PAURODON Marsh. Type *P. valens* Marsh.**

- Hay, O. P. 1902 A, 569.  
 Abel, O. 1922 C, 437, fig. 367.  
 Ameghino, F. 1898 C, 74.

- Ameghino, F. 1902 D, 439.  
     1906 A, 38.  
 Gidley, J. W. 1906 F, 101, pl. v, fig. 5.

- Gregory, W. K. 1910 A, 195.  
 Hennig, E. 1919 A, 6.  
 Osborn, H. F. 1907 G, 29, 219, figs. 26, 207.  
 Palmer, T. S. 1904 A, 517, 884.  
 Simpson, G. G. 1925 B, 563, fig. 1.  
     1926 H, 213.  
     1927 C, 410.  
     1928 B, 308.  
     1928 C, 212.  
 Van den Broeck, E. 1900 A, 62.  
 Weber, M. 1904 A, 361.  
 Zittel and Schlosser 1911 A, 361.  
     1923 A, 439.

**Paurodon valens** Marsh.

- Hay, O. P. 1902 A, 569.  
 Ameghino, F. 1903 A, 161, figs. 83, 85.  
 Gilmore, C. W. 1909 B, 39.  
 Gregory, W. K. 1922 A, 50.  
 Merrill, G. P. 1907 A, 54.  
 Mook, C. C. 1916 A, 133.  
 Trouessart, E. L. 1905 A, 859.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Archæotrigon** Simpson. Type *A. brevimaxillus* Simpson.

- Simpson, G. G. 1927 C, 410.  
     1926 H, 213 (No definition).  
     1928 C, 210.

**Archæotrigon brevimaxillus** Simpson.

- Simpson, G. G. 1927 C, 410.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Tathiodon** Simpson. Type *Tanaodon agilis* Simpson.

- Simpson, G. G. 1927 E, 265 (To replace *Tanaodon*, preoccupied).  
     1926 H, 213 (Tanaodon; no definition).  
     1927 C, 410 (Tanaodon; preoccupied).  
     1928 C, 195.

**Tathiodon agilis** Simpson.

- Simpson, G. G. 1927 C, 410 (Tanaodon).  
     1927 E, 71.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**DRYOLESTIDÆ** Marsh.

- Hay, O. P. 1902 A, 569.  
 Hennig, E. 1921 A, 261.  
 Leche, W. 1907 A, 59 (Stylacodontidæ).  
 Lydekker, R. 1888 F, 384 (Stylacodontidæ).  
 Osborn, H. F. 1888 C, 235 (Stylodontidæ).  
     1907 G, 23 (Amblotheridæ or Stylacodontidæ).  
 Seeley, H. G. 1893 B, 274.

- Simpson, G. G. 1927 C, 411.  
     1928 B, 306.  
     1928 C, 210.  
 Van den Broeck, E. 1900 A, 62 (Amblotheridæ).  
 Weber, M. 1904 A, 358, 361 (Stylacodontidæ).  
 Weber and Abel 1928 A, 128 (Stylacodontidæ).  
 Winge, H. 1917 A, 194 (Stylacodontidæ).  
 Zittel and Schlosser 1911 A, 106 (Stylodontidæ).  
     1923 A, 439 (Amphlestine).

**DRYOLESTES** Marsh. Type *D. priscus* Marsh.

- Hay, O. P. 1902 A, 569 (Dryolestes); 570 (Asthenodon).  
 Ameghino, F. 1902 D, 493.  
 Bardenheath, K. S. 1913 A, 90.  
 Bensley, B. A. 1902 A, 4.  
 Bigot, A. 1897 A, 462.  
 Bolk, L. 1914 A, 20.  
 Dollo, L. 1889 G, 675, 676.  
 Gidley, J. W. 1906 E, 666.  
     1906 F, 96, pl. v, figs. 2, 3; 99, text-fig. 12.  
     1922 A, 268.  
 Gregory, W. K. 1916 A, 244, pl. i, E.  
     1918 A, 5, fig. 2.  
     1922 A, 51 (Asthenodon); 534, pl. v (Dryolestes).  
 Heilprin, A. 1887 A, 335.  
 Hennig, E. 1922 A, 212.  
 Hertz, M. 1925 A, 578, fig. 32.  
 Lankester, E. R. 1905 A, 189, fig. 186.  
 Lavocat, A. 1896 A, 26 (Drolestes).  
 Lydekker, R. 1896 C, 277.  
 Osborn, H. F. 1904 G, 322, pl. xxi, fig. 1.  
     1904 K, 256.  
     1907 G, 23, 27, 30, 218, 220, figs. 14, 31-34, 206, 207; 30, fig. 35 (Asthenodon).

- Osborn, H. F. 1910 B, 519.  
 Palmer, T. S. 1904 A, 246, 876 (Dryolestes); 125, 876 (Asthenodon).  
 Schlosser, M. 1899 J, 354.  
 Simpson, G. G. 1925 B, 563, fig. 1.  
     1927 C, 411, 412 (Dryolestes); 411 (Asthenodon a syn.).  
     1928 C, 211.  
 Steinmann, G. 1907 A, 465, fig. 808.  
 Trouessart, E. L. 1905 A, 859 (Dryolestes); 860 (Asthenodon).  
 Van den Broeck, E. 1900 A, 62 (Dryolestes, Asthenodon).  
 Weber, M. 1904 A, 361.  
 Weber and Abel 1928 A, 88.  
 Zittel and Schlosser 1911 A, 360 (Syn. of Phasolestes).  
     1923 A, 425, 439, fig. 525.

**Dryolestes obtusus** Marsh.

- Hay, O. P. 1902 A, 569.  
 Gilmore, C. W. 1909 B, 38.  
 Mook, C. C. 1916 A, 132.  
     Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Dryolestes priscus** Marsh.

- Hay, O. P. 1902 A, 569 (D. priscus, Stylacodon validus); 570 (Asthenodon segnis).  
 Gilmore, C. W. 1909 B, 38 (D. priscus); 39 (Stylacodon validus, Asthenodon segnis).  
 Mook, C. C. 1916 A, 131 (Dryolestes priscus, Asthenodon segnis).  
 Osborn, H. F. 1907 G, 30, fig. 32 (Phascolestes priscus).  
 Woodward, A. S. 1923 C, 80, fig. 75 (Dryolestes priscus).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Dryolestes tenax** Marsh.

- Hay, O. P. 1902 A, 569.  
 Bowen, C. F. 1915 A, 144.  
 Lull, R. S. 1915 D, 323, 345.

- Palacký, J. 1903 A, 4.  
 Simpson, G. G. 1927 F, 130 (Genus indet.)  
 Upper Cretaceous (Lance); Wyoming.

**Dryolestes vorax** Marsh.

- Hay, O. P. 1902 A, 570.  
 Gilmore, C. W. 1909 B, 38.  
 Merrill, G. P. 1907 A, 35.  
 Mook, C. C. 1916 A, 132.  
 Osborn, H. F. 1907 G, 30, figs. 31, 33, 34. (Phascolestes).  
 Simpson, G. G. 1927 C, 411 (Not a Dryolestes).  
 Woodward, A. S. 1923 C, 80, fig. 75.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Dryolestes** sp. indet.

- Gregory, W. K. 1922 A, 55, figs. 31, 32.

**HERPETAIURUS** Simpson. Type *Dryolestes arcuatus* Marsh.

- Simpson, G. G. 1927 C, 413.  
 1926 H, 213 (No definition).  
 1928 C, 195.

**Herpetaiurus arcuatus** (Marsh).

- Hay, O. P. 1902 A, 569 (Dryolestes).  
 Gilmore, C. W. 1909 B, 38 (Dryolestes).  
 Mook, C. C. 1916 A, 131 (Dryolestes).  
 Simpson, G. G. 1927 C, 413.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**AMBLOTHERIUM** Owen. Type *A. soricinum* Owen.

- Owen, R. 1871 A, 32, pl. ii, figs. 1, 2.  
 Hay, O. P. 1902 A, 569 (Stylacodon); 570 (Laodon).  
 Abel, O. 1920 A, 418, fig. 635 (Stylodon).  
 1922 C, 437, fig. 369 (Stylodon), fig. 371 (Laodon).  
 Ameghino, F. 1902 D, 438 (Laodon).  
 Bolck, L. 1922 A, 112 (Stylodon).  
 Depéret, C. 1912 A, 707 (Stylodon).  
 Flower and Lydekker 1891 A, 31, 114, fig. 4.  
 Gregory, W. K. 1922 A, 51 (Stylacodon, Laodon).  
 Heilprin, A. 1887 A, 335 (Stylacodon).  
 Koken, E. 1893 B, 374 (Stylacodon).  
 Lydekker, R. 1887 A, 274.  
 1888 F, 384 (Stylacodon).  
 Nicholson and Lydekker 1889 A, 1276.  
 Osborn, H. F. 1907 G, 24, 29, fig. 29 (Stylacodon); 29, fig. 30 (Laodon).  
 1910 B, 519.  
 Palmer, T. S. 1904 A, 650, 877 (Stylacodon); 91, 876 (Amblotherium); 651, 877 (Stylodon); 364, 876 (Laodon).  
 Schuchert, C. 1910 A, 582 (Stylacodon).  
 Seeley, H. G. 1893 B, 274 (Laodon).  
 Simpson, G. G. 1926 G, 100 (Stylodon, Stylacodon).  
 1926 H, 213 (Stylacodon).  
 1927 C, 412.  
 1927 G, 282.  
 1928 B, 307, fig. 2.  
 1928 C, 209, fig. 40.  
 1928 K, 463, fig. 2.  
 Trouessart, E. L. 1905 A, 860 (Stylacodon); 859 (Laodon).  
 Van den Broeck, E. 1900 A, 62 (Laodon).

- Weber, M. 1904 A, 361 (Stylacodon, Amblotherium, Laodon).  
 Weber and Abel 1928 A, 88.  
 Winge, H. 1923 A, 49, 94 (Stylacodon, Stylodon).  
 Zittel and Schlosser 1911 A, 361 (Stylodon).  
 1923 A, 439 (Stylodon).

**Amblotherium debile** Simpson.

- Simpson, G. G. 1927 C, 411 (To replace *Dryolestes gracilis* Marsh, preoccupied).  
 Hay, O. P. 1902 A, 569 (Dryolestes gracilis).  
 Gilmore, C. W. 1909 B, 38 (Dryolestes).  
 1914 A, 25 (Dryolestes).  
 Marsh, O. C. 1881 F, 513 (Dryolestes gracilis; preoccupied).  
 Mook, C. C. 1916 A, 131 (Dryolestes).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Amblotherium gracilis** (Marsh).

- Hay, O. P. 1902 A, 569 (Stylacodon gracilis); 570 (Laodon venustus).  
 Gilmore, C. W. 1909 B, 39 (Stylacodon); 39 (Laodon venustus).  
 Marsh, O. C. 1887 A, 337, pl. ix, fig. 5 (Laodon venustus).  
 Merrill, G. P. 1907 A, 61 (Stylacodon); 43 (Laodon venustus).  
 Mook, C. C. 1916 A, 133 (Stylacodon); 133 (Laodon venustus).  
 Simpson, G. G. 1927 C, 412.  
 Woodward, A. S. 1923 C, 80, fig. 75 (Laodon venustus).  
 Upper Jurassic or Lower Cretaceous; Wyoming.

LAOLESTES Simpson. Type *L. eminens* Simpson.

Simpson, G. G. 1927 C, 411.  
1926 H, 213 (No definition).  
1928 C, 210.

**Laolestes eminens** Simpson.

Simpson, G. G. 1927 C, 411.  
1928 K, 463, fig. 2.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

KEPOLESTES Simpson. Type *S. coloradensis* Simpson.

Simpson, G. G. 1927 C, 413.  
1926 H, 213 (No definition).  
1928 C, 211.

**Kepolestes coloradensis** Simpson.

Simpson, G. G. 1927 C, 413.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

MELANODON Simpson. Type *M. oweni* Simpson.

Simpson, G. G. 1927 C, 413.  
1926 H, 213 (No definition).  
1928 C, 195.

**Melanodon oweni** Simpson.

Simpson, G. G. 1927 C, 413, 414.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

MALTHACOLESTES Simpson. Type *M. osborni* Simpson.

Simpson, G. G. 1927 C, 414.  
1926 H, 213 (No definition).  
1928 C, 195.

**Malthacolestes osborni** Simpson.

Simpson, G. G. 1927 C, 414.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

EUTHLASTES Simpson. Type *E. cordiformis* Simpson.

Simpson, G. G. 1927 C, 414.  
1926 H, 213 (No definition).  
1928 C, 195.

**Euthlastes cordiformis** Simpson.

Simpson, G. G. 1927 C, 414.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

MICCYLOTYRANS Simpson. Type *M. minimus* Simpson.

Simpson, G. G. 1927 C, 414.  
1926 H, 213 (No definition).  
1928 C, 195.

**Miccyлотyrans minimus** Simpson.

Simpson, G. G. 1927 C, 414.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

PELICOPSIS Simpson. Type *P. dubius* Simpson.

Simpson, G. G. 1927 C, 414.  
1926 H, 213 (No definition).  
1928 C, 195.

**Pelicopsis dubius** Simpson.

Simpson, G. G. 1927 C, 414.  
Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

## DICROCYNODONTIDÆ Osborn.

Osborn, H. F. 1888 F, 1078.  
Hay, O. P. 1902 A, 568 (Amphitheriidae).  
Abel, O. 1914 A, 49 ("diplocynodontiden").  
Gregory, W. K. 1922 A, 31, 35, 48.  
Osborn, H. F. 1907 G, 24.  
Seeley, H. G. 1893 B, 275.

Simpson, G. G. 1927 C, 415.  
1928 B, 306.  
1928 C, 211.  
Zittel and Schlosser 1911 A, 361 (Diplocynodontinae).  
1923 A, 439 (Diplocynodontinae).

DICROCYNODON Marsh. Type *Diplocynodon victor* Marsh.

Hay, O. P. 1902 A, 568.  
Abel, O. 1922 C, 438, fig. 377.  
Bardenfleth, K. S. 1913 A, 91.  
Broom, R. 1909 C, 137.  
Fuchs, H. 1911 B, 384.  
Gidley, J. W. 1906 E, 666.  
1906 F, 100, pl. v, fig. 4.  
Gregory, W. K. 1910 A, 183, 195.  
1922 A, 59 (Diplocynodon).

Hennig, E. 1919 A, 6 (Diplocynodon).  
Osborn, H. F. 1907 G, 24 (Diplocynodon);  
219, figs. 4, 4a (Dierocynodon).  
Palmer, T. S. 1904 A, 228, 887.  
Seeley, H. G. 1893 B, 275 (Diplocynodon).  
Simpson, G. G. 1925 B, 563, fig. 1.  
1926 H, 213.  
1927 C, 409, 415.  
1928 B, 307, fig. 2.

- Simpson, G. G. 1928 C, 211.  
 Van den Broeck, E. 1900 A, 61.  
 Weber, M. 1904 A, 361.  
 Zittel and Schlosser 1911 A, 361 (Diplocynodon).  
 1923 A, 439 (Diplocynodon).

### **Dicrocynodon victor Marsh.**

- Hay, O. P. 1902 A, 568.  
 Gilmore, C. W. 1909 B, 38 (Diplocynodon).  
 Lull, R. S. 1917 B, 546, pl. xvi; text-fig. 174 (Diplocynodon).  
 Mook, C. C. 1916 A, 132.

### **Docodon Marsh. Type *D. striatus* Marsh.**

- Hay, O. P. 1902 A, 568.  
 Abel, O. 1922 C, 438, fig. 372.  
 Bensley, B. A. 1902 A, 4.  
 Broom, R. 1903 L, 345.  
 Gregory, W. K. 1910 A, 137.  
 1922 A, 59.  
 Osborn, H. F. 1907 G, 28, fig. 21.  
 Palmer, T. S. 1904 A, 241, 887.  
 Seeley, H. G. 1893 B, 275.  
 Simpson, G. G. 1926 H, 213.  
 1927 C, 415.  
 Trouessart, E. L. 1905 A, 862.

- Simpson, G. G. 1927 C, 416.  
 Trouessart, E. L. 1905 A, 862.  
 Woodward, A. S. 1923 C, 80, fig. 75.  
 Zittel and Schlosser 1911 A, 361, fig. 520 (Diplocynodon).  
 1923 A, 439, fig. 556 (Diplocynodon).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### **Dicrocynodon sp. indet.**

- Gregory, W. K. 1922 A, 60, fig. 35.

### **Docodon striatus Marsh.**

- Van den Broeck, E. 1900 A, 61.  
 Weber, M. 1904 A, 361.  
 Hay, O. P. 1902 A, 568.  
 Gilmore, C. W. 1909 B, 38.  
 Mook, C. C. 1916 A, 132.  
 Simpson, G. G. 1928 K, 463, figs. 2, 3.  
 Woodward, A. S. 1923 C, 80, fig. 75.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### **Ennacodon Marsh. Type *Ennacodon crassus* Marsh.**

- Hay, O. P. 1902 A, 568.  
 Abel, O. 1922 C, 438, fig. 376 (Ennacodon).  
 Osborn, H. F. 1907 G, 28, fig. 19 (Ennacodon).  
 Palmer, T. S. 1904 A, 259, 887.  
 Seeley, H. G. 1893 B, 275 (Ennacodon).  
 Simpson, G. G. 1926 H, 213.  
 1927 C, 415.  
 Trouessart, E. L. 1905 A, 862.  
 Van den Broeck, E. 1900 A, 61.

### **Ennacodon affinis Marsh.**

- Hay, O. P. 1902 A, 568.  
 Gilmore, C. W. 1909 B, 38.  
 Merrill, G. P. 1907 A, 35 (Ennacodon).

- Mook, C. C. 1916 A, 132.  
 Trouessart, E. L. 1905 A, 862.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

### **Ennacodon crassus Marsh.**

- Hay, O. P. 1902 A, 568.  
 Gilmore, C. W. 1909 B, 38.  
 Merrill, G. P. 1907 A, 35 (Ennacodon).  
 Mook, C. C. 1916 A, 132.  
 Simpson, G. G. 1927 C, 415.  
 Trouessart, E. L. 1905 A, 862.  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

## **Order MULTITUBERCULATA Cope.**

- Cope, E. D. 1884 Y, 687.  
 Hay, O. P. 1902 A, 556 (Allotheria).  
 Abel, O. 1913 B, 701 (Allotheria).  
 1914 A, 34 ("allotherien").  
 1919 A, 712.  
 1920 A, 416.  
 1922 B, 2 ("multituberculaten").  
 1922 E, 381, 383 ("multituberculaten").  
 1923 A, 216 ("multituberculaten").  
 1926 E, (136).  
 Adloff, P. 1903 A, 372 ("multituberculaten").  
 Ameghino, F. 1893 B, 445.  
 1893 C, 77 (Diprotodonta).  
 1893 D, 16.  
 1902 D, 424.  
 1903 A, 113, 156 (Allotheria); 154 (Plagiulacoidae).  
 1905 C, 351 (Allotheria).  
 1906 A, 358.  
 Arldt, T. 1907 D, 637 (Allotheria).  
 1907 E, 207 (Allotheria).  
 1912 A, 669, 679 (Allotheria).  
 Bardenfleth, K. S. 1913 A, 84 (Allotheria).

- Beddard, F. E. 1902 A, 96, 105 (Allotheria).  
 Bensley, B. A. 1902 A, 7.  
 Bluntschli, H. 1911 B, 378 ("multituberculaten").  
 Bolk, L. 1913 A, 120 ("multituberculaten").  
 1922 A, 109.  
 Branca, W. 1915 A, 3, 19 (Allotheria).  
 Broom, R. 1910 B, 760.  
 1911 C, 319.  
 1914 B, 115, 117, 120, 130.  
 1914 D, 140.  
 1924 B, 64, fig. 13.  
 Chardin, T. 1922 A, 13 ("multituberculés").  
 Carter, J. T. 1922 A, 604, 605.  
 Case, E. C. 1898 C, 822.  
 Cockerell, Miller, and Prinz 1914 A, 349 ("multituberculates").  
 Cope, E. D. 1885 BB, 73.  
 1891 N, 65, 66 (Multituberculata).  
 Cross, W. 1909 A, 43 ("mammals").  
 Depéret, C. 1912 A, 706 ("multituberculés").  
 Dollo, L. 1889 G, 675 (Allotheria).  
 Gadow, H. 1913 A, 117.



- Gidley, J. W. 1909 A, 623 (Allotheria).  
 Gill, T. 1881 A, 383 (Allotheria).  
 Granger, W. 1915 B, 152.  
 Granger and Simpson 1928 A, 1 ("multituberculates").  
 Gregory, W. K. 1910 A, 164, 464 (Allotheria); 169 (Multituberculata).  
     1912 C, 190.  
     1920 A, 137.  
     1922 A, 27, 63.  
     1927 D, 231 ("multituberculates").  
 Hay, O. P. 1910 B, 293 (Allotheria).  
 Hennig, E. 1919 A, 6 (Allotheria).  
     1922 A, 243, 258, 260 ("multituberculaten").  
 Hertz, M. 1925 A, 544 (Allotheria).  
 Hilzheimer, M. 1913 A, 520 ("multituberculaten").  
 Huene, F. 1918 A, 208.  
 Jaekel, O. 1911 A, 207.  
 Loomis, F. B. 1922 A, 62 ("allotheres").  
 Lydekker, R. 1896 C, 280.  
     1909 B, 204.  
     1915 C, 623.  
 Major, C. J. F. 1899 B, 61.  
 Matthew, W. D. 1905 D, 55 ("multituberculates").  
     1906 B, 357.  
     1909 C, 91.  
     1914 B, 383.  
     1915 A, 262.  
     1915 K, 436 ("multituberculates").  
     1916 A, 479.  
     1921 D, 211, 212, 222.  
     1928 B, 948, 949.  
 Osborn, H. F. 1898 U, 686.  
     1907 G, 11, 101 (Allotheria).  
     1909 D, 33, 35, 40.  
     1910 B, 174.  
 Palacký, J. 1902 B, 141 ("allotherien").  
     1903 A, 7 ("allotherien").  
 Reynolds, S. H. 1897 A, 348.  
 Rose, C. 1892 F, 403 ("multituberculaten").  
 Schlosser, M. 1895 B, 361, 362.  
     1898 D, 121.  
     1899 T, 452.  
     1900 B, 299.  
 Schwarz, E. 1924 A, 419.  
 Scott, W. B. 1913 A, 627, 642 (Allotheria).  
 Simpson, G. G. 1925 C, 9.  
     1926 D, 228.  
     1926 E, 8 ("multituberculates").  
     1927 D, 36 ("multituberculates").  
     1927 F, 121 ("multituberculates").  
     1928 C.  
     1928 F, 1.  
     1928 K, 462.  
 Simpson and Elftman 1928 A, 1.  
 Sinclair, W. J. 1906 B, 443, 444.  
 Steinmann, G. 1907 A, 466.  
     1909 A, 82.  
 Stromer, E. 1912 A, 167, 243.  
 Terra, P. 1911 A, 247 ("allotherien").  
 Tims, H. W. W. 1901 A, 261.  
     1903 A, 134.  
 Trouessart, E. L. 1905 A, 864 (Allotheria).  
 Van den Broeck, E. 1900 A, 60 (Allotheria).  
 Weber, M. 1904 A, 356 (Allotheria, Multituberculata).  
 Weber and Abel 1928 A, 85 (Multituberculata).  
 Williston, S. W. 1909 A, 397 ("multituberculates").  
 Wiman, C. 1923 A, 225.  
 Winge, H. 1923 A, 91, 93.  
 Woodward, A. S. 1911 A, 278.  
     1923 C, 79.  
 Woodward, H. 1904 B, 153 (Multituberculati).  
 Zierler, F. E. 1905 A, 513 ("allotherien").  
 Zittel, K. A. 1895 A, 307 (Allotheria).  
 Zittel and Schlosser 1911 A, 351 (Allotheria).  
     1923 A, 429, 663.

*Superfamily PLAGIAULACOIDÆ, new form.*

- Simpson, G. G. 1925 C, 9 (Plagiaulacoidea). | Simpson, G. G. 1928 C, 31 (Plagiaulacoidea).

**PLAGIAULACIDÆ Gill.**

- Hay, O. P. 1902 A, 557 (Bolodontidæ); 558 (Plagiaulacidæ).  
 Abel, O. 1912 F, 542 ("plagiaulaciden").  
     1913 B, 702.  
     1914 A, 37 ("plagiaulaciden").  
     1919 A, 714.  
 Ameghino, F. 1889 B, 280.  
     1893 B, 440, 444.  
     1893 C, 78.  
     1893 D, 15.  
     1902 B, 11 (Neoplagiaulacidæ).  
     1903 A, 153 (Neoplagiaulacidæ).  
     1904 A, 8, 9 (Bolodon).  
 Arldt, T. 1907 D, 641 (Bolodontidæ); 674 (Plagiaulacidæ); 686, 706 (Neoplagiaulacidæ).  
     1912 A, 662 (Microlestidæ); 668, 678, 686, 706 (Plagiaulacidæ, Neoplagiaulacidæ).  
 Beddard, F. E. 1902 A, 97, 98 (Plagiaulacidæ, Bolodontidæ).  
 Broom, R. 1896 B, 563.  
     1914 B, 118 (Bolodontidæ).  
 Case, E. C. 1898 C, 822 (Plagiaulacidæ, Bolodontidæ).  
 Chardon, T. 1922 A, 16 ("plagiaulacides").  
 Depéret, C. 1907 B ("plagiaulacides").  
 Dollo, L. 1889 G, 675 (Bolodon).  
 Gaudry, A. 1901 B, 94 (Bolodon).  
 Gidley, J. W. 1909 A, 612.  
 Gregory, W. K. 1922 A, 27, 41.  
 Hay, O. P. 1902 A, 558 (Plagiaulacinæ).  
 Hennig, E. 1919 A, 6.  
     1922 A, 219, 260.  
 Leche, W. 1902 A, 28.  
 Lydekker, R. 1896 C, 283 (Bolodontidæ); 284 (Plagiaulacidæ).  
     1909 B, 204.  
 Major, C. J. F. 1899 B, 69.  
 Marsh, O. C. 1889 F, 179 (Allodontidæ).  
 Matthew, W. D. 1909 C, 91, 100 (Plagiaulacidæ, Bolodontidæ).  
     1914 B, 387.  
     1915 A, 184.

Matthew, W. D. 1921 D, 211, 212, 217.  
 Osborn, H. F. 1907 G, 24, 103, 104 (Bolodon);  
 106 (Plagiaulacidae).  
 1909 D, 34.  
 1910 B, 103, 111, 119, 124, 518.  
 Palmer, T. S. 1904 A, 787.  
 Schlosser, M. 1898 B, 361 (Plagiaulacidae,  
 Bolodontidae).  
 1900 B, 299.  
 Scott, W. B. 1913 A, 627.  
 Simpson, G. G. 1928 C, 213.  
 Stenmann, G. 1907 A, 467 (Plagiaulacidae,  
 Bolodontidae).

Tims, H. W. M. 1901 A, 232 (Plagiaulacidae);  
 234 (Chirogidae).  
 Trouessart, E. L. 1905 A, 866, 875 (Plagiaulacidae);  
 869, 875 (Neoplagiaulacidae).  
 Van den Broeck, E. 1900 A, 65 (Bolodon).  
 Weber, M. 1904 A, 361 (Bolodontidae); 357,  
 361 (Plagiaulacidae).  
 Weber and Abel 1923 A, 80, 83, 84, 90.  
 Winge, H. 1923 A, 91, 93.  
 Zierler, F. E. 1905 A, 513.  
 Zittel and Schlosser 1911 A, 352.  
 1923 A, 430, 442.

PLAGIAULAX Falconer. Type *P. becklesii* Falconer.

Hay, O. P. 1902 A, 558.  
 Abel, O. 1912 F, 543, fig. 417.  
 1920 A, 418, fig. 635.  
 1922 C, 392.  
 Ameghino, F. 1889 A, 269, 275, 927.  
 1893 C, 77.  
 1904 A, 8, 9.  
 Beddard, F. E. 1902 A, 99.  
 Broom, R. 1905 A, 98.  
 1910 B, 764.  
 1914 B, 115, 120, 131.  
 1925 A, 16.  
 Chardin, T. 1922 A, 16.  
 Cope, E. D. 1885 BB, 78.  
 Depéret, C. 1907 B.  
 Dollo, L. 1889 G, 675.  
 Gervais, P. 1859 A, 487.  
 Gidley, J. W. 1909 A, 625, fig. 9.  
 Gill, T. 1881 A, 383.  
 Gregory, W. K. 1910 A, 169.  
 1920 A, 235.  
 1922 A, 29, 41, fig. 21.  
 Hennig, E. 1919 A, 6.  
 1922 A, 199.  
 Hoernes, R. 1886 A, 654.  
 Huene, F. 1925 C, 179.

Koken, E. 1893 B, 282, 371, 426.  
 Lavocat, A. 1896 A, 26.  
 Lemoine, V. 1839 A, 236.  
 Lydekker, R. 1896 C, 234.  
 1909 B, 204.  
 1910 F, 664.  
 Matthew, W. D. 1915 A, 264.  
 1916 A, 480.  
 Osborn, H. F. 1907 G, 24, fig. 43.  
 Owen, R. 1860 E, 219.  
 Palacký, J. 1903 A, 4.  
 Palmer, T. S. 1904 A, 541, 788.  
 Schlosser, M. 1899 I, 346.  
 Schmidt, O. 1886 A, 100, fig. 2.  
 Seeley, H. G. 1893 B, 276.  
 Simpson, G. G. 1925 C, 7, 10.  
 1928 C, 213.  
 Tims, H. W. M. 1903 A, 146.  
 Van den Broeck, E. 1900 A, 65.  
 Weber, M. 1904 A, 361.  
 Woodward, A. S. 1911 A, 278.  
 1923 C, 81, fig. 77.  
 Zittel and Schlosser 1911 A, 352.  
 1923 A, 431, 664, fig. 535.  
 At present no North American species are  
 referred to this genus.

CTENACODON Marsh. Type *C. serratus* Marsh.

Hay, O. P. 1902 A, 557 (Allodon); 558 (Ctenacodon).  
 Abel, O. 1914 A, 37 (Ctenacodon, Allodon).  
 Ameghino, F. 1889 A, 270, 275.  
 1903 A, 117, 152 (Ctenacodon, Allodon).  
 Bigot, A. 1897 A, 462.  
 Broom, R. 1905 A, 98.  
 1910 B, 764.  
 1914 B, 120 (Ctenacodon); 117, 120 (Allodon).  
 Dollo, L. 1889 G, 675 (Ctenacodon, Allodon).  
 Gaudry, A. 1901 B, 94 (Allodon).  
 Gill, T. 1881 A, 383.  
 Gregory, W. K. 1922 A, 42 (Ctenacodon, Allodon).  
 Hennig, E. 1919 A, 6 (Ctenodon, Allodon).  
 Huene, F. 1925 C, 179, 181.  
 Koken, E. 1893 B, 371 (Ctenacodon, Allodon).  
 1922 A, 230, 242 (Allodon, Ctenacodon).  
 Matthew, W. D. 1915 A, 264, 269.  
 Osborn, H. F. 1907 G, 102, fig. 50 (Ctenacodon);  
 104, fig. 53 (Allodon).  
 Palacký, J. 1903 A, 4 (Ctenacodon, Allodon).  
 Palmer, T. S. 1904 A, 89, 737 (Allodon); 205,

288 (Ctenacodon).  
 Schlosser, M. 1921 A, 130.  
 Schmidt, O. 1886 A, 100.  
 Schuchert, C. 1910 A, 582 (Ctenacodon, Allodon).  
 Schuchert and Levene 1927 A, 310, fig.  
 Simpson, G. G. 1925 C, 4, 6, 7, 10.  
 1926 D, 238, 241, fig. 5.  
 1926 H, 213.  
 1928 C, 210.  
 Thomas, O. 1888 A, 447.  
 Trouessart, E. L. 1905 A, 866 (Ctenacodon);  
 867 (Allodon).  
 Weber, M. 1904 A, 361 (Ctenacodon); 367  
 (Allodon).  
 Zittel and Schlosser 1911 A, 353 (Ctenacodon,  
 Allodon).  
 1923 A, 431, 664 (Ctenacodon, Allodon).

*Ctenacodon laticeps* (Marsh).

Hay, O. P. 1902 A, 557 (Allodon).  
 Abel, O. 1922 C, 437 (Allodon).  
 Gilmore, C. W. 1909 B, 38 (Allodon).  
 Hennig, E. 1922 A, 239 (Allodon).

Merrill, G. P. 1907 A, 21 (Allodon).  
 Mook, C. C. 1916 A, 131 (Allodon).  
 Woodward, A. S. 1923 C, 82, fig. 78 (Allodon).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Ctenacodon serratus Marsh.**

Hay, O. P. 1902 A, 559 (C. serratus, C. nanus).  
 Abel, O. 1922 C, 437, fig. 366.  
 Broom, R. 1914 B, 117.  
 Gilmore, C. W. 1909 B, 38 (C. serratus, C. nanus).

Hennig, E. 1922 A, 239.  
 Huene, F. 1925 C, 179, fig. 2.  
 Mook, C. C. 1916 A, 132 (C. serratus, C. nanus).  
 Simpson, G. G. 1927 D, 86, 38 (C. nanus, a syn.).  
 1928 C, 36.

Trouessart, E. L. 1905 A, 866.

Woodward, A. S. 1923 C, 82, fig. 78.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**PSALODON Simpson. Type *Ctenacodon potens* Marsh.**

Simpson, G. G. 1926 D, 239, 250.  
 1926 H, 213.  
 1927 D, 38.  
 1928 C, 213.

**Psalodon fortis (Marsh).**

Hay, O. P. 1902 A, 557 (Allodon).  
 Gilmore, C. W. 1909 B, 38 (Allodon).  
 Merrill, G. P. 1907 A, 21 (Allodon).  
 Mook, C. C. 1916 A, 131 (Allodon).  
 Simpson, G. G. 1927 D, 38.  
 Woodward, A. S. 1923 C, 82, fig. 78 (Allodon).  
 Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**Psalodon potens (Marsh).**

Unless otherwise indicated the authors, as cited, refer this species to *Ctenacodon*.

Hay, O. P. 1902 A, 558.  
 Ameghino, F. 1903 A, 180, figs. 111, 112.  
 Gilmore, C. W. 1909 B, 38.  
 Huene, F. 1925 C, 180, fig. 2.  
 Merrill, G. P. 1907 A, 32.  
 Mook, C. C. 1916 A, 132.  
 Simpson, G. G. 1926 D, 250 (Psalodon).  
 1927 D, 38 (Psalodon).  
 Tims, H. W. M. 1903 A, 142.  
 Trouessart, E. L. 1905 A, 867.  
 Woodward, A. S. 1923 C, 82, fig. 78.  
 Zittel and Schlosser 1911 A, 353, fig. 503.  
 1923 A, 431, fig. 538.

Upper Jurassic or Lower Cretaceous (Morrison); Wyoming.

**PTILODONTIDÆ Simpson.**

Simpson, G. G. 1928 C, 52.

**ALLACODON Marsh. Type *A. lentus* Marsh.**

Hay, O. P. 1902 A, 557.  
 Abel, O. 1914 A, 37.  
 Dollo, L. 1889 G, 676.  
 Hennig, E. 1919 A, 6.  
 1922 A, 242.  
 Koken, E. 1893 B, 426.  
 Palmer, T. S. 1904 A, 88, 787.  
 Trouessart, E. L. 1905 A, 868.  
 Zittel and Schlosser 1911 A, 353.  
 1923 A, 431.

**Allacodon fortis Marsh.**

Hay, O. P. 1902 A, 557.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Merrill, G. P. 1907 A, 21.  
 Trouessart, E. L. 1905 A, 868.  
 Upper Cretaceous (Lance); Wyoming.

**Allacodon lentus Marsh.**

Hay, O. P. 1902 A, 557.

Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Trouessart, E. L. 1905 A, 868.  
 Upper Cretaceous (Lance); Wyoming.

**Allacodon pumilis Marsh.**

Hay, O. P. 1902 A, 557.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Merrill, G. P. 1907 A, 21.  
 Zittel and Schlosser 1911 A, 353, fig. 502.  
 1923 A, 431, fig. 537.  
 Upper Cretaceous (Lance); Wyoming.

**Allacodon rarus Marsh.**

Hay, O. P. 1902 A, 557.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Merrill, G. P. 1907 A, 21.  
 Upper Cretaceous (Lance); Wyoming.

**NEOPLAGIAULAX Lemoine. Type *N. eocænus* Lemoine.**

Hay, O. P. 1902 A, 559.  
 Abel, O. 1913 B, 703.  
 Ameghino, F. 1893 C, 78, 80.  
 1903 A, 117, 152.  
 1904 A, 8.  
 Bardenfeth, K. S. 1913 A, 82.

Broom, R. 1914 B, 117.  
 Chardin, T. 1922 A, 13, text-fig. 6.  
 Depéret, C. 1905 C, 703.  
 1908 A, 111.  
 1912 A, 706.  
 Gaudry, A. 1901 A, 504.

- Haug, E. 1911 A, 1527.  
 Heilprin, A. 1887 A, 336.  
 Hennig, E. 1919 A, 6.  
 Lemoine, V. 1885 C, 213, pl. xii.  
 1889 A, 236.  
 Matthew, W. D. 1909 C, 100.  
 1915 A, 264, 269.  
 Osborn, H. F. 1910 B, 103, 106, 108, 518.  
 Owen, R. 1885 A, 28, figs. 1-3.  
 Palacký, J. 1903 A, 4.

### EUCOSMODON Matthew and Granger.

- Matthew and Granger* 1921 A, 1.  
 Hay, O. P. 1921 A, 559 (Neoplagiaulax, in part).  
 Granger and Simpson 1928 A, 2.  
 Matthew, W. D. 1928 B, 961.  
 Matthew, Granger, Simpson 1928 A, 4.  
 Simpson, G. G. 1928 C, 31.  
 Simpson and Elftman 1928 A, 2, figs. 1-6.  
 Zittel and Schlosser 1923 A, 431.

### Eucosmodon americanus (Cope).

- Hay, O. P. 1902 A, 559 (Neoplagiaulax).  
 Gardner, J. H. 1910 A, 729 (Neoplagiaulax).  
 Granger and Simpson 1928 A, 2.  
 Matthew, W. D. 1909 C, 91 (Neoplagiaulax).  
 1914 B, 384 (Neoplagiaulax).  
 Matthew and Granger 1921 A, 1.  
 Reeside, J. B. 1924 A, 38 (Neoplagiaulax).

### PTILODUS Cope. Type *P. mediavus* Cope.

- Hay, O. P. 1902 A, 557 (Chirox); 559 (Ptilodus).  
 Abel, O. 1912 F, 542.  
 1913 B, 702, fig. 2.  
 1914 A, 36.  
 1920 A, 417.  
 1922 E, 371, 372.  
 1923 A, 216.  
 Ameghino, F. 1889 A, 1023.  
 1893 C, 80.  
 1893 D, 15.  
 1903 A, 147, 152, figs. 110, 113.  
 1906 A, 360.  
 Arldt, T. 1907 D, 79 (Chirox).  
 Beddard, F. E. 1902 A, 101.  
 Berry, E. W. 1920 A, 210.  
 Broom, R. 1910 B, 763.  
 1914 B, 117, 121, 131 (Ptilodus); 120 (Chirox).  
 1914 D, 140.  
 Brown, B. 1907 A, 840.  
 Chardin, T. 1922 A, 15, 48.  
 Dall, W. H. 1898 A, 347 (Chirox).  
 Gaudry, A. 1901 A, 504.  
 Gidley, J. W. 1909 A, 611, 613.  
 1914 A, 141.  
 Gregory, W. K. 1910 A, 169.  
 1912 C, 190.  
 1920 A, 235.  
 1922 A, 28, 42.  
 Haug, E. 1911 A, 1527 (Chirox, Ptilodus).  
 Hay, O. P. 1910 B, 292, 294.  
 Hennig, E. 1919 A, 6.  
 1922 A, 203, 216, 230.  
 Huene, F. 1918 A, 208, 210.  
 Koken, E. 1893 B, 426.  
 Loomis, F. B. 1922 A, 63.

- Schlosser, M. 1921 A, 130, 136.  
 Schmidt, O. 1886 A, 100.  
 Scott, W. B. 1913 A, 627.  
 Simpson, G. G. 1926 D, 229.  
 Trouessart, E. L. 1905 A, 869.  
 Weber, M. 1904 A, 357, 361.  
 Zittel and Schlosser 1911 A, 353.  
 1923 A, 431.

The species formerly referred to this genus are arranged under *Eucosmodon*.

### Type *Neoplagiaulax americanus* Cope.

- Trouessart, E. L. 1905 A, 870 (Neoplagiaulax).  
 Paleocene (Puerco); New Mexico.

### Eucosmodon molestus (Cope).

- Hay, O. P. 1902 A, 559 (Neoplagiaulax).  
 Gardner, J. H. 1910 A, 729 (Neoplagiaulax).  
 Granger, W. 1917 A, 823 (Neoplagiaulax).  
 Matthew, W. D. 1909 C, 91 (Neoplagiaulax).  
 1914 B, 384 (Neoplagiaulax).  
 Reeside, J. B. 1924 A, 41 (Neoplagiaulax).  
 Trouessart, E. L. 1905 A, 870 (Neoplagiaulax).  
 Paleocene (Torrejon); New Mexico.

### Eucosmodon ultimus Granger and Simpson.

- Granger and Simpson* 1928 A, 2, 2 figs.  
 Lower Eocene (Wasatch); Wyoming.

- Lydekker, R. 1909 B, 204.  
 1910 F, 665, figs.  
 Matthew, W. D. 1906 B, 357.  
 1909 C, 100 (Ptilodus, Chirox).  
 1915 A, 264, 269.  
 1924 E, 749.  
 1928 B, 949, fig. 4.  
 Matthew, Granger, Simpson 1928 A, 2.  
 Osborn, H. F. 1902 I, 9.  
 1907 G, 106, figs. 48, 55 (Ptilodus); 103, 104, figs. 50, 54 (Chirox).  
 1910 B, 106, 108, 518, fig. 28.  
 1912 G, 233, fig. 1.  
 Palmer, T. S. 1904 A, 183, 787 (Chirox); 597 788 (Ptilodus).  
 Perrier, E. 1920 A, 341.  
 Reagan, A. B. 1903 A, 82.  
 Schlosser, M. 1898 B, 361 (Chirox).  
 1921 A, 130.  
 Seeley, H. G. 1883 A, 413.  
 Simpson, G. G. 1925 C, 4, 9, 10, 11.  
 1926 D, 229, fig. 5.  
 1927 B, 9.  
 1928 C, 213.  
 1928 I, 9, 12.  
 Simpson and Elftman 1928 A, 15.  
 Stromer, E. 1924 A, 252.  
 Trouessart, E. L. 1905 A, 870 (Ptilodus); 868 (Chirox).  
 Weber, M. 1904 A, 358, 361 (Ptilodus); 361 (Chirox).  
 Weber and Abel 1928 A, xxiv, 84, fig. 46.  
 Williston, S. W. 1912 F, 92.  
 Zittel and Schlosser 1911 A, 353.  
 1923 A, 432, 664, 665, 666.

***Ptilodus admirabilis* nom. nov.** To replace *P. gracilis* Gidley, not of Osborn, 1893.

- Abel, O. 1912 F, 542, fig. 416 (*P. gracilis*).  
 1914 A, 37, fig. 11 (*P. gracilis*).  
 1920 A, 417, fig. 630 (*P. gracilis*).  
 1922 E, 382 (*P. gracilis*).  
 Broom, R. 1910 B, 763 (*P. gracilis*).  
 1914 B, 122, figs. 1, 2, 5 (*P. gracilis*).  
 Gardner, J. H. 1910 A, 729 (*P. gracilis*).  
 Gidley, J. W. 1909 A, 616, pl. lxx, text-figs. 1-6, 8 (*P. gracilis*).  
 Hennig, E. 1922 A, 214, 224, 256, pl. iv, fig. 6 (*P. gracilis*).  
 Lull, R. S. 1915 D, 326 (*P. gracilis*).  
 1917 B, 545, fig. 173 (*P. gracilis*).  
 Lydekker, R. 1909 B, 204 (*P. gracilis*).  
 Osborn, H. F. 1910 B, 106, fig. 28 ("*Ptilodus*").  
 Scott, W. B. 1913 A, 642, 643, figs. 303, 304 (*P. gracilis*).  
 Simpson, G. G. 1926 D, 233, fig. 3 (*P. gracilis*).  
 Simpson and Elftman 1928 A, 2, 15 (*P. gracilis*).  
 Stanton, T. W. 1909 A, 264 (*P. gracilis*).  
 Weber and Abel 1928 A, 85, fig. 45 (*P. gracilis*).  
 Zittel and Schlosser 1911 A, 353, fig. 504 (*P. gracilis*).  
 1923 A, 432, fig. 539 (*P. gracilis*).  
 Paleocene (Fort Union); Montana.

***Ptilodus formosus* (Marsh).**

- Hay, O. P. 1902 A, 560 (*Cimolomys*).  
 Bowen, C. F. 1915 A, 146 (*Halodon*).  
 Gidley, J. W. 1909 A, 623 (This species?).  
 Lull, R. S. 1915 D, 326 (*Ptilodus*); 323, 345 (*Cimolomys*. This species?).  
 Osborn, H. F. 1891 E, 600, fig. 2c (*Halodon*).  
 Stanton, T. W. 1909 A, 264 (This species?).  
 Trouessart, E. L. 1905 A, 870 (*Cimolomys*).  
 Upper Cretaceous (Lance); Wyoming:  
 Paleocene (Fort Union); Montana.

***Ptilodus mediavus* Cope.**

- Hay, O. P. 1902 A, 559.  
 Cope, E. D. 1891 N, 65, fig. 35.  
 Gardner, J. H. 1910 A, 729.  
 Gidley, J. W. 1909 A, 612, 613.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41 (*P. mediavus*).  
 Trouessart, E. L. 1905 A, 870.  
 Woodward, A. S. 1898 B, 251, fig. 148.  
 Paleocene (Torrejon); New Mexico.

***Ptilodus montanus* Douglass.**

- Douglass, E. 1908 D, 14.  
 Gardner, J. H. 1910 A, 729.  
 Gidley, J. W. 1909 A, 615.  
 Lull, R. S. 1915 D, 326.  
 Matthew, W. D. 1914 B, 389.  
 Stanton, T. W. 1909 A, 264.  
 Paleocene (Fort Union); Montana.

***Ptilodus plicatus* (Cope).**

- Hay, O. P. 1902 A, 557 (*Chirox*).  
 Cope, E. D. 1891 N, 65, fig. 36 (*Chirox*).  
 Gardner, J. H. 1910 A, 729.  
 Gidley, J. W. 1909 A, 614.  
 Hennig, E. 1922 A, 214, 239.  
 Matthew, W. D. 1909 C, 91 (*Chirox*).  
 Trouessart, E. L. 1905 A, 867 (*Chirox*).  
 Paleocene (Torrejon); New Mexico.

***Ptilodus primævus* Lambe.**

- Lambe, L. M. 1902 A, 79, pl. xv, figs. 13, 14.  
 Ameghino, F. 1903 A, 182 (*Boreodon*).  
 Bowen, C. F. 1915 A, 144.  
 Brown, B. 1914 E, 379.  
 Hatcher, J. B. 1905 B, 100.  
 Hay, O. P. 1903 D, 119.  
 1910 B, 296.  
 Lambe, L. M. 1904 C, 25, 37, 50.  
 1907 B, 178.  
 1912 A, 10.  
 Lull, R. S. 1915 D, 324.  
 Matthew, W. D. 1916 A, 479, 484, 490 (*To Cimolomys?*).  
 Osborn, H. F. 1902 H, 676.  
 1902 I, 15, 21.  
 Trouessart, E. L. 1905 A, 867.  
 Upper Cretaceous (Belly River); Alberta.

***Ptilodus serratus* (Marsh).**

- Hay, O. P. 1902 A, 560 (*Cimolomys*).  
 Bowen, C. F. 1915 A, 144 (*Halodon*).  
 Gidley, J. W. 1909 A, 622 (This species?).  
 Huene, F. 1925 C, 130 (*Halodon*).  
 Lemoine, V. 1889 A, 240, fig. 1 (*Halodon*).  
 Lull, R. S. 1915 D, 324, 345 (*Cimolomys*); 326 (*Ptilodus*).  
 Osborn, H. F. 1891 E, 600, figs. 2, 4 (*Halodon*).  
 Stanton, T. W. 1909 A, 264 (This species?).  
 Upper Cretaceous (Lance); Wyoming: Paleocene (Fort Union); Montana.

***Ptilodus trouessartianus* Cope.**

- Hay, O. P. 1902 A, 559 (*P. trouessartianus*).  
 Ameghino, F. 1903 A, 147, figs. 69, 115 (*P. trouessartianus*).  
 1906 A, 360, fig. 202 (*P. trouessartianus*).  
 Gardner, J. H. 1910 A, 729 (*P. trouessartianus*).  
 Gidley, J. W. 1909 A, 614 (*P. trouessartianus*).  
 Matthew, W. D. 1909 C, 91 (*P. trouessartianus*).  
 1914 B, 384 (*P. trouessartianus*).  
 Reeside, J. B. 1924 A, 41 (*P. trouessartianus*).  
 Trouessart, E. L. 1905 A, 870 (*P. trouessartianus*).  
 Paleocene (Torrejon); New Mexico.

***Ptilodus* sp. indet.**

- Bowen, C. F. 1915 A, 144.  
 Brown, B. 1907 A, 342. Upper Cretaceous (Hell Creek); Montana.  
 Douglass, E. 1908 D, 13 (*Chirox* sp.). Paleocene (Fort Union); Montana.  
 Simpson, G. G. 1927 A, 1. Upper Cretaceous (Hell Creek); Montana.

**ECTYPODUS** Matthew and Granger. Type *E. musculus* Matthew and Granger.

Matthew and Granger 1921 A, 1.

Chardin, T. 1922 A, 15.

Simpson, G. G. 1928 C, 31.

**Ectypodus musculus** Matthew and Granger.

Matthew and Granger 1921 A, 1.

Reeside, J. B. 1924 A, 47.

Paleocene ("Tiffany"); Colorado.

**CIMOLOMYS** Marsh. Type *C. gracilis* Marsh.

Hay, O. P. 1902 A, 559.

Bigot, A. 1897 A, 462.

Chardin, T. 1922 A, 15.

Dollo, L. 1889 G, 676 (Nanomys).

Gaudry, A. 1901 B, 94.

Hennig, E. 1919 A, 6.

Huene, F. 1925 C, 181.

Koken, E. 1893 B, 426.

Matthew, W. D. 1916 A, 479, 481.

Palmer, T. S. 1904 A, 189, 788.

Trouessart, E. L. 1905 A, 871.

Winge, H. 1923 A, 48, 51 (Cimolomys, Nanomys).

Zittel and Schlosser 1911 A, 354.

1923 A, 426, fig. 529.

Upper Cretaceous (Lance); Wyoming.

**Cimolomys bellus** Marsh.

Bowen, C. F. 1915 A, 144.

Hay, O. P. 1902 A, 559.

Lull, R. S. 1915 D, 323, 345.

Upper Cretaceous (Lance); Wyoming.

**Cimolomys digona** Marsh.

Hay, O. P. 1902 A, 560.

Bowen, C. F. 1915 A, 146.

Hennig, E. 1922 A, 214.

Lull, R. S. 1915 D, 323, 345.

Upper Cretaceous (Lance); Wyoming.

**Cimolomys gracilis** Marsh.

Bowen, C. F. 1915 A, 144.

Hay, O. P. 1902 A, 560.

Hennig, E. 1922 A, 214 [Ptilodus (Cimolomys)].

Lemoine, V. 1889 A, 240, fig. 1.

Lull, R. S. 1915 D, 323, 345.

Merrill, G. P. 1907 A, 28.

Upper Cretaceous (Lance); Wyoming.

**Cimolomys minutus** (Marsh).

Hay, O. P. 1902 A, 560.

Bowen, C. F. 1915 A, 144 (Nanomys).

Lull, R. S. 1915 D, 323, 345.

Upper Cretaceous (Lance); Wyoming.

**Cimolomys parvus** (Marsh).

Hay, O. P. 1902 A, 560.

Bowen, C. F. 1915 A, 146 (Cimolodon).

Lull, R. S. 1915 D, 324, 345.

Upper Cretaceous (Lance); Wyoming.

**CIMOLON** Marsh. Type *C. nitidus* Marsh.

Marsh, O. C. 1889 D, 84.

Hay, O. P. 1902 A, 559 (Cimolomys, in part).

Simpson, G. G. 1926 D, 239, figs. 6, 8.

1927 A, 4.

1927 B, 9.

1928 C, 31.

**Cimolodon agilis** Marsh.

Hay, O. P. 1902 A, 559 (Cimolomys).

Bowen, C. F. 1915 A, 146.

Lull, R. S. 1915 D, 323, 345 (Cimolomys).

Merrill, G. P. 1907 A, 28.

Upper Cretaceous (Lance); Wyoming.

**Cimolodon nitidus** Marsh.

Marsh, O. C. 1889 D, 84.

Hay, O. P. 1902 A, 560 (Cimolomys).

Bowen, C. F. 1915 A, 144.

Lemoine, V. 1889 A, 240, fig. 1.

Lull, R. S. 1915 D, 324, 345 (Cimolomys).

Osborn, H. F. 1891 E, 600, figs. 3, 4.

Zittel and Schlosser 1911 A, 353, fig. 505 (Cimolomys).

1923 A, 432, fig. 540 (Cimolomys).

Upper Cretaceous (Lance); Wyoming.

**Cimolodon** sp. indet.

Simpson, G. G. 1927 A, 5. Upper Cretaceous (Hell Creek); Montana.

**ORACODON** Marsh. Type *O. anceps* Marsh.

Hay, O. P. 1902 A, 561.

Dollo, L. 1889 G, 676.

Palmer, T. S. 1904 A, 478, 788.

Trouessart, E. L. 1905 A, 871.

**Oracodon anceps** Marsh.

Hay, O. P. 1902 A, 561.

Bowen, C. F. 1915 A, 146.

Huene, F. 1925 C, 179.

Lull, R. S. 1915 D, 324, 345.

Merrill, G. P. 1907 A, 50.

Trouessart, E. L. 1905 A, 871.

Upper Cretaceous (Lance); Wyoming.

**Oracodon conulus** Marsh.

Hay, O. P. 1902 A, 562.

Bowen, C. F. 1915 A, 146.

Huene, F. 1925 C, 179.

Lull, R. S. 1915 D, 324, 345.

Merrill, G. P. 1907 A, 50.

Trouessart, E. L. 1905 A, 871.

Upper Cretaceous (Lance); Wyoming.

**CAMPTOMUS Marsh. Type *C. amplus* Marsh.**

- Hay, O. P. 1902 A, 562.  
 Dollo, L. 1889 G, 676.  
 Palmer, T. S. 1904 A, 157, 788.  
 Simpson, G. G. 1928 I, 11, 12 (A reptile).

**Camptomus amplus Marsh.**

- Hay, O. P. 1902 A, 562.  
 Ameghino, F. 1893 C, 80.  
 Bowen, C. F. 1915 A, 144.  
 Broom, R. 1914 B, 125.  
 Lemoine, V. 1889 A, 240, fig. 1.  
 Lull, R. S. 1915 D, 324, 345.  
 Upper Cretaceous (Lance); Wyoming.

**ESSONODON Simpson. Type *E. browni* Simpson.**

- Simpson, G. G. 1927 A, 2.

**Essonodon browni Simpson.**

- Simpson, G. G. 1927 A, 2.  
 Upper Cretaceous (Hell Creek); Montana.

**MENISCOËSSUS Cope. Type *M. conquistus* Cope.**

- Hay, O. P. 1902 A, 560.  
 Abel, O. 1912 F, 544.  
 Ameghino, F. 1903 A, 109, 145, figs. 66, 67.  
 1904 B, 43.  
 1906 A, 359, fig. 199.  
 Beddard, F. E. 1902 A, 101.  
 Bigot, A. 1897 A, 462 (Selenacodon, Dipriodon).  
 Brown, B. 1907 A, 840.  
 Dollo, L. 1889 G, 674.  
 Gaudry, A. 1901 B, 94.  
 Gregory, W. K. 1922 A, 63.  
 Heilprin, A. 1887 A, 203, 335.  
 Hennig, E. 1919 A, 6.  
 1922 A, 203, 216, 230, 234, fig. 1 (Meniscoëssus); 224, fig. 4 (Tripiodon); 220 (Dipriodon).  
 Lemoine, V. 1889 A, 240 (Halodon).  
 Matthew, W. D. 1915 A, 264, 269.  
 1916 A, 479.  
 Matthew and Granger 1925 A, 6.  
 Osborn, H. F. 1907 G, 102, 108, figs. 49, 55.  
 Palmer, T. S. 1904 A, 308, 788 (Halodon); 239, 788 (Dipriodon); 409, 788 (Meniscoëssus); 627, 788 (Selenacodon); 693, 788 (Tripiodon).  
 Petronievics, B. 1918 A, 87 (Stereognathus).  
 Russell, L. S. 1926 A, 232.  
 Schlosser, M. 1898 B, 362.  
 Simpson, G. G. 1927 B, 9.  
 1927 F, 121.  
 Stromer, E. 1924 A, 252, fig. 4.  
 Tims, H. W. M. 1901 A, 232.  
 1903 A, 142.  
 1905 B, 1787.  
 Trouessart, E. L. 1905 A, 870.  
 Weber, M. 1904 A, 357, 358, 361, fig. 274.  
 Weber and Abel 1928 A, 84, fig. 47.  
 Winge, H. 1923 A, 48, 51 (Meniscoëssus, Selenacodon).  
 Woodward, A. S. 1911 B, 279 (Meniscoëssus, Selenacodon, Dipriodon).  
 Zittel and Schlosser 1911 A, 354.  
 1923 A, 432, 664.

**Meniscoëssus borealis Simpson.**

- Simpson, G. G. 1927 A, 3, fig. 2.  
 Upper Cretaceous (Hell Creek); Montana.

**Meniscoëssus brevis (Marsh).**

- Hay, O. P. 1902 A, 560.  
 Bowen, C. F. 1915 A, 146 (Selenacodon).

- Hennig, E. 1922 A, 214 (Selenacodon).  
 Lull, R. S. 1915 D, 324, 345.  
 Upper Cretaceous (Lance); Wyoming.

**Meniscoëssus caperatus (Marsh).**

- Hay, O. P. 1902 A, 561.  
 Bowen, C. F. 1915 A, 144 (Tripiodon).  
 Hennig, E. 1922 A, 214 (Tripiodon).  
 Koken, E. 1893 B, 425 (Tripiodon).  
 Lull, R. S. 1915 D, 324, 345.  
 Upper Cretaceous (Lance); Wyoming.

**Meniscoëssus cœlatus (Marsh).**

- Hay, O. P. 1902 A, 561.  
 Bowen, C. F. 1915 A, 144 (Tripiodon).  
 Hennig, E. 1921 A, 214 (Tripiodon).  
 1922 A, 214 (Tripiodon).  
 Lemoine, V. 1889 A, 240, fig. 1 (Tripiodon).  
 Lull, R. S. 1915 D, 324, 345.  
 Merrill, G. P. 1907 A, 62 (Tripiodon).  
 Zittel and Schlosser 1911 A, 354, fig. 506 (Tripiodon).  
 Upper Cretaceous (Lance); Wyoming.

**Meniscoëssus conquistus Cope.**

- Hay, O. P. 1902 A, 561.  
 Ameghino, F. 1903 A, 108, fig. 26 (This species?).  
 1906 A, 359, fig. 200.  
 Bowen, C. F. 1915 A, 144.  
 Brown, B. 1907 A, 842.  
 1914 E, 358.  
 Dollo, L. 1889 G, 674.  
 Hennig, E. 1922 A, 214.  
 1924 A, 124.  
 Lull, R. S. 1915 D, 324.  
 Matthew, W. D. 1916 A, 477.  
 Simpson, G. G. 1927 A, 1.  
 Trouessart, E. L. 1905 A, 870.  
 Zittel and Schlosser 1911 A, 354, fig. 506.  
 1923 A, 432, fig. 541.  
 Upper Cretaceous (Hell Creek); Montana;  
 (Lance); Wyoming.

**Meniscoëssus fragilis (Marsh).**

- Hay, O. P. 1902 A, 561.  
 Bowen, C. F. 1915 A, 146 (Selenacodon).  
 Hennig, E. 1922 A, 214 (Selenacodon).  
 Lull, R. S. 1915 D, 324, 345.  
 Upper Cretaceous (Lance); Wyoming.

**Meniscoëssus sculptus (Marsh).**

- Hay, O. P. 1902 A, 561.  
 Ameghino, F. 1893 C, 80 (Halodon).  
 Bowen, C. F. 1915 A, 144 (Halodon).  
 Huene, F. 1925 C, 180 (Halodon).  
 Lemoine, V. 1889 A, 240, fig. 1.  
 Lull, R. S. 1915 D, 324, 345.

Osborn, H. F. 1891 E, 600, fig. 2 (Halodon).  
 Upper Cretaceous (Lance); Wyoming.

**Meniscoëssus sp. indet.**

- Brown, B. 1907 A, 842. Upper Cretaceous  
 (Hell Creek); Montana.  
 Simpson, G. G. 1927 A, 1.  
 Upper Cretaceous (Hell Creek); Montana.

**POLYMASTODONTIDÆ Cope.**

- Cope, E. D. 1884 Y, 687.  
 Hay, O. P. 1902 A, 562 (Polymastodontinæ).  
 Abel, O. 1913 B, 708.  
 1914 A, 39 ("polymastodontiden").  
 1919 A, 715.  
 Ameghino, F. 1903 A, 106, 107, 158 (Polymastodontinæ).  
 Arldt, T. 1907 D, 675.  
 1912 A, 706.  
 Beddard, F. E. 1902 A, 98.  
 Branca, W. 1915 W, 18.  
 Case, E. C. 1898 C, 823.  
 Gregory, W. K. 1922 A, 63.  
 Hennig, E. 1919 A, 6.  
 1922 A, 260.

- Lydekker, R. 1896 C, 283.  
 Matthew and Granger 1925 A, 6 (Catopsalinæ).  
 Schlosser, M. 1898 B, 361 (Polymastodontinæ).  
 1900 B, 299 (Polymastodontinæ).  
 Simpson, G. G. 1926 D, 246.  
 1928 C, 31.  
 Tims, H. W. M. 1901 A, 282 (Polymastodontidæ, Polymastodontinæ).  
 1903 A, 142 (Polymastodontidæ).  
 1905 B, 1787.  
 Trouessart, E. L. 1905 A, 865, 875.  
 Weber, M. 1904 A, 361.  
 Winge, H. 1923 A, 91.  
 Zittel and Schlosser 1911 A, 354.  
 1923 A, 432, 442.

**POLYMASTODON Cope.**

- Hay, O. P. 1902 A, 562.  
 Abel, O. 1913 B, 708.  
 1922 E, 372.  
 1923 A, 216.  
 Ameghino, F. 1889 A, 911, 923, 963.  
 1903 A, 106.  
 1904 A, 8.  
 1904 B, 44.  
 1905 C, 411.  
 1906 A, 152, 361.  
 Broom, R. 1914 B, 117, 126.  
 1914 D, 140.  
 Brown, B. 1907 A, 840.  
 Carter, J. T. 1922 A, 605, pl. vii, figs. 2-5.  
 Cockerell, Miller and Prinz 1914 A, 349.  
 Cope, E. D. 1885 BB, 78.  
 Dall, W. H. 1898 A, 347.  
 Gardner, J. H. 1910 A, 712.  
 Gaudry, A. 1901 B, 94.  
 1906 B, 106.  
 Gregory, W. K. 1910 A, 169, 170, 212.  
 1920 A, 138, fig. 59.  
 Haug, E. 1911 A, 1527.  
 Hay, O. P. 1910 B, 293.  
 Heilprin, A. 1887 A, 336.  
 Hennig, E. 1919 A, 6.  
 1922 A, 203, 254, 262.  
 Koken, E. 1893 B, 371.  
 Lydekker, R. 1896 C, 284.  
 1915 C, 624.  
 Matthew, W. D. 1906 B, 357.  
 1909 C, 100.  
 1915 A, 264, 269.  
 1916 A, 479.  
 1924 E, 749.  
 Matthew and Granger 1925 A, 6 (Tæniolabis; Polymastodon, a syn.).  
 Osborn, H. F. 1907 G, 103, fig. 51.  
 1909 D, 23.  
 1910 B, 106, 108, 518.

**Type *T. taënsis* Cope.**

- Palmer, T. S. 1904 A, 556, 788.  
 Perrier, E. 1920 A, 341.  
 Rogers, A. F. 1924 A, 545.  
 Russell, L. S. 1926 A, 232.  
 Schlosser, M. 1898 B, 362.  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 286, 627.  
 Simpson, G. G. 1925 C, 3, 9-11.  
 1926 D, 228, 240.  
 1928 C, 31, 164, 213.  
 Sinclair and Granger 1914 A, 306.  
 Steinmann, G. 1909 A, 82.  
 Stromer, E. 1924 A, 252.  
 Terra, P. 1911 A, 247, fig. 81.  
 Tims, H. W. M. 1903 A, 144.  
 Trouessart, E. L. 1905 A, 865.  
 Weber, M. 1904 A, 361.  
 Weber and Abel 1928 A, xxiv, 44, 84, 88.  
 Woodward, H. 1904 B, 153.  
 Zittel and Schlosser 1911 A, 354.  
 1923 A, 433, 665.  
 This genus is probably identical with  
*Tæniolabis*.

**Polymastodon attenuatus (Cope).**

- Hay, O. P. 1902 A, 562.  
 Ameghino, F. 1903 A, 108, fig. 25.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Osborn, H. F. 1904 F, 7.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 362, 363.  
 Tims, H. W. M. 1903 A, 142.  
 Trouessart, E. L. 1905 A, 865.  
 Zittel and Schlosser 1911 A, 354, fig. 507.  
 1923 A, 432, fig. 543.  
 Paleocene (Puerco); New Mexico.



**Polymastodon fissidens** (Cope).

- Hay, O. P. 1902 A, 563.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Russell, L. S. 1926 A, 232.  
 Schlosser, M. 1908 A, 362.  
 Trouessart, E. L. 1905 A, 865.  
 Paleocene (Torrejon?); New Mexico.

**Polymastodon latimolis** (Cope).

- Hay, O. P. 1902 A, 563.  
 Schlosser, M. 1898 B, 362.  
 Paleocene (Puerco); New Mexico.

**Polymastodon selenodus** Osborn and Earle.

- Hay, O. P. 1902 A, 563.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 Schlosser, M. 1898 B, 362.  
 Trouessart, E. L. 1905 A, 865.  
 Paleocene (Puerco); New Mexico.

**Polymastodon taënsis** (Cope).

- Hay, O. P. 1902 A, 563.

- Abel, O. 1913 B, 708, fig. 3 (P. taënsis).  
 1914 A, 39, fig. 13 (P. taënsis).  
 1920 A, 417 (P. taënsis).  
 Ameghino, F. 1903 A, 106, figs. 24, 29, 31.  
 1905 C, 411.  
 1906 A, 361, fig. 205.  
 Broom, R. 1914 B, 126, pls. xi, xii, figs. 6, 8.  
 Gardner, J. H. 1910 A, 729.  
 Gregory, W. K. 1910 A, 170, fig. 8.  
 Hennig, E. 1922 A, 214, pl. v, fig. 1 (P. taënsis).  
 Lydekker, R. 1915 C, 624, figs. 3, 4.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Osborn, H. F. 1904 F, 7.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 362, 363.  
 Scott, W. B. 1913 A, 286, fig. 144.  
 Seeley, H. G. 1886 A, 413 (Catopsalis pollux); 414 (P. taënsis).  
 Simpson, G. G. 1926 D, 228, fig. 2.  
 Stromer, E. 1924 A, 252, fig. 5.  
 Tims, H. W. M. 1901 A, 282.  
 1903 A, 142 (P. tabensis).  
 1905 B, 1787 (P. tabensis).  
 Trouessart, E. L. 1905 A, 865.  
 Weber and Abel 1928 A, 87, fig. 52.  
 Paleocene (Puerco); New Mexico.

**DIPRIODON** Marsh. Type *D. robustus* Marsh.

- Marsh, O. C. 1889 D, 85.  
 Hay, O. P. 1902 A, 560 (Meniscoëssus).  
 Simpson, G. G. 1927 C, 4.

**Dipriodon lunatus** Marsh.

- Hay, O. P. 1902 A, 561 (Meniscoëssus).  
 Bowen, C. F. 1915 A, 144.  
 Hennig, E. 1922 A, 220, 222, fig. 2.  
 Lull, R. S. 1915 D, 324, 345 (Meniscoëssus).  
 Upper Cretaceous (Lance); Wyoming.

**Dipriodon robustus** Marsh.

- Hay, O. P. 1902 A, 561 (Meniscoëssus).  
 Bowen, C. F. 1915 A, 144.  
 Hennig, E. 1922 A, 220, 254.  
 Lull, R. S. 1915 D, 324, 345 (Meniscoëssus).  
 Simpson, G. G. 1926 D, 240.  
 Upper Cretaceous (Lance); Wyoming.

**CATOPSALIS** Cope. Type *C. foliatus* Cope.

- Hay, O. P. 1902 A, 562.  
 Matthew, W. D. 1909 C, 100.  
 Matthew and Granger 1925 A, 6 (Syn. of Tæniolabis).  
 Matthew, Granger, Simpson 1928 A, 4.  
 Palmer, T. S. 1904 A, 164, 788.  
 Reagan, A. B. 1903 A, 82 (Calopsalis).  
 Seeley, H. G. 1886 A, 413.  
 Simpson, G. G. 1927 B, 9.  
 Trouessart, E. L. 1905 A, 865.

**Catopsalis calgariensis** Russell.

- Russell, L. S. 1926 A, 230, fig. 1.  
 Simpson, G. G. 1927 B, 2, 9, fig. 1.  
 Upper Cretaceous (Paskapoo); Alberta.

**Catopsalis foliatus** Cope.

- Hay, O. P. 1902 A, 562.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Russell, L. S. 1926 A, 232.  
 Schlosser, M. 1898 B, 362 (Polymastodon foliatus).  
 Tims, H. W. M. 1901 A, 284.  
 Paleocene (Puerco); New Mexico.

**TÆNIOLABIS** Cope. Type *T. sulcatus* Cope.

- Hay, O. P. 1902 A, 562.  
 Matthew, W. D. 1928 B, 949, 954, fig. 4 (To include Polymastodon).  
 Matthew and Granger 1925 A, 6.  
 Matthew, Granger, Simpson 1928 A, 1.  
 Palmer, T. S. 1904 A, 659, 788.  
 Seeley, H. G. 1886 A, 415.

- Simpson and Elftman 1928 A, 17.  
 Zittel and Schlosser 1923 A, 432, 442 (Syn. of Polymastodon).

**Tæniolabis sulcatus** Cope.

- Hay, O. P. 1902 A, 562.  
 Paleocene (Puerco); New Mexico.

## GENERA OF UNCERTAIN RELATIONSHIPS.

PICRODUS Douglass. Type *P. silberlingi* Douglass.

Douglass, E. 1908 D, 17.

**Picrodus silberlingi** Douglass.

Douglass, E. 1908 D, 17, pl. 1, figs. 9, 10.

Lull, R. S. 1915 D, 326.

Matthew, W. D. 1914 B, 390.

Paleocene (Fort Union); Montana.

PARONYCHODON Cope. Type *P. lacustris* Cope.

Hay, O. P. 1902 A, 490.

Matthew, W. D. 1916 A, 481.

Palmer, T. S. 1904 A, 518, 788.

**Paronychodon lacustris** Cope.

Hay, O. P. 1902 A, 490.

Bowen, C. F. 1915 A, 130, 151.

Hatcher, J. B. 1905 B, 84.

Matthew, W. D. 1916 A, 477.

Osborn, H. F. 1902 I, 12.

Peale, A. C. 1912 A, 754.

Upper Cretaceous (Judith River); Montana.

BOREODON Lambe. Type *B. matutinus* Lambe.

Lambe, L. M. 1902 A, 79.

1904 C, 25.

Matthew, W. D. 1916 A, 481.

Palmer, T. S. 1904 A, 139, 788.

Trouessart, E. L. 1905 A, 867.

**Boreodon matutinus** Lambe.

Lambe, L. M. 1902 A, 79, pl. xv, fig. 15.

Ameghino, F. 1903 A, 182.

Bowen, C. F. 1915 A, 144.

Brown, B. 1914 E, 379.

Hatcher, J. B. 1905 B, 100, fig. 1.

Hay, O. P. 1910 B, 296.

Lambe, L. M. 1904 C, 25, 37, 52.

1912 A, 10.

Lull, R. S. 1915 D, 324.

Matthew, W. D. 1916 A, 479, 484, 490.

Osborn, H. F. 1902 I, 15.

Stanton and Hatcher 1905 A, 50 ("mammal").

Upper Cretaceous (Belly River); Alberta.

## Infraclass EUTHERIA Gill.

Citations are here made to the Eutheria of Gill, regarded by him as a subclass and as embracing the Didelphia and the Monodelphia.

Hay, O. P. 1902 A, 563.

Ameghino, F. 1909 A, 4.

Bardenfleth, K. S. 1913 A, 84.

Beddard, F. E. 1902 A, 116.

Bensley, B. A. 1901 B, 130.

Bolk, L. 1922 B, 55.

Broom, R. 1901 A, 188.

1908 A, 1055.

1910 B, 764 ("eutherians").

1912 B, 421.

1914 B, 132.

Case, E. C. 1898 C, 821 (Metatheria); 825 (Eutheria).

Cope, E. D. 1891 N, 65.

Dawkins, W. B. 1915 A, 520.

Duckworth, W. L. H. 1904 A, 21 (Theria).

Fürbringer, M. 1904 A, 575.

Gadow, H. 1912 A, 818.

Gregory, W. K. 1910 A, 92, 225, 228, 231

(Eutheria); 464 (Theria).

1916 A, 242 ("eutherian").

Lydekker, R. 1902 B, 374.

Matthew, W. D. 1904 D, 811 ("eutherian,"

Metatheria, "mammals").

1928 B, 949.

Miller, G. S. 1912 B, 2.

Osborn, H. F. 1899 J, 415.

1907 G, 11, 100.

1907 H, 613.

Parker and Haswell 1897 A, 448 (Theria).

Schlosser, M. 1905 A, 324.

Schuchert, C. 1915 A, 928.

Scott, W. B. 1913 A, 57.

Shufeldt, R. 1911 A, 72.

Smith, G. E. 1913 A, 560 ("eutherian").

Stromer, E. 1912 A, 162, 242.

Weber, M. 1904 A, 303.

Weber and Abel 1928 A, 3, 4, 5 (Theria).

## Subclass DIDELPHIA Blainville.

Hay, O. P. 1902 A, 563.

Bolk, L. 1916 A, 718 ("didelphians").

1922 B, 55 (Metatheria).

Broom, R. 1897 B, 252 (Metatheria).

Carus, V. 1875 A, 179.

Cope, E. D. 1891 N, 66.

Doran, A. H. G. 1878 A, 477.

Gadow, H. 1912 A, 818 (Metatheria).

Gregory, W. K. 1910 A, 225 (Metatheria).

1920 A, 235.

Haeckel, E. 1868 A, 464.

Haeckel, E. 1873 A, 512, 543, 549 (Marsupialia).

1893 A, xx (Didelphida).

Hennig, E. 1922 A, 260.

Hill, J. P. 1897 A, 436 (Metatheria).

Hogben, L. T. 1919 A, 71 (Metatheria).

Hubrecht, A. A. W. 1938 A, 157.

Huxley, T. H. 1863 E, 527.

1870 F, 533.

1880 D, 452.

1880 E, 464 (Metatheria).

Jaekel, O. 1911 A, 206 (Didelphii).

Loomis, F. B. 1921 A, 189 ("didelphids").  
Osborn, H. F. 1907 G, 100.

1907 H, 613.

Parker, W. K. 1886 A, 272 (Metatheria).

Parker and Haswell 1897 A, 449, 489 (Metatheria).

Reynolds, S. H. 1897 A, 349, 351.

Scott, W. B. 1913 A, 57, 59, 626.

Smith, G. E. 1911 A, 293 (Metatheria).

Stromer, E. 1908 B, 169.

Terra, P. 1911 A, 248.

Thomas, O. 1888 A, 453 (Metatheria).

Tims, H. W. M. 1911 A, 294 (Metatheria).

Tomes, C. S. 1900 A, 35 ("implacentals").

Weber, M. 1904 A, 361 (Didelphia); 302, 331 (Metatheria).

Wortman, J. L. 1902 A, xiv, 143 (Metatheria).

## Order MARSUPIALIA Illiger.

Illiger, C. 1811 A, 75.

Hay, O. P. 1902 A, 563.

Abel, O. 1901 B, 313 ("beuteltiere").

1904 A, 183 ("marsupialier").

1906 A, 56 ("marsupialier").

1907 E, (249) ("marsupialier").

1910 B, (186).

1912 F, 172, 359, 541.

1913 B, 701.

1914 A, 34 ("beuteltiere"); 48 (Pantotheria).

1919 A, 710.

1920 A, 416.

1921 A, 185 ("marsupialier").

1922 E, 373.

1926 E, (137) ("marsupialier").

Adloff, P. 1903 A, 367 ("beuteltiere").

1906 A, 114 ("marsupialier").

1907 A, 530 ("marsupialier").

1910 B, 232 ("marsupialier").

1913 C, 8 ("marsupialier").

1918 A, 129 ("beutler").

Åmbäck-Christie-Linde, A. 1912 A, 621.

Agassiz, L. 1836 B, 24 ("marsupiaux").

1844 D, 137.

Ahrens, H. 1912 B, 49 ("marsupialier").

Allis, E. P. 1919 D, 219.

Altmann, F. 1925 A, 106 ("beutler").

Ameghino, F. 1905 C, 351.

Anderson, C. 1925 A, 16, 25 ("marsupials").

Anthony, R. 1910 A, 783 ("marsupiaux").

1912 A, ("marsupiaux").

1913 A, 256 ("marsupiaux").

Ardt, T. 1907 A, 244.

1907 B, 456 ("marsupialier").

1907 D, 664.

1907 E, 207 (Pantotheria).

1911 A, 229 ("beuteltiere").

1912 A, 669, 679.

Bardeleben, K. 1885 B, 85 ("beuteltiere").

1889 A, 107 ("beuteltiere").

1889 B, 259 ("marsupials").

1904 A, 111 ("beuteltiere").

1906 A, 140 ("beuteltiere").

Bateson, W. 1892 A, 105 ("marsupials").

Bayer, F. 1897 A, 147.

Beddard, F. E. 1902 A, 122.

Beer, G. R. 1926 A, 326, 330.

Bender, O. 1907 A, 42 ("marsupialier").

Bensley, B. A. 1901 A, 431.

1901 B, 117.

1901 C, 245.

1903 A, 83.

1906 A, 1.

Bertelli, D. 1909 A, 157 (Marsupiali).

Beyer, H. 1908 A, 71, 81, 86, 99 ("beuteltiere")

Black, N. 1900 A, 8 ("marsupials").

Blatschkie, F. 1904 A, 151.

Bluntschli, H. 1912 B, 362 ("marsupialier").

Boas, J. E. V. 1914 B, 577 ("beuteltiere").

1918 A, 1-24.

1922 B, 55 ("marsupials").

Bolk, L. 1916 A, 715.

1921 B, 170.

Bonaparte, C. L. 1832 A, 288.

1833 A, 1042 ("beuteltiere").

1840 A, 11.

Bonsdorff, E. J. 1871 A, 318.

Boule, M. 1902 B, 910 ("marsupiaux").

Branca, W. 1915 A, 45 ("marsupialier").

Brandt, J. F. 1885 A, 27.

Brauer, A. 1914 A.

Braus, H. 1906 A, 304 ("marsupialier").

Broom, R. 1897 B, 252.

1897 D, 513 ("marsupials").

1898 A, 714 ("marsupials").

1901 A, 188.

1901 B, 735 ("marsupials").

1902 B, 168 ("marsupials").

1902 C, 449 ("marsupials").

1902 D, 549 ("marsupials").

1903 I, 546 ("marsupials").

1904 B, 89 ("marsupials").

1908 A, 1055 ("marsupials").

1909 D, 195 ("marsupials").

1910 B, 764.

1911 A, 921 ("marsupials").

1914 B, 132.

1914 F, 296 ("marsupials").

1926 A, 259.

Carlsson, A. 1922 A, 224.

Carter, J. T. 1922 A, 600, 603 ("marsupials").

Carus, V. 1875 A, 179.

Carus and Engelmann 1861 A, 1290.

Chandler, A. C. 1914 B, 139 ("marsupials").

Clark and Sonntag 1926 A.

Cleland, J. 1863 B, 302 (Marsupials).

Cockerell, Miller and Prinz 1914 A, 350.

Cope, E. D. 1875 Y, 445.

1885 BB, 71.

1885 EE, 606.

1891 N, 67, 69, 89.

Cuvier, F. 1825 A, 125 ("marsupiaux").

Dana, J. D. 1863 B, 315 ("marsupials").

Dependoff, T. 1898 A, 245.

1907 A, 540 ("marsupialier").

1907 C, 99 ("beutler").

Diener, C. 1909 A, 55 ("beuteltiere").

Dollo, L. 1889 E, 186 ("marsupiaux").

1899 A, 188 ("marsupiaux").

1900 A, 275 ("marsupiaux").

1907 A, 166 ("marsupiaux").

- Doran, A. H. G. 1878 A, 371.  
 Duckworth, W. L. H. 1904 A, 22.  
 Duméril, A. M. C. 1806 A, 338 ("Marsupiat").  
 Eggeling, H. 1904 A, 84 ("marsupialier").  
 Eimer, G. H. T. 1901 A, 256 ("beuteltiere").  
 Eisler, P. 1895 A, 55 ("marsupialien").  
 Elliot, D. G. 1901 A, 1.  
 Emery, C. 1901 A, 671 ("marsupialier").  
 Flower, W. H. 1868 C, 631.  
 Frassetto, F. 1915 A.  
 Freund, P. 1892 A, 527.  
 Frey, H. 1911 A, 395.  
 Fuchs, H. 1906 A, 12 ("marsupialier").  
 1907 A, 154 ("marsupialier").  
 1911 A, 52 ("marsupialier").  
 1914 A, 37 ("marsupialier").  
 1922 A, 283.  
 Fürbringer, M. 1904 A.  
 Gadow, H. 1896 A, 48.  
 1912 A, 818 ("marsupials").  
 1913 A, 115 ("marsupials").  
 Gaupp, E. 1905 D, 1037 ("marsupialier").  
 1910 D, 92 ("marsupialier").  
 1911 A, 417 ("marsupialier").  
 1911 B, 99 ("marsupialier").  
 1911 D, 621 ("marsupialier").  
 1912 B, 219 ("marsupialier").  
 1913 A, 63 ("marsupialier").  
 Gegenbaur, C. 1864 C, 177 ("marsupialien").  
 Gervais, P. 1852 A, 131 ("marsupiaux").  
 1859 A, 257.  
 Gidley, J. W. 1915 A, 400 ("marsupials").  
 1919 A, 273 ("marsupials").  
 Giebel, C. G. 1855 A, 38.  
 1878 C, 854 ("beuteltiere").  
 1883 A ("beutler").  
 Gill, T. 1881 A, 383 (Pantotheria).  
 Gotthieb, H. 1914 A, 185.  
 Gregory, W. K. 1910 A, 38, 45, 69, 78, 197,  
 225, 437, 443, 453, 454, 464.  
 1910 C, 298.  
 1912 C, 188 (Marsupialia); 191 (Pantotheria).  
 1916 A, 248 ("marsupials"); 244, pl. i,  
 E. (Pantotheria).  
 1920 A, 137, 235.  
 1922 A, 540.  
 1926 B, 411 (Pantotheria).  
 1927 D, 231 ("marsupials").  
 Haacke, W. 1886 A, 367 ("marsupialien").  
 Haeckel, E. 1868 A, 441.  
 1873 A, 588.  
 1893 A, xix.  
 Hanson, F. B. 1919 B, 78.  
 1920 B, 329 ("marsupials").  
 Hasse and Schwarck 1870 A, 148.  
 Hayek, H. 1926 A, 177 ("beuteltiere").  
 Heilprin, A. 1887 A, 334.  
 Hennig, E. 1922 A, 258 ("marsupialier").  
 Hertz, M. 1925 A ("marsupialier").  
 Hill, J. P. 1897 A, 385.  
 Hilzheimer, M. 1913 A, 517 ("beuteltiere").  
 Hoernes, R. 1886 A, 653.  
 Hogben, L. T. 1919 A, 71, 75 ("marsupials").  
 Hommes, J. H. 1924 A, 26 ("marsupials").  
 Hopewell-Smith and Tims 1911 A, 941 ("marsupials").  
 Howes, G. B. 1891 A, 154.  
 1902 A, 524.  
 Howes and Harrison 1893 A, 790.  
 Hubrecht, A. A. W. 1897 A, 27 ("marsupials").  
 1908 A.  
 Huxley, T. H. 1856 B, 194 ("marsupials").  
 1859 D, 435.  
 1863 E, 528.  
 1863 F, 580.  
 1868 C, 314, 316.  
 1869 G, 436.  
 1869 H, 389 ("marsupials").  
 1870 F, 523, 538.  
 1879 A, 404.  
 1880 E, 463.  
 1880 F, 163.  
 Jacobi, A. 1921 A, 215.  
 Johnson, A. 1883 A, 405 ("marsupials").  
 Kampfen, P. N. 1905 A.  
 1922 A, 54.  
 Kaudern, W. 1910 A, 562 ("marsupial").  
 Kesteven, H. L. 1918 A, 465 ("marsupials").  
 Kingsley, J. S. 1925 A, 205, 294.  
 Klauw, C. J. 1924 A, 240.  
 Klein, E. E. 1868 A ("marsupialier").  
 Köstlin, O. 1844 A ("beutler").  
 Koken, E. 1893 B, 479 ("beuteltiere").  
 1901 B, 224 ("beuteltiere").  
 Klükenthal, W. 1913 A, 676.  
 Laloy, L. 1907 A, 585 ("marsupiaux").  
 Lavocat, A. 1885 A, 45 ("marsupiaux").  
 1896 A, 21 ("marsupiaux").  
 Leboucq, H. 1884 A, 74 ("marsupiaux").  
 Leche, W. 1887 A.  
 1900 A, 999, 1003.  
 1905 A, 578 ("marsupialier").  
 1907 A, 50 ("beuteltiere").  
 Le Damany, P. 1903 B, 275 ("marsupiaux").  
 1903 G, 322 ("marsupiaux").  
 1906 B, 163 ("marsupiaux").  
 Leunis and Ludwig 1883 A, 289.  
 Longman, H. A. 1924 A, 1-15.  
 Lubosch, W. 1907 A, 618 ("marsupialier").  
 1911 A, 329 ("marsupialier").  
 Lubsen, J. 1905 A, 449 ("marsupialier").  
 Lull, R. S. 1906 B, 534.  
 1910 D, 153 ("marsupials").  
 1917 B, 295, 322, 338.  
 Lydekker, R. 1893 F, 174.  
 1896 C.  
 1899 B, 922 ("marsupials").  
 1902 B, 373 ("marsupials").  
 1903 D, 101 ("marsupials").  
 1907 D, 498 ("marsupials").  
 Major, C. J. F. 1899 B, 61.  
 Mantell, G. A. 1844 A, 848.  
 Martins, C. 1857 A ("marsupiaux").  
 1872 A, 308 ("marsupiaux").  
 Matthew, W. D. 1904 D, 811 ("marsupials").  
 1905 B, 69 ("marsupials").  
 1905 D, 54.  
 1907 B, 532, 534.  
 1909 C, 103, 105, 110.  
 1909 D, 335, 338 ("marsupials").  
 1910 G, 158, 157.  
 1914 D, 491 ("marsupials").  
 1915 A, 187, 262, fig. 31.

- Matthew, W. D. 1915 K, 475 ("marsupials").  
 1916 A, 479 ("marsupials").  
 1921 D, 211, 212.  
 1928 B, 948, 953, 954, 961, 978.
- Mayer, A. F. 1842 A, 164 ("beuteltiere").
- Mead, C. S. 1906 A, 480.
- Meckel, J. F. 1825 A ("beuteltiere").
- Meunier, S. 1903 A, 776 ("marsupiaux").
- Miller, G. S. 1912 B, 2.
- Mitchell, P. C. 1905 A, 445.
- Mivart, St. G. 1888 A, 377 ("marsupials").
- Mysberg, W. A. 1917 A, 647.
- Nauck, E. T. 1923 A, 8 ("marsupialier").
- Oehngren, S. 1919 A, 173.
- Oken, L. 1823 A, 300 ("beuteltiere").
- Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 1901 F, 330.  
 1902 E, 356, fig. 1.  
 1905 N, 240 ("marsupials").  
 1907 G, 11, 94, 108.  
 1909 D, 129.  
 1917 B, 237.  
 1925 B, 18.
- Owen, R. 1841 G, 315.  
 1841 H, 379.  
 1842 F, 87.  
 1857 E.  
 1858 A, 21.  
 1879 C, 573.
- Palacký, J. 1902 B, 141 ("marsupialien").  
 1903 A, 1 ("marsupialien").
- Pander and Alton 1828 A, 1 ("beuteltiere").
- Parker, W. K. 1886 A, 268, 270 ("marsupials").  
 1888 C, 397 ("marsupials").
- Parsons, F. G. 1903 A, 317.
- Perna, G. 1906 A, 123.
- Peters, W. 1867 A, 725 ("beuteltiere").  
 1867 C, 953 ("marsupials").  
 1868 B, 389.
- Pictet, F. J. 1853 A, 388 ("didelphes").
- Rabl, C. 1903 A, 175 ("marsupialier").
- Rehs, J. 1914 A, 2, 32.
- Retzius, A. 1849 A, 674.
- Reynolds, S. H. 1897 A, 489, 546.
- Röse, C. 1892 G, 143 ("beuteltiere").
- Romer, A. S. 1922 A, 41, fig. 1 ("marsupials").
- Rutland, J. 1901 A, 21033 ("marsupials").
- Sabatier, A. 1897 B, 933 ("marsupiaux").
- Schlosser, M. 1898 D, 124 ("beutler").  
 1899 K, 355.  
 1902 I, 737 ("marsupialier").  
 1903 G, 145.  
 1905 A, 325 ("marsupialier").  
 1911 A, 165 ("marsupialier").
- Schmidt, O. 1886 A, 93 ("marsupials").
- Schwalbe, G. 1904 A, 206.
- Schwarz, E. 1924 A, 419.
- Selater, P. L. 1875 A, 209.
- Scott, W. B. 1896 C, 308 ("marsupials").  
 1913 A, 57, 626, 684.  
 1917 A, 178 ("marsupials").  
 1928 B, 257.
- Seeley, H. G. 1886 A, 413.
- Serres, M. 1852 A, 145 ("marsupiaux").
- Seydel, O. 1899 A, 516 ("marsupialier").
- Shore, T. W. 1887 A, 365 ("marsupials").
- Simpson, G. G. 1927 F, 122, 123.  
 1928 C, 147, 183.
- Sinclair, W. J. 1905 C, 73 ("marsupials").  
 1906 B, 471.
- Sixta, V. 1899 A, 329 ("marsupialier").  
 1900 A, 214 ("marsupialier").  
 1900 B, 326, 359.  
 1901 A, 323 ("marsupialier").
- Smith, G. E. 1912 A, 425 ("marsupials").
- Steinmann, G. 1907 A, 464.  
 1912 B, 717 ("beuteltiere").
- Strecker, C. 1887 A, 318 ("beuteltiere").
- Stromer, E. 1902 B, 556, 561 ("marsupialier").  
 1912 A, 162, 242.  
 1916 A, 403.
- Taschenberg, O. 1899 A, 4425.
- Thilenius, G. 1897 A, 484 ("marsupialier").
- Thomas, O. 1887 A, 310.  
 1888 C, 1-401.
- Tims, H. W. M. 1902 A, 321.  
 1905 B, 1785.  
 1911 A, 294 ("marsupials").
- Todd, T. W. 1922 A, 268.
- Tomes, C. S. 1900 A, 42 ("marsupials").  
 1906 A, 45 ("marsupials").
- Tornier, G. 1888 A, 310 ("beuteltiere").  
 1891 A, 185 ("beuteltiere").
- Trouessart, E. L. 1905 A, 826.
- Van den Broeck, A. J. P. 1912 A, 782.
- Van den Broeck, E. 1900 A, 66 ("marsupiaux").
- Vogt, C. 1879 A, 245 ("marsupiaux").
- Wagner, R. 1843 A, 12.
- Wallace, A. R. 1876 A, I, 498; II, 248, 253.  
 1894 A, 436.
- Walmsley, T. 1918 A, 327 ("marsupials").
- Waterhouse, G. R. 1846 A, 1-549 (Marsupiatia).
- Watson, D. M. S. 1916 A, 354 ("marsupials").
- Weber, M. 1904 A, 331.
- Weber and Abel 1928 A, 4, 45, 889.
- Weber and Burlet 1927 A.
- White, C. A. 1885 A, 61 ("marsupials").
- Wiedersheim, R. 1892 A, 57 ("beutler").
- Winge, H. 1906 A, 53.  
 1923 A, 56, 93.
- Wood, H. E. 1924 A, 77.
- Woodward, A. S. 1916 A, lxxii ("marsupials").  
 1923 A, 32.
- Woodward, H. 1904 B, 154.
- Wortman, J. L. 1901 B, xi, 335.  
 1902 A, xiii, 45; xiv, 21.  
 1920 A, 13 ("marsupials").
- Wright, R. R. 1883 A, 20.
- Zaaijer, T. 1894 A, 339.
- Zittel, K. A. 1897 A, 134 ("marsupialier").
- Zittel and Schlosser 1911 A, 350 (Marsupialia),  
 350 (Pantotheria).  
 1923 A, 428, 664.

## Suborder POLYPROTODONTIA.

- Hay, O. P. 1902 A, 564.  
 Abel, O. 1913 B, 709.

- Abel, O. 1914 A, 43.  
 1919 A, 717.

- Ameghino, F. 1893 C, 77 (Polyprotodonta).  
 Arldt, T. 1907 D, 675.  
     1911 A, 231 ("polyprotodontier").  
 Beddard, F. E. 1902 A, 149.  
 Briquel, P. 1898 A, 14 ("polyprotodontes").  
 Broom, R. 1901 B, 735 ("polyprotodonts").  
     1910 B, 766 ("polyprotodont").  
     1911 C, 315 ("polyprotodonts").  
     1914 B, 119 ("polyprotodonts").  
 Case, E. C. 1898 C, 824 (Polyprotodonta).  
 Cope, E. D. 1891 N, 69.  
 Dederer, P. H. 1909 A, 614 (Polyprotodonta).  
 Dependorf, T. 1907 C, 103 ("polyprotodontier").  
 Gregory, W. K. 1910 A, 200, 201, 202.  
     1922 A, 64, 69.  
 Hennig, E. 1922 A, 258 ("polyprotodontier").  
 Hilzheimer, M. 1913 A, 522 ("polyprotodontier").  
 Kükenthal, W. 1913 A, 677.  
 Leche, W. 1905 A, 578 ("polyprotodontier").  
 Miller, G. S. 1912 B, 2.  
 Osborn, H. F. 1907 G, 111.  
 Palacký, J. 1903 A, 3 ("polyprotodontiden").
- Reynolds, S. H. 1897 A, 350.  
 Schlosser, M. 1902 I, 737 (Polyprotodonta).  
 Scott, W. B. 1913 A, 630, 640, 671 (Polyprotodonta).  
 Simpson, G. G. 1927 F, 122, 123.  
     1928 C, 147.  
 Sixta, V. 1900 B, 326 ("polyprotodontier").  
 Steinmann, G. 1907 A, 465.  
 Stromer, E. 1912 A, 163.  
 Terra, P. 1911 A, 249.  
 Thomas, O. 1887 A, 312 ("polyprotodont marsupials").  
     1888 A, 447 ("polyprotodonts").  
     1888 C, 219.  
 Tims, H. W. M. 1902 A, 331.  
 Trouessart, E. L. 1905 A, 844.  
 Weber, M. 1904 A, 348.  
 Weber and Abel 1928 A, 68, 70, 79, 80, 83.  
 Weber and Burlet 1927 A, xiii.  
 Winge, H. 1923 A, 91, 93.  
 Zittel and Schlosser 1911 A, 358.  
     1923 A, 436.

*Superfamily DIDELPHOIDÆ, new form.*

- Osborn, H. F. 1910 B, 515 (Didelphoidea). | Wright, R. R. 1883 A, 20 (Didelphia).

*DIDELPHIDÆ Gray.*

- Unless otherwise indicated the authors, as quoted, use the spelling Didelphyidæ.  
*Gray, J. E.* 1821 A, 308 (Didelphidæ).  
*Hay, O. P.* 1902 A, 570.  
*Adloff, P.* 1910 B, 230.  
*Ameghino, F.* 1889 A, 1010 (Didelphydæ).  
     1893 B, 445.  
     1893 C, 77.  
     1893 D, 16 ("didelphes").  
     1897 B, 262 ("opossums").  
     1898 C, 74 ("didelphydes").  
     1900 A, 202 (Didelphydæ).  
     1902 B, 12.  
     1902 D, 423 (Didelphydæ).  
     1903 A, 160.  
     1905 A, 6.  
     1906 A, 351, 356.  
*Anderson, C.* 1925 A, 24 (Didelphiidæ).  
*Anthony, R.* 1913 A, 264 ("didelphes").  
*Arlt, T.* 1907 D, 650.  
     1911 A, 230 ("didelphyden").  
     1912 A, 704, 750.  
*Bateson, W.* 1892 A, 104.  
*Beddard, F. E.* 1902 A, 155.  
*Bensley, B. A.* 1901 A, 431 ("opossums").  
     1901 B, 120.  
     1901 C.  
     1903 A, 181, 204.  
     1906 A, 1.  
*Boas, J. E. V.* 1914 B, 578 ("didelphyden").  
     1918 A, 1 ("didelphyden").  
*Bonaparte, C. L.* 1832 A, 288 (Pedimana).  
     1840 A, 257 (Didelphidæ).  
*Cuvier, G.* 1805 A ("pedimanes").  
     1825 A, 284, pls. ("sarigues").  
*Dollo, L.* 1899 A, 193.  
*Doran, A. H. G.* 1878 A, 477, 480.  
*Elliot, D. G.* 1901 A, 1.  
*Flower, W. H.* 1868 C, 635.
- Gadow, H.* 1916 A, 545 ("opossums").  
*Gaudry, A.* 1906 B, 125 ("sarigues").  
*Gaupp, E.* 1910 C.  
*Gervais, P.* 1859 A, 260 ("didelphidés").  
*Ghigi, A.* 1900 B, 99 ("didelfidi").  
*Gidley, J. W.* 1915 A, 400 (Didelphidæ).  
*Gill, T.* 1885 B, 21.  
*Gregory, W. K.* 1910 A, 201 (Didelphidæ).  
*Hilzheimer, M.* 1913 A, 522 ("didelphyden").  
*Hoernes, R.* 1886 A, 657.  
*Huxley, T. H.* 1880 E, 464 (Didelphidæ).  
*Koken, E.* 1893 B, 480 ("didelphyden").  
*Kükenthal, W.* 1913 A, 677.  
*Leche, W.* 1887 A.  
     1912 A, 72.  
*Le Damany, P.* 1903 D, 349 ("sarigues").  
*Leunis and Ludwig* 1883 A, 294.  
*Lobley, J. L.* 1908 A, 201, 205.  
*Lubosch, W.* 1907 A, 618.  
     1908 B.  
*Lull, R. S.* 1917 B, 338.  
*Lydekker, R.* 1896 C, 193, 271.  
*Matschie, P.* 1896 A, 247.  
*Matthew, W. D.* 1909 C, 103, 105, 110.  
     1915 A, 184, 262, 268, fig. 31.  
     1915 K, fig. 17 ("opossum").  
     1916 A, 482 (Didelphidæ).  
*Matthew and Granger* 1917 A, 323.  
*Meckel, J. F.* 1825 A ("didelphen").  
*Miller, G. S.* 1912 B, 2 (Didelphiidæ).  
     1924 C, 2 (Didelphiidæ).  
*Osborn, H. F.* 1909 D, 55, 59, 61.  
     1910 B, 612.  
*Owen, R.* 1841 G, 321, 332 (Scansoria).  
     1841 H, 330 ("opossums").  
*Palacký, J.* 1903 A, 3 ("didelfiden").  
*Pander and Alton* 1828 A, 1 ("didelphen").  
*Puccioni, N.* 1908 A, 49 ("didelfidi").  
*Reynolds, S. H.* 1897 A, 350, 423, 486, 521.

Scharff, R. F. 1911 A, 183, 229, 367, 403.

Schmidt, O. 1886 A, 97.

Scott, W. B. 1913 A, 627, 630 (Didelphiidae).

Simpson, G. G. 1926 G, 91 (Didelphiidae).

1927 F, 122, 123, 126 (Didelphiidae).

1928 C, 210 (Didelphiidae).

1928 G, 1 (Didelphiidae).

Sinclair, W. J. 1905 C, 73.

1906 B, 403.

Stromer, E. 1902 B, 559, 560 ("didelphiden").

Terra, P. 1911 A, 252.

Thomas, O. 1888 A, 453.

1888 C, 315.

1914 A, 417 ("opossums").

Tornier, G. 1894 B, 104 ("didelphiden").

Trouessart, E. L. 1905 A, 850.

Wallace, A. R. 1876 A, xi, 243.

1894 A, 436 (Didelphiidae).

Waterhouse, G. R. 1846 A, 462 (Didelphiidae).

Weber, M. 1904 A, 349.

Weber and Abel 1928 A, 68, 70, 82, 91.

Weber and Burlet 1927 A, xiii, 73.

Winge, H. 1923 A, 59, 93, 112 (Didelphyidae, Didelphiidae).

Wood, H. E. 1924 A, 85.

Wright, R. R. 1833 A, 24.

Zaaijer, T. 1894 A, 339 (Didelphyidae).

Zittel and Schlosser 1911 A, 362.

1923 A, 441, 442.

#### PEDIOMYINÆ Simpson.

Simpson, G. G. 1927 F, 122, 123.

#### PEDIOMYS Marsh. Type *P. elegans* Marsh.

Hay, O. P. 1902 A, 565 (Pediomys); 692 (Protolambda).

Arlt, T. 1912 A, 686 (Protolambda).

Gidley, J. W. 1906 F, 102, pl. v, fig. 6 (Pediomys?); 99, 104, fig. 12 (Protolambda).

Gregory, W. K. 1922 A, 65, 67 (Pediomys); 66 (Protolambda).

Matthew, W. D. 1916 A, 491.

Osborn, H. F. 1907 G, 96, fig. 47 (Protolambda).

Palmer, T. S. 1904 A, 518, 878 (Pediomys); 583, 909 (Protolambda).

Simpson, G. G. 1927 A, 6 (Pediomys).

1927 F, 122, 124 (Pediomys); Protolambda, a syn.).

1928 G, 2, 3.

Zittel and Schlosser 1911 A, 507 (Protolambda).

1923 A, 597, 664, 665 (Protolambda).

#### *Pediomys elegans* Marsh.

Hay, O. P. 1902 A, 565.

Ameghino, F. 1893 C, 81.

Bowen, C. F. 1915 A, 146.

Lull, R. S. 1915 D, 323, 345.

Merrill, G. P. 1907 A, 54.

Simpson, G. G. 1927 F, 122.

Trouessart, E. L. 1905 A, 843.

Upper Cretaceous (Lance);

#### *Pediomys hatcheri* (Osborn).

Hay, O. P. 1902 A, 692 (Protolambda).

Abel, O. 1919 A, 724, fig. 545 (Protolambda).

Mathew, W. D. 1916 A, 473 (Protolambda).

Simpson, G. G. 1927 F, 122.

Upper Cretaceous (Lance); Wyoming.

#### *Pediomys* sp. indet.

Simpson, G. G. 1927 A, 5. Upper Cretaceous (Hell Creek); Montana.

1928 G, 4, fig. 1.

#### NYSSODON Simpson. Type *N. punctidens* Simpson.

Simpson, G. G. 1927 F, 122, 124.

#### *Nyssodon punctidens* Simpson.

Simpson, G. G. 1927 F, 122, 124.

Upper Cretaceous (Lance); Wyoming.

#### THLÆODONTINÆ, new name.

Hay, O. P. 1902 A, 564 (Stagodontidae, in part).

Cope, E. D. 1892 U, 760 (Thlæodontidae).

Matthew, W. D. 1914 B, 387 (Thlæodontidae).

Palmer, T. S. 1904 A, 773, 887 (Syn. of Stagodontidae).

Simpson, G. G. 1927 F, 122, 124 (Didelphodontinae; preoccupied by Matthew).

#### DIDELPHODON Marsh. Type *D. vorax* Marsh. Not preoccupied by *Didelphodus*.

Hay, O. P. 1902 A, 565.

Gregory, W. K. 1910 A, 206, 299 (Didelphops).

1922 A, 66, fig. 37 (Didelphops).

Matthew, W. D. 1906 C, 232 (Didelphops).

1909 D, 338 (Didelphops).

Osborn, H. F. 1907 G, 96, fig. 47, E (Didelphodon?).

1910 B, 515 (Didelphops).

Palmer, T. S. 1904 A, 230, 878 (Didelphodon); 230, 878 (Didelphops).

Simpson, G. G. 1927 A, 5.

1927 B, 9 (Didelphops).

1927 F, 125, 126.

Trouessart, E. L. 1905 A, 826 (Didelphops).

Weber and Abel 1928 A, 90 (Didelphodus).

Wortman, J. L. 1901 B, xi, 387 (Didelphops).

#### *Didelphodon ferox* Marsh.

Hay, O. P. 1902 A, 566.

Bowen, C. F. 1915 A, 144 (Didelphops).

Lemoine, V. 1889 A, 240, fig. 1.

Lull, R. S. 1915 D, 323, 345.

Matthew, W. D. 1916 A, 491, 496 (Didelphops).

Merrill, G. P. 1907 A, 34 (Didelphops).

Simpson, G. G. 1927 F, 125, 127.

Trouessart, E. L. 1905 A, 826 (Didelphops).

Upper Cretaceous (Lance); Wyoming.

**Didelphodon vorax** Marsh.

- Hay, O. P. 1902 A, 566.  
 Abel, O. 1919 A, 724, fig. 545 (Didelphops).  
 Ameghino, F. 1893 C, 81 (Didelphops).  
 Bowen, C. F. 1915 A, 144 (Didelphops).  
 Huene, F. 1918 A, 209 (Didelphops).  
 Koken, E. 1893 B, 426 (Didelphops).  
 Lemoine, V. 1889 A, 240, fig. 1.

- Lull, R. S. 1915 D, 323, 345.  
 Matthew, W. D. 1916 A, 491 (Didelphops).  
 Simpson, G. G. 1927 F, 122, 128.  
 Trouessart, E. L. 1905 A, 826 (Didelphops).  
 Upper Cretaceous (Lance); Wyoming.

**Didelphodon** sp. indet.

- Merrill, G. P. 1907 A, 34 (Didelphops). Upper Cretaceous (Lance); Wyoming.

**ECTOCONODON** Osborn. Type *E. petersoni* Osborn.

- Hay, O. P. 1902 A, 692.  
 Cossman, M. 1901 B, 186.  
 Palmer, T. S. 1904 A, 251, 909.  
 Schlosser, M. 1902 E, 473.  
 Simpson, G. G. 1927 F, 121, 125, 126.

**Ectoconodon petersoni** Osborn.

- Hay, O. P. 1902 A, 692.  
 Abel, O. 1919 A, 724, fig. 545.  
 Matthew, W. D. 1916 A, 478.  
 Simpson, S. S. 1927 F, 122, 126.  
 Upper Cretaceous (Lance); Wyoming.

**THLÆODON** Cope. Type *T. padanacus* Cope.

- Hay, O. P. 1902 A, 565.  
 Gregory, W. K. 1922 A, 66, 67, 68.  
 Hennig, E. 1919 A, 6.  
 Matthew, W. D. 1915 A, 268.  
 1916 A, 481.  
 Palmer, T. S. 1904 A, 674, 887.  
 Simpson, G. G. 1927 B, 9.  
 1927 F, 121.  
 1928 K, 465, fig. 4.  
 Trouessart, E. L. 1905 A, 860.  
 Weber and Abel 1928 A, 83.  
 Zittel and Schlosser 1923 A, 441.

**Thlæodon padanicus** Cope.

- Hay, O. P. 1902 A, 565.  
 Gregory, W. K. 1922 A, 67, fig. 38.  
 Huene, F. 1918 A, 209.  
 Lull, R. S. 1915 D, 323.  
 Matthew, W. D. 1916 A, 478, 492, pls. v. vi, text-fig. 3.  
 Simpson, G. G. 1927 A, 1, 5.  
 1927 F, 122, 126.  
 Zittel and Schlosser 1923 A, 441, fig. 559.  
 Cretaceous (Lance); Wyoming.

**Thlæodon** sp. indet.

- Simpson, G. G. 1927 A, 5, fig. 4 (This genus?).  
 Upper Cretaceous (Hell Creek); Montana.

**ALPHODON** Simpson. Type *A. marshi* Simpson.

- Simpson, G. G. 1927 F, 122 (Alphodon); 125, 130 (Alphadon).

**Alphodon marshi** Simpson.

- Simpson, G. G. 1927 F, 122 (Alphodon); 125, 130 (Alphadon).  
 Upper Cretaceous (Lance); Wyoming.

**CIMOLESTINÆ** Trouessart.

- Trouessart, E. L. 1905 A, 842.  
 Hay, O. P. 1902 A, 564 (Stagodontidæ); 565 (Cimolestidæ).  
 Ameghino, F. 1893 C, 80 (Stagodontidæ).  
 Gregory, W. K. 1922 A, 64.  
 Hennig, E. 1921 A, 261 (Cimolestidæ, Stagodontidæ).  
 Marsh, O. C. 1902 A, 564 (Stagodontidæ); 565 (Cimolestidæ).

- Matthew, W. D. 1914 B, 387.  
 1915 A, 268.  
 1916 A, 482, 499.  
 1921 D, 211, 217.  
 Matthew and Granger 1925 A, 12.  
 Palmer, T. S. 1904 A, 734, 878 (Cimolestidæ); 771, 887, 889 (Stagodontidæ).  
 Simpson, G. G. 1927 F, 126 ("Didelphidæ incertæ sedis").  
 Trouessart, E. L. 1905 A, 860 (Stagodontidæ).

THE FOLLOWING GENERA ARE REFERRED TO THIS SUBFAMILY ONLY PROVISIONALLY.

**CIMOLESTES** Marsh. Type *C. incisus* Marsh.

- Hay, O. P. 1902 A, 566.  
 Ameghino, F. 1893 C, 80.  
 Huene, F. 1918 A, 209.  
 Koken, E. 1893 B, 426.  
 Matthew, W. D. 1916 A, 491.  
 Palmer, T. S. 1904 A, 189, 878.

- Simpson, G. G. 1927 F, 127.  
 Trouessart, E. L. 1905 A, 826.  
 Woodward, A. S. 1916 B, 527.  
 Zittel and Schlosser 1911 A, 363.  
 1923 A, 441 (Syn. of Thlæodon).



**Cimolestes incisus** Marsh.

- Hay, O. P. 1902 A, 566.  
 Ameghino, F. 1893 C, 81.  
 Bowen, C. F. 1915 A, 146.  
 Lemoine, V. 1889 A, 240, fig. 1.  
 Lull, R. S. 1915 D, 323, 345.  
 Matthew, W. D. 1916 A, 491.

Simpson, G. G. 1927 F, 122.

Woodward, A. S. 1916 B, 528.  
 Upper Cretaceous (Lance); Wyoming.

**Cimolestes** sp. indet.

Douglass, E. 1908 D, 16, pl. i, fig. 17. Paleocene  
 (Fort Union); Montana.

**DIAPHORODON** Simpson. Type *Cimolestes curtus* Marsh.

*Simpson, G. G.* 1927 F, 122, 126, 127.

**Diaphorodon curtus** (Marsh).

- Hay, O. P. 1902 A, 566 (Cimolestes).  
 Ameghino, F. 1893 C, 81 (Cimolestes).  
 Bowen, C. F. 1915 A, 146 (Cimolestes).

Lull, R. S. 1915 D, 323, 345 (Cimolestes).  
 Matthew, W. D. 1916 A, 488, 491, 496 (Cimolestes).

Simpson, G. G. 1927 F, 122, 127, 130.  
 Woodward, A. S. 1916 B, 528 (Cimolestes).  
 Upper Cretaceous (Lance); Wyoming.

**DELPHODON** Simpson. Type *Didelphodon comptus* Marsh.

*Simpson, G. G.* 1927 F, 122, 127.

**Delphodon comptus** (Marsh).

- Hay, O. P. 1902 A, 566 (Didelphodon).  
 Ameghino, F. 1893 C, 81 (Didelphops).  
 Bowen, C. F. 1915 A, 144 (Didelphops).  
 Lemoine, V. 1889 A, 240, fig. 1 (Didelphodon).

Lull, R. S. 1915 D, 323, 345 (Didelphodon).  
 Matthew, W. D. 1916 A, 491, 496 (Didelphodon).  
 Merrill, G. P. 1907 A, 34 (Didelphops).  
 Simpson, G. G. 1927 F, 122, 127.  
 Trouessart, E. L. 1905 A, 826 (Didelphops).  
 Upper Cretaceous (Lance); Wyoming.

**STAGODON** Marsh. Type *S. nitor* Marsh.

- Hay, O. P. 1902 A, 564.  
 Huene, F. 1918 A, 209.  
 Matthew, W. D. 1916 A, 492.  
 Palmer, T. S. 1904 A, 642, 887.  
 Simpson, G. G. 1927 F, 122, 126, 128.  
 Trouessart, E. L. 1905 A, 860.  
 Woodward, A. S. 1916 B, 528.

**Stagodon nitor** Marsh.

- Hay, O. P. 1902 A, 564.  
 Ameghino, F. 1893 C, 80.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Simpson, G. G. 1927 F, 128.  
 Trouessart, E. L. 1905 A, 860.  
 Upper Cretaceous (Lance); Wyoming.

**Stagodon tumidus** Marsh.

- Hay, O. P. 1902 A, 565.  
 Ameghino, F. 1893 C, 80.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Trouessart, E. L. 1905 A, 860.  
 Upper Cretaceous (Lance); Wyoming.

**Stagodon validus** Marsh.

- Hay, O. P. 1902 A, 565.  
 Bowen, C. F. 1915 A, 146.  
 Lull, R. S. 1915 D, 323, 345.  
 Matthew, W. D. 1916 A, 493, 496.  
 Merrill, G. P. 1907 A, 60.  
 Upper Cretaceous (Lance); Wyoming.

**Stagodon** sp. indet.

Simpson, G. G. 1927 A, 5 (This genus?). Upper  
 Cretaceous (Hell Creek); Montana.

**BATODON** Marsh. Type *B. tenuis* Marsh.

- Hay, O. P. 1902 A, 565.  
 Matthew, W. D. 1916 A, 497.  
 Palmer, T. S. 1904 A, 134, 878.  
 Simpson, G. G. 1927 A, 7.  
 1927 B, 9.  
 1927 F, 129.  
 A genus of uncertain position.

**Batodon tenuis** Marsh.

- Hay, O. P. 1902 A, 565.  
 Bowen, C. F. 1915 A, 146.

Douglass, E. 1908 D, 15.  
 Lull, R. S. 1915 D, 323, 345.  
 Merrill, G. P. 1907 A, 25.  
 Simpson, G. G. 1927 F, 122, 129.  
 Trouessart, E. L. 1905 A, 842.  
 Upper Cretaceous (Lance); Wyoming: Paleocene (Fort Union); Montana.

**Batodon** sp. indet.

Douglass, E. 1908 D, 15. Paleocene (Fort Union);  
 Montana.

**DIDELPHINÆ.**

Simpson, G. G. 1927 F, 123.

**PERATHERIUM** Aymard. Type not indicated.

- Aymard, A.* 1850, Ann. Soc. Agri. Sci., Arts. et  
 Comm. du Puy, xiv, 81, 83-84.

Hay, O. P. 1902 A, 570 (Didelphis, in part).  
 Bensley, B. A. 1903 A, 181.

- Bensley, B. A. 1906 A, 13.  
 Chardin, P. T. 1927 A, 7, fig. 1.  
 Depéret, C. 1905 C, 705.  
     1906 A, 619.  
     1908 A, 169.  
 Douglass, E. 1905 A, 211.  
 Filhol, H. 1877 A, 247.  
 Gervais, P. 1859 A, 261.  
 Gidley, J. W. 1915 A, 400.  
 Gregory, W. K. 1910 A, 205.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 110.  
     1909 D, 339, 540, pl. xlix, fig. 4; pl. l, fig. 9.  
     1915 A, 268.  
     1915 K, 420.  
 Osborn, H. F. 1907 G, 109.  
     1910 B, 627.  
 Scott, W. B. 1913 A, 627, 631.  
 Seeley, H. G. 1886 A, 418.  
 Simpson, G. G. 1928 G, 1-6.  
 Stock and Furlong 1922 A, 311.  
 Troxell, E. L. 1923 F, 507.  
 Winge, H. 1923 A, 60, 85, 91, 98 (Perotherium).  
 Woodward, A. S. 1898 B, 260.
- Peratherium alternans** Cope.  
 Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.
- Peratherium comstocki** Cope.  
 Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 93.  
 Osborn, H. F. 1909 D, 46.  
 Palacký, J. 1903 A, 5 (Didelphys).  
 Simpson, G. G. 1928 G, 1, 5, fig. 2.  
     Lower Eocene (Wind River); Wyoming.
- Peratherium fugax** Cope.  
 Hay, O. P. 1902 A, 571 (Didelphis).  
 Bensley, B. A. 1901 C, 249.  
 Cook, H. J. 1912 D, 35.  
 Cope, E. D. 1891 N, 69, fig. 37.  
 Matthew, W. D. 1909 C, 105.  
 Seeley, H. G. 1886 A, 513, figs.  
 Simpson, G. G. 1928 G, 4, fig. 1.  
 Stock and Furlong 1922 A, 311.  
 Troxell, E. L. 1923 F, 507.  
     Middle Oligocene (Cedar Creek); Colorado:  
     (Brulé?); Nebraska.

## PERADECTES Matthew and Granger.

- Matthew and Granger* 1921 A, 2.  
 Carter, J. T. 1922 A, 604, 606.  
 Simpson, G. G. 1928 G, 3.  
 Winge, H. 1923 A, 101 (Perodectes).  
 Zittel and Schlosser 1923 A, 441.

## EODELPHIS Matthew.

- Matthew, W. D.* 1916 A, 482.  
 Gregory, W. K. 1922 A, 65, 70.  
     1927 G, 268, fig. 1.  
 Hennig, E. 1919 A, 6 (Eodidelphys).

**Peratherium huntii** Cope.

- Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.

**Peratherium innominatum** Simpson.

- Simpson, G. G.* 1928 G, 4, 6, figs. 3, 5.  
     Middle Eocene (Lower Bridger); Wyoming.

**Peratherium marginale** Cope.

- Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.

**Peratherium marsupium** (Troxell).

- Troxell, E. L.* 1923 F, 508, figs. 1-3 (Herpetotherium).  
*Simpson, G. G.* 1928 G, 3, 5, figs. 1-4.  
     Middle Eocene (Bridger); Wyoming.

**Peratherium merriami** Stock and Furlong.

- Stock and Furlong* 1922 A, 312, figs. 1-5.  
*Simpson, G. G.* 1928 G, 1.  
     Oligocene (John Day); Oregon.

**Peratherium pygmaeum** (Scott).

- Hay, O. P. 1902 A, 571 (Didelphis).  
 Dall and Harris 1892 A, 305 (Didelphys).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.

**Peratherium scalare** Cope.

- Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.

**Peratherium titanelix** Matthew.

- Matthew, W. D.* 1903 B, 202, fig. 1.  
     1909 C, 103.  
*Troxell, E. L.* 1923 F, 507.  
     Lower Oligocene (Chadron); Montana.

**Peratherium tricuspe** Cope.

- Hay, O. P. 1902 A, 571 (Didelphis).  
 Matthew, W. D. 1909 C, 105.  
     Middle Oligocene (Cedar Creek); Colorado.

**Peratherium sp. indet.**

- Douglass, E. 1908 D, 16. Paleocene (Fort Union); Montana.

Type *P. elegans* Matthew and Granger.**Peradectes elegans** Matthew and Granger.

- Matthew and Granger* 1921 A, 2.  
 Reeside, J. B. 1924 A, 47.  
 Simpson, G. G. 1928 G, 1, figs. 1-3.  
     Paleocene (Tiffany); Colorado.

Type *E. browni* Matthew.

- Simpson, G. G.* 1927 A, 6.  
     1927 F, 126.  
     1928 C, 147.  
 Sternberg, C. M. 1926 A, 103.

Weber and Abel 1928 A, 91.  
 Winge, H. 1923 A, 101, 108 (Eodidelphis).  
 Zittel and Schlosser 1923 A, 441 (Eodelphys).

### **Eodelphis browni** Matthew.

Matthew, W. D. 1916 A, 482, pls. ii-iv; text-figs. 1, 2.  
 Gregory, W. K. 1922 A, 64, fig. 36.  
 Huene, F. 1918 A, 209.  
 Longman, H. A. 1924 A, 9.  
 Simpson, G. G. 1928 C, 147.

### **DIDELPHIS** Linnæus. Type *D. marsupialis* Linnæus.

Unless otherwise indicated the authors, as quoted, use the spelling *Didelphys*.

Hay, O. P. 1902 A, 570 (Didelphis).  
 Abel, O. 1912 F, 224, fig. 152.  
 1914 C, 335, 336, figs. 5, 6.  
 Adams, L. A. 1919 A, 115, pl. x.  
 Adloff, P. 1918 A, 137, figs. 6, 7 (Didelphis).  
 Allen, J. A. 1892 A.  
 1901 B, 149.  
 1901 D, 135.  
 1902 B, 249.  
 Ameghino, F. 1889 A, 1010.  
 1897 B, 260.  
 1900 A, 204.  
 1902 A, 21.  
 1902 B, 6.  
 1902 D, 432.  
 1903 A, 160.  
 1904 A, 529.  
 1905 A, 6.  
 1905 C, 413, figs. 62, 96.  
 1906 A, 235, 338.  
 Anthony, R. 1912 A ("sarigue").  
 Arldt, T. 1907 B, 456.  
 1907 D, 650.  
 Baird, S. F. 1876 A, ccviii ("opossum").  
 Bardeleben, K. 1885 B, 86.  
 1901 A, 95.  
 Bardenheeth, K. S. 1913 A, 71.  
 Beddard, F. E. 1902 A, 155.  
 Behlen, H. 1906 A, 195.  
 Bensley, B. A. 1901 C, 249 (Peratherium).  
 1902 A, 7.  
 1903 A, 182.  
 1906 A, 5, 12.  
 Blendinger, W. 1904 A, 467, figs. 15, 16.  
 Bluntschli, H. 1912 B, 367, fig. 7.  
 Boas, J. E. V. 1909 A, 524.  
 1914 C, 301, fig. 90.  
 Bolk, L. 1916 A, 735.  
 Bronn, H. G. 1848 A, 423.  
 1849 A, 718, 733, seq.  
 Broom, R. 1901 B, 738.  
 1910 B, 766.  
 Carlsson, A. 1922 A.  
 Cleland, J. 1863 B, 302 ("opossum").  
 Cope, E. D. 1880 U, 156.  
 Cuvier, F. 1825 A, 73, pl. xxiii, C ("sarigues").  
 Cuvier, G. 1805 A.  
 Dana, J. D. 1863 C, 342.  
 Dependorf, T. 1898 A, 246.  
 1907 C, 103.  
 Doran, A. H. G. 1878 A, 480.  
 Eggeling, H. 1904 A, 86.  
 Eimer, G. H. T. 1901 A, 139.

Weber and Abel 1928 A, 83, fig. 44.  
 Upper Cretaceous (Belly River); Alberta.

### **Eodelphis cutleri** (Woodward).

Woodward, A. S. 1916 D, Abstr. 158, 30 (Cimolestes).  
 Simpson, G. G. 1928 C, 143.  
 Woodward, A. S. 1916 E, 525, fig. 1 (Cimolestes).  
 Upper Cretaceous (Belly River); Alberta.

Eisler, P. 1895 A.  
 Elliot, D. G. 1901 A, 1.  
 Emery, C. 1901 A, 671, figs. 14, 16.  
 Fischer, J. B. 1829 A, 263.  
 Flower, W. H. 1870 A, 244.  
 Frassetto, F. 1915 A, fig. 91.  
 Frech, F. 1906 A, 485, 487.  
 1907 A, 315.  
 Fuchs, H. 1906 A, 19.  
 1907 A, 163.  
 1908 B, 585, figs. 1, 2.  
 1909 D, 33, figs. 11a, 11b; 122, fig. 25.  
 1910 A, 48.  
 1911 B, 379, figs. 13-15, 41  
 1911 D, 112.  
 1914 A, 38.  
 1922 A, 283.  
 Gaupp, E. 1905 C, 128.  
 1905 D, 1042.  
 1905 E, 159.  
 1908 C, 673, 745.  
 1910 C, 396.  
 1911 B, 99.  
 1911 D, 625.  
 1913 A, 62, fig. 32.  
 Gegenbaur, C. 1864 C, 176, fig. 1.  
 1865 C, 546, fig. 1.  
 Gervais, P. 1852 A, 133, pl. xlv.  
 1853 B, 68 ("didelphes").  
 1859 A, 262, pl. xlv.  
 Giebel, C. G. 1855 A, 40, pl. xvii, figs. 10, 12.  
 1883 A, pls. xix, xlvii, lix, lxxiii, lxxviii.  
 Grant, M. 1904 B, 205.  
 Gregory, W. K. 1910 A, 192, 218, 437, 440 (Didelphis).  
 1916 A, 244, pl. i, M; text-figs. 7, 9 (Didelphis).  
 1920 A, 140, fig. 63 (Didelphis).  
 1921 A, 68, 77, pl. xxvii (Didelphis).  
 1927 G, 270 ("opossum").  
 Hasse and Schwarck 1870 A, 152.  
 Hay, O. P. 1928 C, 425.  
 Heilprin, A. 1887 A, 334, 335.  
 Henckel, K. O. 1927 A, 375.  
 Hensel, R. 1879 A, 531.  
 Hill, J. P. 1897 A, 408.  
 Hilsheimer, M. 1913 A, 521.  
 Hommes, J. H. 1924 A, 21.  
 Hopewell-Smith and Tims 1911 A, 941.  
 Huene, F. 1918 A, 208.  
 Ihering, H. 1909 A, 300.  
 Jaeger, G. F. 1842 A, 435.  
 Kampfen, P. N. 1922 A, 54.  
 Kehrner, F. A. 1896 A, 354.  
 Kingsley, J. S. 1925 A, 205, fig. 215.

- Klaauw, C. J. 1924 A, 240.  
1924 B, 600.
- Kostlin, O. 1844 A
- Lavocat, A. 1896 A, 26.
- Leboucq, H. 1884 A, 75.
- Leche, W. 1887 A.  
1900 A, 995, 1002.  
1904 A, 219.
- Lobley, J. L. 1908 A, 196.
- Lubosch, W. 1908 B.  
1911 B, 744.
- Lydekker, R. 1896 C, 196, 271.
- Major, C. J. F. 1880 A, 39.
- Martins, C. 1887 A, 76.
- Matthes, E. 1921 C.
- Matthew, W. D. 1906 C, 214.  
1909 D, 335, text-fig. 6 ("opossum").  
1915 A, 268.  
1916 A, 481 (Didelphis).  
1917 A, 574 (Didelphis).
- Meckel, J. F. 1825 A.
- Merriam, C. H. 1892 A, 60 (Didelphis).
- Miller, G. S. 1912 B, 2 (Didelphis).  
1923 C, 2 (Didelphis).
- Oehngren, S. 1919 A, 173, figs. 15-17.
- Osborn, H. F. 1898 N, 187.  
1901 B, 216, 472, 516.  
1901 F, 331.  
1907 G, 108, figs. 58, 209.  
1917 B, 235, fig.
- Owen, R. 1841 G, 321.  
1845 B, 380.  
1868 A, 877.
- Palacký, J. 1902 B, 142.
- Palmer, T. S. 1904 A, 229, 879.
- Pander and Alton 1828 A, 1.
- Parker and Haswell 1897 A, 531.
- Peters, W. 1867 A, 728.  
1867 C, 953.  
1868 B, 390.
- Pfeiffer, H. 1854 A, 13 (Didelphis).
- Pictet, F. J. 1853 A, 395.
- Puccioni, N. 1908 A, 55.
- Rathke, H. 1846 A, 168.
- Rehn, J. A. G. 1901 A, 147 (Didelphis).
- Rehs, J. 1914 A, 35.
- Retterer, E. 1916 A, 767 ("sarigues").
- Reynolds, S. H. 1897 A, 422, 443.
- Röse, C. 1892 F, 402, 405.  
1897 A, 66, fig. 26.
- Romer, A. S. 1922 B, *passim*, pls. xxviii;  
xxviii-xxxvi; xxxviii, xxxviii; xl-xlvi.
- Rosenberg, E. 1895 A, 298.
- Schapiro, B. 1913 A, 219.
- Scharff, R. F. 1911 A, 182, 283, 367.
- Schlosser, M. 1899 C, 165.  
1899 L, 353.  
1902 F, 135.  
1902 I, 737, 738.  
1921 A, 122.
- Schmalhausen, J. J. 1908 A, 342.  
1908 B, 376, fig. 3.
- Schwalbe, G. 1904 A, 206.
- Sclater, P. L. 1875 A, 213.
- Scott, W. B. 1913 A, 631 (Didelphis).  
1916 A, 115 ("opossums").  
1917 A, 127, 133, 134 ("opossum").
- Simpson, G. G. 1926 D, 248.
- Simpson, G. G. 1927 F, 123.  
1928 C, 209, figs. 46, 48, 50, 52, 53.  
1928 G, 2, 4, fig. 1.
- Sinclair, W. J. 1906 B, 466.
- Sixta, V. 1900 B, 328.
- Stromer, E. 1902 B, 560.
- Taschenberg, O. 1899 A, 4540.
- Terra, P. 1911 A, 252, fig. 84.
- Thomas, O. 1888 A, 447, 457.  
1888 C, 316.  
1901 A, 144 (Didelphis).
- Thompson, A. H. 1900 A, 922.
- Tims, H. W. M. 1902 A, 329.  
1905 B, 1785.
- Tornier, G. 1891 A, 114.
- Trouessart, E. L. 1905 A, 850.
- Troxell, E. L. 1923 F, 509.
- Van den Broeck, A. J. P. 1912 A, 782.
- Virchow, H. 1917 A, 233, figs. 1-6.
- Wallace, A. R. 1876 A, 1, 126, 130, 145.
- Waterhouse, G. R. 1846 A, 464.
- Watson, D. M. S. 1913 D, 24 (Didelphis).
- Weber, M. 1904 A, 349, 354.
- Weber and Abel 1928 A, 49, 71, figs. 17, 31 (Didelphis).
- Weber and Burret 1927 A.
- Weil, R. 1900 A, 103, pls. i, ii.
- Wiedersheim, R. 1892 A, 57, pl. vii, fig. 15.
- Winge, H. 1893 C, 87.  
1923 A, 61, 87, 90, 93, 115 (Didelphis, Didelphys).
- Woodward, A. S. 1898 D, 331, 332.
- Woodward, M. F. 1894 B, 444.
- Wortman, J. L. 1901 B, xi, 338 ("opossum").
- Wright, R. R. 1883 A, 24.
- Zittel and Schlosser 1911 A, 363.  
1923 A, 441, figs. 560, 635.

**Didelphis valens** Lambe.

*Lambe, L. M.* 1908 A, 10, 22, pl. viii, figs. 1-7.  
Oligocene (Cypress Hills); Saskatchewan.

**Didelphis virginiana** Kerr.

- Hay, O. P. 1902 A, 571.
- Agassiz, L. 1859 B, 186 ("opossum").
- Allen, J. A. 1901 B, 160, 180, pl. xxii.  
1901 D, 187 (D. marsupialis).  
1902 B, 256.
- Ameghino, F. 1912 B, 179 (Didelphys).
- Baker, F. C. 1920 A, 373.
- Bangs, O. 1898 A, 172.
- Bluntschli, H. 1912 B, 366, fig. 7.
- Broom, R. 1926 A, 261.
- Cope, E. D. 1895 G, 596 (Didelphys).
- Eimer, G. H. T. 1901 A, 15, 16.
- Elliot, D. G. 1901 A, 1, fig. 1 (Didelphys).
- Eudes-Deslongchamps, E. 1842 C, 37, pl. iv.
- Flower, W. H. 1868 C, 635, pl. xxx, fig. 5.
- Foot, J. S. 1918 A, 147, pl. xx (Didelphys).
- Frech and Geinitz 1903 A, 36 (Didelphys).
- Fuchs, H. 1906 A, 34 (Didelphys).
- Gaupp, E. 1905 C, 126, fig. 1 (Didelphys).
- Gidley, J. W. 1927 E, 274.
- Giebel, C. G. 1883 A, pls. lix, lxxxv (Didelphys).
- Gregory, W. K. 1919 B, 422, fig. 5 ("opossum").  
1921 A, 239.
- Haacke, W. 1888 A, 367 (Didelphys).
- Hanson, F. B. 1920 B, 330 (Didelphys).

- Hay, O. P. 1917 E, 44.  
1920 B, 135.  
1923 A, 363, 382.  
1927 D, 274.
- Holmes, F. S. 1859 A, 184 ("opossum").  
1860 A, iv ("opossum").
- Lydekker, R. 1896 C, 196 (D. marsupialis).
- Matthew, W. D. 1916 A, 497, fig. 4.  
1925 A, 97 (D. sp.).
- Miller, G. S. 1912 B, 3.  
1924 C, 3.
- Owen, R. 1838 A, 123 ("opossum").  
1841 H, 352, 386 ("virginia opossum").  
1845 B, pl. xcvi, fig. 6.  
1868 A, 877.
- Pander and Alton 1828 A, 1, pl. vi.
- Pauli, S. 1899 A, 172 (Didelphys).
- Rehn, J. A. G. 1901 A, 149.
- Scharff, R. F. 1911 A, 284, 366 (Didelphys marsupialis).
- Schmidt, E. 1872 A, 251 (Didelphys).

#### THYLACODON Matthew and Granger. Type *T. pusillus* Matthew and Granger.

- Matthew and Granger 1921 A, 2.  
Zittel and Schlosser 1923 A, 441.

#### TELACODON Marsh. Type *T. laevis* Marsh.

- Hay, O. P. 1902 A, 566.  
Gidley, J. W. 1906 F, 103.  
Matthew, W. D. 1916 A, 491, 497.  
Palmer, T. S. 1904 A, 666, 878.  
Simpson, G. G. 1927 A, 7.  
1927 F, 129.
- A genus of uncertain position. It may belong among the *Monodelphia*.

#### Telacodon laevis Marsh.

- Hay, O. P. 1902 A, 566.  
Bowen, C. F. 1915 A, 146.  
Lull, R. S. 1915 D, 323, 345.

#### SYNCONODON Osborn. Type *S. sexcuspis* Osborn.

- Hay, O. P. 1902 A, 692.  
Cossmann, M. 1901 B, 186.  
Osborn, H. F. 1907 G, 96, fig. 47.  
Palmer, T. S. 1904 A, 656, 909.  
Schlosser, M. 1902 E, 473.  
Simpson, G. G. 1927 F, 121, 129.
- The systematic position of this genus is doubtful.

- Sellards, E. H. 1916 C, 139, 140, 148, 158.  
1916 D, 616.  
1916 E, 16, 17.
- Simpson, G. G. 1928 H, 1.
- Stromer, E. 1902 B, 556.
- Thomas, O. 1901 A, 145.
- Trouessart, E. L. 1905 A, 852 (Didelphys).
- Troxell, E. L. 1923 F, 509, fig. 4.
- Turner, H. N. 1847 A, 114, fig. 2 (Didelphys).
- Waterhouse, G. R. 1846 A, 465.
- Wood, H. E. 1924 A, tables 1, 2.
- Wortman, J. L. 1901 B, xii, 379, text-fig. 46.
- Wright, R. R. 1883 A, 24, figs. 5-8 (Didelphys).
- Recent; Great Lakes to Oklahoma and Texas nearly to Gulf, Hudson Valley to Florida and west to Louisiana: Pleistocene; Florida, Texas.
- Didelphis sp. indet.**
- Cooke, C. W. 1926 A, 445 ("opossum"). Pleistocene; Florida.

#### Thylacodon pusillus Matthew and Granger.

- Matthew and Granger 1921 A, 2.  
Simpson, G. G. 1928 G, 1.  
Paleocene (Puerco); New Mexico.

- Merrill, G. P. 1907 A, 62.  
Simpson, G. G. 1927 F, 122, 129.  
Trouessart, E. L. 1905 A, 842.  
Upper Cretaceous (Lance); Wyoming.

#### Telacodon praestans Marsh.

- Hay, O. P. 1902 A, 566.  
Bowen, C. F. 1915 A, 146.  
Lull, R. S. 1915 D, 323, 345.  
Merrill, G. P. 1907 A, 62.  
Simpson, G. G. 1927 F, 129 (This genus?).  
Upper Cretaceous (Lance); Wyoming.

#### Synconodon sexcuspis Osborn.

- Hay, O. P. 1902 A, 692.  
Abel, O. 1919 A, 724, fig. 545.  
Matthew, W. D. 1916 A, 478.  
Simpson, G. G. 1927 F, 123, 129.  
Cretaceous (Lance); Wyoming.

### Subclass MONDELPHIA.

- Hay, O. P. 1902 A, 571.
- Abel, O. 1907 E, (249) ("placentalier").  
1913 B, 710 (Placentalia).  
1914 A, 48 ("placentalier").  
1919 A, 721 (Placentalia).
- Adloff, P. 1906 A, 114 ("placentalier").  
1907 A, 532 ("placentalier").  
1910 B, 277 ("placentalier").  
1918 A, 129 ("placentalier").
- Ärnäck-Christie-Linde, A. 1912 A, 621.
- Ahrens, H. 1912 A, 508 ("placentalier").

- Anthony, R. 1913 A, 256 ("euthériens").
- Ardt, T. 1907 D, 674 (Placentalia).  
1907 E, 208 ("placentalier").
- Beer, G. R. 1926 A, 327, 330 (Placentalia).
- Behlen, H. 1906 A, 197 ("placentalier").
- Bensley, B. A. 1901 B, 117 (Placentalia).  
1903 A, 84 (Eutheria).
- Bolk, L. 1916 A, 715.
- Bonaparte, C. L. 1838 B, 107 (Placentalia).
- Braus, H. 1906 A, 317 ("placentalier").
- Broom, R. 1897 B, 252 (Eutheria).

- Broom, R. 1897 D, 513 (Eutheria).  
 1899 A, 749 (Eutheria).  
 1903 I, 557 (Eutheria).  
 1909 D, 210 (Eutheria).
- Carus, V. 1875 A, 63, 68.
- Dependorff, T. 1898 A, 382 ("placentalier").  
 1907 C, 102 ("placentalier").
- Duckworth, W. L. H. 1904 A, 23 (Eutheria).
- Fraas, E. 1905 B, 382.
- Gadow, H. 1912 A, 818 (Eutheria).
- Gill, T. 1886 A, 46.
- Gottlieb, H. 1914 A, 185.
- Gregory, W. K. 1910 A, 231, 464.  
 1920 A, 236 (Placentalia).  
 1927 D, 231 ("placentalis").
- Gregory and Camp 1918 A ("placentalis").
- Haeckel, E. 1868 A, 441 (Placentalia).  
 1873 A, 512, 549 (Placentalia).  
 1893 A, xx, xxii ("placentalien").
- Hatschek, B. 1889 B, 117 ("amnioten").
- Hay, O. P. 1912 D, 579.
- Hennig, E. 1922 A, 258 ("placentalier"); 260 (Eutheria).
- Hill, J. P. 1897 A, 436 (Eutheria).
- Hogben, L. T. 1919 A, 72 (Placentalia).
- Howes, G. B. 1893 C, 591 (Placentalia).  
 1894 A, 87 (Placentalia).  
 1902 A, 524 (Placentalia).
- Hubrecht, A. A. W. 1897 A, 27 (Placentalia).  
 1908 A, 157.
- Huxley, T. H. 1863 E, 527.  
 1870 F, 538.  
 1880 E, 467 (Eutheria).
- Kükenthal, W. 1913 A, 677.
- Leche, W. 1900 A, 999 (Placentalia).
- Lydekker, R. 1893 F, 174 (Placentalia).  
 1899 B, 922 (Placentalia).
- Matthew, W. D. 1914 D, 491.  
 1915 K, 441 ("placental mammals").
- Meunier, S. 1903 A, 776 ("monodelphes").
- Osborn, H. F. 1897 I, 107 (Meseutheria, Ceneutheria).  
 1899 J, 415 (Placentalia).
- Osborn, H. F. 1907 H, 613.
- Owen, R. 1845 E, 120 ("placentaires").  
 1848 B, 199 ("placental mammals").
- Parker, W. K. 1885 C, 116 (Eutheria).  
 1886 A, 121, 269 (Eutheria).
- Parker and Haswell 1897 A, 449 (Eutheria).
- Rabl, C. 1903 A, 175 ("Choriata").
- Schlosser, M. 1898 D, 124 (Placentalia).  
 1900 C, 133 ("placentalier").
- Scott, W. B. 1913 A, 58, 59, 145.
- Simpson, G. G. 1927 F, 129 (Placentalia. This order?).  
 1928 C, 183 (Placentalia).
- Sixta, V. 1899 A, 329 ("placentalier").
- Smith, G. E. 1911 A, 293 (Eutheria).  
 1912 A, 425 (Eutheria).
- Steinmann, G. 1907 A, 467 (Placentalia).
- Stromer, E. 1908 A, 87.  
 1908 B, 170.  
 1912 A, 243.
- Terra, P. 1911 A, 257.
- Thacker, A. G. 1922 A, 606 (Placentalia).
- Thomas, O. 1887 A, 310 ("placentalis").  
 1888 A, 450 (Placentalia, Eutheria).
- Thompson, A. H. 1906 A, 262 ("placental mammals").
- Tims, H. W. M. 1902 A, 32 (Eutheria).  
 1911 A, 294 (Eutheria).
- Tomes, C. S. 1900 A, 35 ("placentalis").
- Tornier, G. 1888 A, 235 ("placentalther").  
 1894 A, 97 ("placentalier").
- Underhill, B. M. 1910 A, 75 (Placentalia).
- Weber, M. 1904 A, 362.
- Weber and Abel 1928 A, 3, 5, 93.
- Weber and Burlet 1927 A.
- Wiedersheim, R. 1892 A, 61 (Placentalia).
- Winge, H. 1906 A, 53 (Placentalia).  
 1923 A, 55, 116 (Placentalia).
- Woodward, H. 1904 B, 154 (Eutheria).
- Wortman, J. L. 1901 B, xi, 335.
- Zittel and Schlosser 1911 A, 364 (Placentalia).  
 1923 A, 443 (Placentalia).

## Order TÆNIODONTA Cope.

- Hay, O. P. 1902 A, 572.
- Abel, O. 1912 F, 509 (Ganodontia).  
 1913 B, 725 (Ganodontia).  
 1914 A, 100 (Ganodontia).  
 1919 A, 773.  
 1920 A, 426 (Ganodontia).
- Ameghino, F. 1889 A, 1025.  
 1906 E, 230 (Ganodontia).
- Anonymous 1897 A, 152 (Ganodontia).
- Ardt, T. 1912 A, 686 (Ganodontia).
- Beddard, F. E. 1902 A, 190 (Ganodontia).
- Case, E. C. 1898 C, 828 (Ganodontia).
- Clark and Sonntag 1896 A, 461 (Ganodontia).
- Cope, E. D. 1880 U, 149 ("taeniodontes").  
 -1885 BB, 72.
- Delafontaine, M. 1875 A, 170 ("tillodontes").
- Fischer, E. 1903 A, 721 ("taeniodonten").
- Gregory, W. K. 1910 A, 99, 341, 465 (Ganodontia).  
 1920 A, 166, 241.
- Hilzheimer, M. 1913 A, 569 (Ganodontia).
- Koken, E. 1893 B, 496.
- Lane, H. H. 1909 A, 25.  
 1910 A, 914.
- Loomis, F. B. 1921 A, 190 (Ganodontia).
- Lydekker, R. 1903 D, 125 ("taeniodonts").
- Matthew, W. D. 1909 C, 92, 94, 97, 102.  
 1909 D, 301.  
 1915 A, 259, fig. 30.  
 1915 K, 470.  
 1918 H, 609, 620.  
 1921 D, 212, 214.  
 1928 B, 957, 965, 977.
- Osborn, H. F. 1897 I, 107 (Ganodontia).  
 1899 J, 415 (Ganodontia).  
 1902 E, 358, fig. 1.  
 1907 G, 151.  
 1909 D, 186.  
 1910 B, 632.  
 1925 B, 18.
- Palacký, J. 1902 A, 3 ("ganodonten").
- Scharff, R. F. 1911 A, 244 (Ganodontia).
- Schlosser, M. 1898 B, 360, 361, 366 (Tillodontia).  
 1899 U, 462.

Schlosser, M. 1905 B, 126 (Ganodonta).  
 Scott, W. B. 1905 B, 361 (Ganodonta).  
 1913 A, 267, 276, 286 (Taniodontia); 625 (Ganodonta).  
 Seeley, H. G. 1886 A, 414.  
 Sinclair, W. J. 1905 D, 361 (Ganodonta).  
 Stromer, E. 1912 A, 175 (Ganodonta).  
 Terra, P. 1911 A, 264 (Ganodonta).  
 Thacker, A. G. 1922 A, 601, 603.

Trouessart, E. L. 1897 B, 87 (Ganodonta).  
 1905 A, 823 (Ganodonta).  
 Weber, M. 1904 A, 468, 510 (Ganodonta); 514 (Taniodontia).  
 Weber and Abel 1928 A, 125, 236 (Ganodonta, Taniodontia).  
 Zittel and Schlosser 1911 A, 413 (Ganodonta).  
 1923 A, 496 (Ganodonta); 665-667 (Taniodontia).

## CONORYCTIDÆ Wortman.

Hay, O. P. 1902 A, 572.  
 Anonymous 1897 A, 151.  
 Arldt, T. 1907 D, 620.  
 1912 A, 700.  
 Beddard, F. E. 1902 A, 193.  
 Lane, H. H. 1909 A, 25.  
 1910 A, 914.  
 Matthew, W. D. 1909 C, 92, 102.  
 1914 B, 387.  
 1921 D, 212.

Osborn, H. F. 1909 D, 34.  
 Schlosser, M. 1899 U, 463 ("conorycti").  
 Trouessart, E. L. 1897 B, 87.  
 1905 A, 823.  
 Weber, M. 1904 A, 468.  
 Weber and Abel 1928 A, 236.  
 Winge, H. 1917 A, 91 (Conoryctidæ); 92, 105, 108 (Conoryctini).  
 Zittel and Schlosser 1911 A, 414 (Conoryctinæ).  
 1923 A, 497 (Conoryctinæ).

CONORYCTES Cope. Type *C. comma* Cope.

Hay, O. P. 1902 A, 573.  
 Abel, O. 1913 B, 725.  
 1914 A, 101.  
 1919 A, 773.  
 Ameghino, F. 1906 E, 230.  
 Anonymous 1897 A, 151.  
 Beddard, F. E. 1902 A, 193.  
 Behlen, H. 1906 A, 193.  
 Haug, E. 1911 A, 1528.  
 Loomis, F. B. 1922 A, 62.  
 Matthew, W. D. 1909 C, 102.  
 1915 K, fig. 37.  
 1918 H, 609.  
 1924 E, 749.  
 1928 B, 957.  
 Osborn, H. F. 1907 G, 152, fig. 117.  
 1910 B, 109, 540.  
 Palmer, T. S. 1904 A, 199, 813.  
 Scharff, R. F. 1911 A, 244.  
 Schlosser, M. 1898 B, 362, 366.

Schlosser, M. 1899 U, 461.  
 Seeley, H. G. 1886 A, 415.  
 Weber, M. 1904 A, 468.  
 Weber and Abel 1928 A, 236.  
 Winge, H. 1917 A, 105, 181 (Conoryctes, Hexodon).  
 1923 A, 134, 196, 212.  
 Zittel and Schlosser 1911 A, 414.  
 1923 A, 497, 665.

*Conoryctes comma* Cope.

Hay, O. P. 1902 A, 573.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 41.  
 Trouessart, E. L. 1905 A, 823.  
 Zittel and Schlosser 1911 A, 414, fig. 575.  
 1923 A, 497, fig. 615.  
 Paleocene (Torrejon); New Mexico.

ONYCHODECTES Cope. Type *O. tisonensis* Cope.

Hay, O. P. 1902 A, 573.  
 Abel, O. 1913 B, 725.  
 1914 A, 101.  
 1919 A, 773.  
 Ameghino, F. 1906 A, 284.  
 1906 E, 230.  
 Anonymous 1897 A, 151.  
 Beddard, F. E. 1902 A, 193.  
 Gregory, W. K. 1920 A, 167, 241, fig. 112.  
 Haug, E. 1911 A, 1527.  
 Loomis, F. B. 1922 A, 62 (Onychodectes).  
 Matthew, W. D. 1909 C, 102.  
 1915 K, fig. 37.  
 1918 H, 610.  
 1924 E, 749.  
 1928 B, 957.  
 Matthew and Granger 1925 A, 7.  
 Osborn, H. F. 1907 G, 152, figs. 118, 119.  
 Palmer, T. S. 1904 A, 475, 813.  
 Scharff, R. F. 1911 A, 244.  
 Schlosser, M. 1898 B, 362, 366.

Schlosser, M. 1899 U, 462.  
 Weber, M. 1904 A, 468.  
 Weber and Abel 1928 A, 236.  
 Winge, H. 1917 A, 105, 108.  
 1923 A, 134, 212, 215, 216.  
 Zittel and Schlosser 1911 A, 414.  
 1923 A, 497.

*Onychodectes rarus* Osborn and Earle.

Hay, O. P. 1902 A, 573.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 366.  
 Trouessart, E. L. 1905 A, 823.  
 Paleocene (Puerco); New Mexico.

*Onychodectes tisonensis* Cope.

Hay, O. P. 1902 A, 573.  
 Beddard, F. E. 1902 A, 193.

Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.

Reeside, J. B. 1924 A, 38.  
Schlosser, M. 1898 B, 366.  
Paleocene (Puerco); New Mexico.

## STYLINODONTIDÆ Marsh.

Hay, O. P. 1902 A, 573.  
Ameghino, F. 1889 A, 894 (Calamodontidæ).  
Anonymous 1897 A, 151.  
Arlt, T. 1907 A, 238 ("stylinodontiden").  
1907 D, 683.  
1912 A, 700.  
Baird, S. F. 1876 A, 337.  
Beddard, F. E. 1902 A, 191.  
Delafontane, M. 1875 A, 170 ("stylinodontes").  
Gregory, W. K. 1922 A, 51, 61 (Styloidontidæ).  
Lane, H. H. 1909 A, 25 (Styliodontidæ).  
1910 A, 914.  
Matthew, W. D. 1906 B, 361.  
1909 C, 92, 94, 97, 102.  
1914 B, 387.  
1918 H, 610 ("stylinodonts").  
1921 D, 212, 214.  
Osborn, H. F. 1909 D, 34, 40.

Palacký, J. 1902 A, 3 ("calamadonten").  
Palmer, T. S. 1904 A, 771, 821.  
Schlosser, M. 1899 U, 463.  
Trouessart, E. L. 1897 B, 87.  
1905 A, 824.  
Wallace, A. R. 1876 A, 1, 139.  
Weber, M. 1904 A, 468.  
Weber and Abel 1928 A, 125, 236.  
Winge, H. 1917 A, 91, 104, 107, 181 (Stylinodontidæ); 92, 108 (Stylinodontini); 99, 100, 107 (Onychodectini).  
1923 A, 123, 133, 134, 135, 136, 198, 212 (Stylinodontidæ, Stylinodontinæ, Conoryctini, Onychodectidæ, Onychodectini).  
Zittel and Schlosser 1911 A, 414 (Stylinodontinæ).  
1923 A, 497 (Stylinodontinæ).

WORTMANIA Hay. Type *Hemiganus otariidens* Cope.

Hay, O. P. 1902 A, 573.  
Abel, O. 1913 B, 725 (Hemiganus).  
1914 A, 101 (Hemiganus).  
1919 A, 773.  
Ameghino, F. 1906 A, 284 (Hemiganus).  
1906 E, 230.  
Anonymous 1897 A, 151 (Hemiganus).  
Haug, E. 1911 A, 1527.  
Matthew, W. D. 1909 C, 102.  
1915 K, fig. 37.  
1918 H, 609.  
1924 E, 749.  
1928 B, 957.  
Osborn, H. F. 1907 G, 153, fig. 120 (Hemiganus).  
1910 B, 540.  
Palmer, T. S. 1904 A, 318, 821 (Hemiganus); 709, 821 (Wortmania).  
Weber, M. 1904 A, 468 (Hemiganus).

Weber and Abel 1928 A, 236 (Hemiganus); 237 (Wortmania).  
Winge, H. 1917 A, 106 (Hemiganus).  
Zittel and Schlosser 1911 A, 414 (Hemiganus).  
1923 A, 497 (Hemiganus).

## Wortmania otariidens (Cope).

Hay, O. P. 1902 A, 573.  
Beddard, F. E. 1902 A, 191 (Hemiganus).  
Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.  
Reeside, J. B. 1924 A, 38.  
Weber, M. 1904 A, 408, fig. 358 (Hemiganus).  
Weber and Abel 1928 A, 236, fig. 151 (Hemiganus).  
Paleocene (Puerco); New Mexico.

PSITTACOTHERIUM Cope. Type *P. multifragum* Cope.

Hay, O. P. 1902 A, 574.  
Abel, O. 1913 B, 725.  
1914 A, 101.  
1919 A, 773.  
Ameghino, F. 1906 E, 230.  
Anonymous 1897 A, 151.  
Beddard, F. E. 1902 A, 191.  
Granger, W. 1917 A.  
Gregory, W. K. 1920 A, 166.  
Haug, E. 1911 A, 1528.  
Loomis, F. B. 1922 A, 62.  
Matthew, W. D. 1909 C, 102.  
1915 K, fig. 37.  
1924 E, 749.  
1928 B, 957.  
Osborn, H. F. 1905 I, 97.  
1907 G, 154, figs. 121-123.  
1910 B, 109, 540.  
Palmer, T. S. 1904 A, 594, 821.  
Scharff, R. F. 1911 A, 244.  
Schlosser, M. 1898 B, 361.  
1899 U, 461, 466.

Seeley, H. G. 1886 A, 415.  
Terra, P. 1911 A, 263.  
Tims, H. W. M. 1901 A, 284.  
Trouessart, E. L. 1897 B, 86.  
1905 A, 824.  
Weber and Abel 1928 A, 236, 238.  
Winge, H. 1917 A, 106, 108.  
1923 A, 135, 212.  
Zittel and Schlosser 1911 A, 414.  
1923 A, 497.

## Psittacotherium multifragum Cope.

Hay, O. P. 1902 A, 574.  
Abel, O. 1913 B, 726, fig. 31.  
1914 A, 101, fig. 61.  
1919 A, 774, fig. 579.  
1920 A, 427, fig. 647.  
Beddard, F. E. 1902 A, 191.  
Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.  
Reeside, J. B. 1924 A, 41.



- Schlosser, M. 1898 B, 367.  
1899 U, 461.  
Trouessart, E. L. 1905 A, 824.  
Zittel and Schlosser 1911 A, 414, fig. 576.  
1923 A, 498, fig. 616.  
Paleocene (Torrejon); New Mexico.

**Psittacotherium** sp. indet.

- Gidley, J. W. 1924 B, 47. Eocene (Wasatch); Colorado.  
Lull, R. S. 1915 D, 326. Paleocene (Fort Union); Montana.  
Reeside, J. B. 1924 A, 47. Eocene (Wasatch); Colorado.

CALAMODON Cope. Type *C. simplex* Cope.

- Hay, O. P. 1902 A, 574.  
Abel, O. 1913 B, 725, 726.  
1914 A, 101.  
Ameghino, F. 1885 A, 154.  
1906 E, 230.  
Anonymous 1897 A, 151.  
Baird, S. F. 1876 A, 305.  
Beddard, F. E. 1902 A, 193.  
Depéret, C. 1905 C, 703.  
Haug, E. 1911 A, 1528.  
Matthew, W. D. 1909 C, 102.  
1915 K, fig. 37.  
1928 B, 977.  
Osborn, H. F. 1898 V, 206.  
1907 G, 155, figs. 124, 125.  
1909 D, 40.  
1910 B, 125, 132, 140, 540.  
1912 G, 236, fig. 3.  
Palacký, J. 1902 A, 3.  
Schlosser, M. 1899 U, 462, 467.  
Scott, W. B. 1913 A, 274.  
Stehlin, H. G. 1916 B, 1435.  
Steinmann, G. 1907 A, 478.  
Terra, P. 1911 A, 263.  
Tims, H. W. M. 1901 A, 284.  
Trouessart, E. L. 1905 A, 824.  
Wallace, A. R. 1876 A, 1, 139.  
Weber, M. 1904 A, 468.  
Weber and Abel 1928 A, 236, 237.  
Winge, H. 1917 A, 107.  
1923 A, 136, 212.  
Wortman, J. L. 1903 A, xv, 431.  
Zittel and Schlosser 1911 A, 414.  
1923 A, 497, 666.

**Calamodon arcamœnus** Cope.

- Hay, O. P. 1902 A, 574.  
Matthew, W. D. 1909 C, 94.  
Merrill, G. P. 1907 A, 26.  
Reeside, J. B. 1924 A, 46.  
Lower Eocene (Wasatch); New Mexico.

**Calamodon novomehicanus** Cope.

- Hay, O. P. 1902 A, 575 (Ectoganus).  
Matthew, W. D. 1909 C, 94.  
Merrill, G. P. 1907 A, 27 (Calamodon); 85 (Ectoganus).  
Reeside, J. B. 1924 A, 46.  
Trouessart, E. L. 1905 A, 825 (Ectoganus).  
Lower Eocene (Wasatch); New Mexico.

**Calamodon simplex** Cope.

- Hay, O. P. 1902 A, 574.  
Abel, O. 1914 A, 101, fig. 62.  
Cope, E. D. 1891 N, 74.  
Matthew, W. D. 1909 C, 94.  
Merrill, G. P. 1907 A, 27.  
Reeside, J. B. 1924 A, 46.  
Schlosser, M. 1899 U, 463.  
Stehlin, H. G. 1916 B, 1448.  
Trouessart, E. L. 1905 A, 824.  
Weber, M. 1904 A, 468, figs. 356, 357.  
Weber and Abel 1928 A, 236, fig. 150.  
Lower Eocene (Wasatch); Wyoming, New Mexico.

**Calamodon** sp. indet.

- Douglass, E. 1908 D, 22, pl. ii, figs. 14-16 (This genus?). Paleocene (Fort Union); Montana.  
Merrill, G. P. 1907 A, 27. Eocene (Wasatch); New Mexico.

DRYPTODON Marsh. Type *D. crassus* Marsh.

- Hay, O. P. 1902 A, 575.  
Haug, E. 1911 A, 1528.  
Hoernes, R. 1886 A, 664.  
Matthew, W. D. 1909 C, 102.  
Palmer, T. S. 1904 A, 246, 821.  
Schlosser, M. 1899 U, 463.  
Zittel and Schlosser 1911 A, 414 (Syn. of Calamodon).  
1923 A, 497 (Syn. of Calamodon).

**Dryptodon crassus** Marsh.

- Hay, O. P. 1902 A, 575.  
Matthew, W. D. 1909 C, 94.  
Trouessart, E. L. 1905 A, 825.  
Lower Eocene (Wasatch?); New Mexico.

STYLODON Marsh. Type *S. mirus* Marsh.

- Hay, O. P. 1902 A, 574.  
Abel, O. 1913 B, 726.  
Ameghino, F. 1906 E, 230.  
Anonymous 1897 A, 151.  
Beddard, F. E. 1902 A, 193.  
Gaudry, A. 1906 B, 124.  
Gregory, W. K. 1922 A, 42 (Stylodon).  
Haug, E. 1911 A, 1528.

- Matthew, W. D. 1909 C, 102.  
1915 K, fig. 37.  
1922 A, XIII (Stylodon).  
1928 B, 977.  
Osborn, H. F. 1907 G, 156, fig. 126.  
1909 D, 44-46, 52.  
1910 B, 133, 155, 540.  
Palmer, T. S. 1904 A, 650, 821.

Schlosser, M. 1899 U, 461, 466.  
 Scott, W. B. 1913 A, 274.  
 Terra, P. 1911 A, 263.  
 Trouessart, E. L. 1905 A, 824.  
 Weber, M. 1904 A, 468.  
 Winge, H. 1917 A, 107, 108.  
 Zittel and Schlosser 1911 A, 415 (Stylinodon).  
 1923 A, 498, 666, 667.

### **Stylinodon cylindrifera** (Cope).

Hay, O. P. 1902 A, 575.

Beddard, F. E. 1902 A, 193.  
 Matthew, W. D. 1909 C, 94.  
 Trouessart, E. L. 1905 A, 824.  
 Lower Eocene (Wind River); Wyoming.

### **Stylinodon mirus** Marsh.

Hay, O. P. 1902 A, 575.  
 Matthew, W. D. 1909 C, 97.  
 Schlosser, M. 1899 U, 461.  
 Trouessart, E. L. 1905 A, 824.  
 Middle Eocene (Bridger); Wyoming.

### **Ectoganus** Cope. Type *E. gliriformis* Cope.

Hay, O. P. 1902 A, 575.  
 Ameghino, F. 1906 E, 230.  
 Cope, E. D. 1875 Y, 447.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 Palmer, T. S. 1904 A, 251, 821.  
 Schlosser, M. 1899 U, 461, 463.

### **Ectoganus gliriformis** Cope.

Hay, O. P. 1902 A, 575.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 35.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.

## **Order XENARTHRA** Cope.

Unless otherwise indicated the authors, as cited, use the name *Edentata* for this Order.

Cope, E. D. 1889 P, 657 (Xenarthra).

Hay, O. P. 1902 A, 571 (Bruta); 575 (Xenarthra).

Abel, O. 1901 A, 23 ("édentés").

1901 B, 315 ("edentaten").

1910 B, (186) (Xenarthra).

1912 F, 261, 294, 368, 562, 708 (Xenarthra).

1913 B, 725 (Xenarthra).

1914 A, 99 (Xenarthra).

1919 A, 772 (Xenarthra).

1920 A, 425 (Xenarthra).

1921 A, 188, 281, 299 (Xenarthra).

1922 C, 292 ("xenarthren").

1926 B, 237 (Xenarthra).

Agassiz, L. 1844 D, 137.

Allen, J. A. 1913 B, 454.

Ameghino, F. 1889 B, 280.

1902 A, 166 (Xenarthra).

1905 A, 47 ("edentados").

1906 D, 90 (Xenarthra).

1906 E, 175 ("édentés"); 241 (Xenarthra).

1907 A, 120 ("edentados").

1909 A, 1 ("edentados").

1911 A, 212, 221 ("edentaten").

Anonymous 1897 A, 150.

Anthony, R. 1912 A ("paresseux").

Ardt, T. 1907 A, 243.

1907 B, 455 ("edentaten").

1907 C, 677 ("edentaten").

1907 D, 652 (Edentata); 688 (Xenarthra).

1911 A, 212, 221 (Edentata); 221 ("xenarthren").

Ballowitz, E. 1892 A, 133 ("edentaten").

Bardleben, K. 1885 B, 85 ("edentaten").

1889 B, 259 ("edentaten").

1904 A, 111 ("edentaten").

1906 A, 140 ("edentaten").

Bardenfeth, K. S. 1913 A, 69.

Bayer, F. 1897 A, 147 ("édentés").

Beddard, F. E. 1902 A, 161 (Edentata); 166 (Paratheria).

Bensley, B. A. 1902 A, 4.

Bertelli, D. 1909 A, 161 ("edentati").

Beyer, H. 1908 A, 90 ("edentaten").

Black, N. 1900 A, 9.

Blatschke, F. 1904 A, 151 ("edentaten").

Bluntschli, H. 1912 B, 390 ("edentaten").  
 1913 A, 42 ("edentaten").

Boas, J. E. V. 1914 B, 577 ("edentaten").

Bonsdorff, E. J. 1871 A, 318.

Boule and Thevenin 1920 A, 204 (Xenarthra, "édentés").

Branca, W. 1908 B, 44.

Broom, R. 1897 B, 252.

1897 C, 279 ("edentates").

1902 D, 549.

1903 I, 549.

1915 A, 162.

Carus, V. 1875 A, 172 (Bruta).

Carus and Engelmann 1861 A, 1298 (Bruta).

Case, E. C. 1898 C, 826.

Chandler, A. C. 1914 B, 139 ("edentates").

Clark and Sonntag 1926 A, 453, 463 (Edentata);  
 468, 471 (Xenarthra).

Cleland, J. 1863 B, 302.

Cope, E. D. 1885 BB, 72.

1891 N, 67, 70, 90.

Cuvier, F. 1825 A, 191 ("édentés").

Cuvier, G. 1825 A, v, 1, 67-145 ("édentés").

Dana, J. D. 1863 A, 1 ("edentates").

Dependorf, T. 1907 C, 110 ("edentaten").

Dijkstra, O. H. 1923 A, 303.

Dollo, L. 1889 E, 187 ("édentés").

Doran, A. H. G. 1878 A, 470.

Eggeling, H. 1904 A, 87 ("edentaten").

Eimer, G. H. T. 1901 A, 60 ("edentaten"); 258 ("faultere").

Elliot, D. G. 1901 A, 4.

Fischer, J. B. 1829 A, 386.

Flower, W. H. 1882 A, 358.

Frassetto, F. 1915 A, 79 ("edentati").

Frey, H. 1911 A, 409.

Fuchs, H. 1910 A, 59 ("edentaten").

Fürbringer, M. 1904 A ("edentaten").

Gadow, H. 1896 A, 48.

1912 A, 821 ("edentates").

1913 A, 120 ("edentates").

Gaudry, A. 1906 B, 110 ("édentés").

- Gaupp, E. 1911 B, 101 (Xenarthra).  
 1911 D, 621 ("edentaten"); 625 (Xenarthra).  
 1913 A, 63 (Xenarthra).
- Gegenbaur, C. 1888 A, 396 ("edentaten").
- Gervais, P. 1859 A, 254 ("édentés").
- Gessner, I. 1921 A, 271 ("edentaten").
- Giebel, C. T. 1855 A, 59.  
 1883 A ("edentaten").
- Gill, T. 1886 A, 46.  
 1910 A, 56 (Xenarthra).
- Goodsir, J. 1837 A.
- Gottlieb, H. 1914 A, 187 (Xenarthra).
- Gregory, W. K. 1910 A (Edentata); 339, 340 (Xenarthra).  
 1912 F, 294.  
 1920 A, 163, 240.  
 1921 A, 69.
- Grevé, C. 1912 A, 77 ("edentaten").
- Haackel, E. 1868 A, 479 ("edentaten").  
 1873 A, 544.
- Hasse and Schwarck 1870 A, 122.
- Hay, O. P. 1912 B, 9 ("edentates").  
 1912 D, 554 (Edentata, Xenarthra).  
 1914 A, 103.  
 1924 D, 335.  
 1927 E, 77 ("edentates").
- Heilprin, A. 1887 A, 336.
- Hilzheimer, M. 1913 A, 569 (Xenarthra).
- Hogben, L. T. 1919 A, 74 (Xenarthra).
- Howes, G. B. 1891 A, 153.  
 1893 C, 591.
- Huxley, T. H. 1863 D, 233.  
 1863 E, 555.  
 1868 C, 314.  
 1880 E, 462.
- Ihde, — 1912 A, 265 ("edentaten").
- Ihering, H. 1909 A, 301 (Bruta).
- Jaekel, O. 1909 B, 611 (Paratheria).  
 1909 C, 706 ("edentaten").  
 1910 D, 113, 122 (Paratheria).  
 1911 A, 180 (Paratheria).
- Kampfen, P. N. van 1905 A, 473 (Xenarthra).
- Kingsley, J. S. 1925 A, 207 (Xenarthra); 207, 295 (Edentata).
- Köstlin, O. 1844 A ("zahnlosen").
- Koken, E. 1893 B, 486, 487 ("edentaten").
- Kükenthal, W. 1913 A, 679 (Xenarthra).
- Lane, H. H. 1909 A, 25 (Edentata, Xenarthra).  
 1910 A, 914 (Edentata, Xenarthra).
- Lataste, F. 1887 A, 268 ("édentés").
- Lavocat, A. 1885 A, 46 ("édentés").
- Leche, W. 1887 A.
- Leenhardt, L. E. E. 1906 A, 176 ("édentés").
- Lehman-Nitsche 1900 A, 103 ("edentaten").
- Lobley, J. L. 1908 A, 196.
- Loomis, F. B. 1921 A, 190 (Xenarthra).
- Lubosch, W. 1908 B.  
 1911 B, 742 ("edentaten").  
 1926 A, 109 ("edentaten").
- Lull, R. S. 1917 B, 308, 333.
- Lydekker, R. 1893 F, 172 ("edentates").  
 1902 B, 375 ("edentates").
- Major, C. J. F. 1899 B, 62.
- Martins, C. 1857 A, 81 ("édentés").
- Matthew, W. D. 1904 D, 815.  
 1909 C, 97, 102, 114, 119, 120.  
 1909 D, 301.  
 1910 G, 158, 159.
- Matthew, W. D. 1912 F, 301.  
 1915 A, 259, figs. 29, 30 (Xenarthra); 187, 259, fig. 29 (Edentata).  
 1915 K, 468.  
 1918 H, 610, 620 ("edentate").  
 1928 B, 948, 965, 977.
- Matthew and Cook 1909 A, 383.  
 1909 B, 197, 366.
- Mead, C. S. 1906 A, 480 (Xenarthra).
- Meckel, J. F. 1809 A, tab. i (Edentula, Edentata).  
 1825 A ("zahnlosen").
- Menegaux, A. 1909 A, 277, pls. iii-vi ("édentés").
- Mitchell, P. C. 1905 A, 437 (Xenarthra).
- Mysberg, W. A. 1917 A, 652 (Xenarthra).
- Osborn, H. F. 1897 I, 107 ("edentates").  
 1899 J, 415.  
 1905 H, 207, fig. 2.  
 1905 I, 99.  
 1907 G, 13, 151.  
 1909 D, 59, 125.  
 1910 B, 78, 174, 289, 539, 540.  
 1917 B, 236, 237, 259.  
 1925 B, 18.
- Owen, R. 1843 C, 353.  
 1845 E, 120 (Bruta).  
 1851 D, 350 (Bruta, Edentata).  
 1857 E (Bruta).  
 1858 A, 23 (Bruta).
- Palacký, J. 1902 A, 1 (Edentata); 4 (Xenarthra).
- Pander and Alton 1825 A, 2 ("zahnloesenthiere").
- Parker and Haswell 1897 A, 449.
- Paulli, S. 1900 B, 506, 537, figs. 20-25.
- Perna, G. 1906 A, 123.
- Pfeiffer, H. 1854 A, 14 ("faulthier").
- Pictet, F. J. 1853 A, 260 ("édentés").
- Poche, F. 1903 A, 567 (Bradypus).  
 1911 B (Bradypodidae).
- Puccini, N. 1908 A, 41.
- Rehs, J. 1914 A, 39 (Xenarthra); 2, 39 (Edentata).
- Retzius, A. 1849 A, 650.
- Reynolds, S. H. 1897 A, 351, 539.
- Ridewood, W. G. 1901 A, 393.
- Schapiro, B. 1913 A, 220.
- Scharff, R. F. 1911 A, 152, 234, 353, 401.
- Schlosser, M. 1898 D, 121 ("edentaten").  
 1899 I, 347 ("edentaten").  
 1899 U, 462, 466 (Xenarthra).  
 1904 A ("edentaten").  
 1911 A, 165.
- Schmidt, O. 1886 A, 110.
- Schulthess, B. 1920 A, 1-119 (Xenarthra).
- Scott, W. B. 1896 C, 308  
 1903 A, 900.  
 1905 A, 242.  
 1913 A.  
 1916 A, 117 ("edentates").  
 1928 B, 254.
- Seeley, H. G. 1872 A, 275 ("edentates").  
 1878 A, 225 ("edentatés").
- Sefve, I. 1915 A, 77 (Xenarthra).
- Serres, M. 1852 A, 145 ("édentés").
- Simpson, G. G. 1927 H, 293 (Xenarthra).
- Sinclair, W. J. 1905 D, 1, 361, 493.  
 1906 A, 65, figs. 1-3 ("edentate?").
- Smith, G. E. 1903 B, 48.  
 1912 A, 425.

Stehlin, H. G. 1916 B, 1502 (Xenarthra).  
 Steinmann, G. 1907 A, 474.  
     1909 A, 67 ("edentaten").  
     1910 A, 102 ("edentaten").  
 Stromer, E. 1903 C, 63.  
     1908 B, 168.  
     1912 A, 172 (Xenarthra); 243 (Edentata).  
 Taschenberg, O. 1899 A, 4426.  
 Terra, P. 1911 A, 258 (Edentata); 260 (Xenarthra).  
 Thacker, A. G. 1922 A, 601, 603.  
 Thomas, O. 1888 A, 458.  
 Tims, H. W. M. 1914 A, 378 ("edentates").  
 Tornier, G. 1891 A, 185 ("xenarthren").  
     1894 B, 104 ("faulthiere").  
 Treggold, A. F. 1897 A, 295.  
 Trouessart, E. L. 1897 B, 87 (Xenarthra).  
     1905 A, 738 (Edentata, Xenarthra).  
 Turner, H. N. 1847 A, 110.  
 Vallois, H. V. 1921 B, 975 ("édentés").  
 Van den Broeck, A. J. P. 1912 A, 784 (Xenarthra).  
 Vicq-d'Azyr, F. 1792 A, ciii (Edentati).  
     1819 A, 47 (Edentati).

Wagner, R. 1843 A, 12.  
 Wallace, A. R. 1876 A, II, 244.  
 Waterhouse, G. R. 1842 A, 344.  
 Watson, D. M. S. 1916 A, 361.  
 Weber, M. 1904 A, 412, 420, 430 (Xenarthra, Effodienta); 412 (Edentata).  
 Weber and Abel 1928 A, 171, 187, 215, 898 (Xenarthra).  
 Weber and Burlet 1927 A (Xenarthra).  
 Wegner, R. N. 1922 A, 418 (Xenarthra).  
 Winge, H. 1915 A, 219 (Edentata, Xenarthra).  
     1923 A, 282, 289, 329 (Xenarthra); 274, 328 (Edentata).  
 Woodward, A. S. 1898 B, 277.  
     1904 D, 155.  
     1923 C, 70.  
 Wortman, J. L. 1901 C, 211.  
     1920 A, 15.  
 Zaaier, T. 1894 A, 339.  
 Ziegler, H. E. 1901 A, 232.  
 Zittel and Schlosser 1911 A, 410 (Edentata); 413 (Xenarthra).  
     1923 A, 493 (Edentata); 496 (Xenarthra).

### Suborder TARDIGRADA Macartney.

*Macartney, J.* 1802, Lectures Comp. Anat., I, table 1 (Includes *Bradypus*, *Megatherium*).  
 Abel, O. 1909 A, 2, 15 (Anicanodonta).  
     1912 F, 377 (Anicanodonta).  
     1913 B, 726 (Anicanodonta).  
     1914 A, 100, 103 (Anicanodonta).  
     1920 A, 427 (Anicanodonta).  
 Ameghino, F. 1889 A, 653, 1006 (Anicanodonta).  
     1893 A, 397 (Anicanodonta).  
     1906 D, 90 (Anicanodonta).  
     1909 A, 15, 24 (Anicanodonta).  
     1909 B, 109.  
 Burmeister, H. 1886 C, 87-125, with pls. (Tardigrada, Gravigrada).  
 Flower, W. H. 1883 A, 178 (Pilosa).  
 Gill, T. 1872 B, 24.

Gregory, W. K. 1910 A, 465 (Anicanodonta).  
 Haeckel, E. 1868 A, 479.  
 Hay, O. P. 1927 E, 77 ("ground sloths").  
 Illiger, C. 1811 A, 108.  
 Kingsley, J. S. 1925 A, 259 (Bradypus).  
 Matthew, W. D. 1928 B, 977 ("sloths").  
 Osborn, H. F. 1910 B, 540 (Pilosa).  
 Scott, W. B. 1913 A, 186, 591, 610.  
     1928 B, 261 (Gravigrada).  
 Weber, M. 1904 A, 458 (Anicanodonta).  
 Weber and Abel 1928 A, 217, 224, 229 (Anicanodonta).  
 Winge, H. 1923 A, 282, 310, 326 (Bradypodidae).  
 Zittel and Schlosser 1911 A, 413 (Anicanodonta).  
     1923 A, 496 (Anicanodonta); 497, 498 (Gravigrada).

### Superfamily MEGATHERIOIDÆ, new form.

Unless otherwise indicated the authors, as quoted, use for this group the name Gravigrada.  
 Abel, O. 1912 F, 377, 675.  
     1914 A, 103.  
     1919 A, 775 (Gravigradidæ).  
 Ameghino, F. 1885 A, 111.  
     1898 A, 397.  
     1900 A, 199.  
     1906 D, 91.  
     1906 E, 231, 242.  
     1909 A, 15.  
 Arldt, T. 1907 A, 238, 243.  
     1907 B, 455 ("gravigraden").  
     1907 C, 677.  
     1907 D, 29, 144.  
 Beddard, F. E. 1902 A, 179.  
 Burmeister, H. 1868 B, 759 ("gravigraden").  
     1879 B, 279.  
     1881 A, 374 ("gravigraden").  
     1886 B, 1131 ("gravigraden").  
     1887 A, 861.  
 Carus, V. 1875 A, 178.

Case, E. C. 1898 C, 826.  
 Gray, J. E. 1821 A, 305 (Oligodontæ).  
 Hay, O. P. 1912 D, 555.  
     1914 A, 105.  
 Jaekel, O. 1909 C, 708.  
     1911 A, 225 (Gravigradi).  
 Matthew, W. D. 1912 F, 302 ("ground sloths").  
     1913 B, 291 ("ground sloths").  
     1915 A, 204 ("ground sloths").  
     1919 B, 178 ("ground sloths").  
 Miller, L. H. 1915 B, 75 ("ground sloths").  
 Osborn, H. F. 1906 C, 776.  
     1909 D, 126.  
 Owen, R. 1843 C, 359.  
 Pictet, F. J. 1853 A, 263 ("Gavigrades").  
 Scharff, R. F. 1911 A, 399.  
 Schulthess, B. 1920 A, 56, 71 ("gravigraden").  
 Scott, W. B. 1903 A, 901.  
     1905 A, 242.  
     1905 B, 494.  
     1913 A, 205, 598, 681.  
     1916 A, 116 ("ground sloths").  
 Sinclair, W. J. 1905 D, 161, 363, 495.

- Terra, P. 1911 A, 262.  
 Weber and Abel 1928 A, 224, 229 (Gravigrada). | Winge, H. 1923 A, 329 (Gravigrada).  
 Zittel and Schlosser 1911 A, 415.

## MEGATHERIIDÆ Flower, W. H.

- Flower, W. H. 1882 A, 360.  
 Hay, O. P. 1902 A, 575.  
 Ameghino, F. 1889 A, 1018 (Megatheriidæ).  
 1897 B, 260 (Megatheria).  
 1904 C, 131.  
 Arldt, T. 1907 A, 243 (Megatheriidæ).  
 1907 D, 664 (Megatheriidæ).  
 1912 A, 699 (Megatheriidæ).  
 Beddard, F. E. 1902 A, 183.  
 Cope, E. D. 1880 U, 152.  
 1891 N, 70.  
 Dall and Harris 1892 A, 284.  
 Gill, T. 1886 A, 65.  
 Gray, J. E. 1821 A, 305 (Megatheriadæ).  
 Hay, O. P. 1923 A, 5, 312.  
 Hoernes, R. 1886 A, 663 (Megatheriidæ).  
 Kraglievich, L. 1925 C, 244.  
 1926 B, 22.  
 Lane, H. H. 1909 A, 25.  
 1910 A, 914.  
 Osborn, H. F. 1910 B, 541.  
 Palmer, T. S. 1904 A, 819.  
 Reynolds, S. H. 1897 A, 546.  
 Scott, W. B. 1905 B, 495.  
 1913 A, 591, 598, 607.  
 Sinclair, W. J. 1905 D, 495.  
 Thomas, O. 1888 A, 458.  
 Trouessart, E. L. 1905 A, 795.  
 Weber and Abel 1928 A, 224, 229 (Gravigrada).  
 Winge, H. 1923 A, 282, 310 (Megatheriini).  
 Woodward, A. S. 1898 B, 278.  
 Zittel and Schlosser 1911 A, 415 (Megatheriini).  
 1923 A, 499 (Megatheriini).

## MEGATHERIINÆ Gill.

- Gill, T. 1872 B, 24.  
 Abel, O. 1913 B, 726.  
 1919 A, 778.  
 Ameghino and Kraglievich 1921 A, 141 (Megatheriidæ).  
 Arldt, T. 1912 A, 744.  
 Gervais, P. 1855 A, 52 ("mégathériidés").  
 Giebel, C. G. 1883 A ("megatherien").  
 Stock, C. 1925 A, 49.  
 Trouessart, E. L. 1905 A, 795.  
 Weber and Abel 1928 A, 224, 229, 232.  
 Winge, H. 1915 A, 220, 244.  
 Zittel and Schlosser 1911 A, 415.  
 1923 A, 499.

MEGATHERIUM Cuvier. Type *M. americanum* Cuvier.

- Hay, O. P. 1902 A, 576.  
 Abel, O. 1912 F, 261, 373, 684.  
 1914 A, 108.  
 1914 C, 352.  
 1921 A, 284.  
 1925 A, 13, fig. 10.  
 Ameghino, F. 1883 B, 62.  
 1885 A, 111, 204.  
 1889 A, 1018.  
 1904 C, 131.  
 1905 A, 55.  
 1907 A, 89, fig. 9.  
 1912 A, 60.  
 1912 B, 178.  
 Ameghino and Kraglievich 1921 A, 135, seq., 5 pls.  
 Arldt, T. 1907 D, 29.  
 Beddard, F. E. 1902 A, 183.  
 Boule, M. 1891 A, 38.  
 1902 A, 914, fig. 27.  
 1923 A, 399.  
 Boule and Thevenin 1920 A, 213.  
 Bronn, H. G. 1838 A, 1247, pl. xlv, fig. 4.  
 1848 A, 710.  
 1849 A, 713.  
 Bru, J. B. 1804 A, 387, pls. xxiv, xxv.  
 Buckland, F. T. 1838 A, 104.  
 Burmeister, H. 1881 A, 375.  
 1886 B, 1132.  
 1887 A, 362.  
 Cabrera, A. 1926 A, 388.  
 1928 A, 441, pls. i, ii, figs. 1-6.  
 Carus and Engelmann 1861 A, 1767.  
 Case, E. C. 1898 C, 826.  
 Clift, W. 1832 A, 234.  
 Cope, E. D. 1880 U, 153.  
 Cuvier, G. 1825 A, v, 1, 174-192, pl. xvi.  
 Dana, J. D. 1883 A, 2.  
 1863 C, 338 ("megathere").  
 Desmarest, A. G. 1822 A, 365.  
 Diener, C. 1912 A, 216.  
 Falconer, H. 1863 A, 62.  
 Fischer, J. B. 1829 A, 388.  
 Frech and Geinitz 1903 A, 34.  
 Frets, G. P. 1910 A, 564.  
 Gervais, P. 1855 A, 52.  
 1873 B, 22, seq.  
 Gervais and Ameghino 1880 A, 132.  
 Giebel, C. G. 1878 C, 854.  
 1855 A, 61.  
 1883 A, pl. xlv.  
 Grandidier, G. 1912 A, 401.  
 Gregory, W. K. 1915 D, 370, fig. 12.  
 Hay, O. P. 1910 D, 371, 372.  
 1912 B, 9.  
 1913 B, 12, 13, 14.  
 1919 A, 311.  
 1926 E, 388.  
 Heilprin, A. 1887 A, 338.  
 Hoernes, R. 1886 A, 663.  
 Holmes, F. S. 1870 A, 17, 31.  
 Humphreys, J. 1908 A, 8.  
 Hutchinson, H. N. 1910 A, 283, pls. 1, ii.  
 Huxley, T. H. 1865 B, 42.  
 Knipe, H. R. 1912 A, 185, fig.  
 Kraglievich, L. 1925 B, 226.  
 1925 C, 244.  
 1926 B, 16, fig. 1.  
 1926 D, 173.  
 Lankester, E. R. 1905 A, 7, 172, figs. 3, 121.

- Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 288.  
 Lobley, J. L. 1908 A, 213, 214, 217  
 Lonnberg, E. 1910 A, 58.  
 Lund, P. W. 1838 A, 12.  
 Lydekker, R. 1894 B, 30.  
 Mantell, G. A. 1850 A, 165, pl. lxxiii, fig. 1.  
 Matthew, W. D. 1910 G, 159.  
     1911 B, 113.  
     1915 A, 262.  
     1915 K, fig. 37.  
     1924 E, 748.  
 Meckel, J. F. 1825 A.  
 Mitchell, S. 1832 A, 905.  
 Mivart, St. G. 1879 B, 511.  
 Murchison, R. I. 1843 A, 133.  
     1843 B, 147.  
 Osborn, H. F. 1906 C, 851.  
     1910 B, 466, 472, 541.  
 Owen, R. 1839 F, 157.  
     1843 C, 359.  
     1845 B, 338, pls. lxxxiii, lxxxiv.  
     1851 D, 350.  
     1860 E, 390, figs.  
     1866 B, 301, figs. 191, 274, 279.  
     1868 A, 892.  
     1879 C, 581.  
 Palacký, J. 1902 A, 2.  
 Palmer, T. S. 1904 A, 406, 819.  
 Pander and Alton 1821 A, pls. i-v (Bradypus).  
 Parish, W. 1832 A, 233.  
 Perkins, H. C. 1871 A, 763.  
 Perrier, E. 1920 A, 365.  
 Philippi, R. A. 1893 A, 90, figs. 5-7.  
 Pictet, F. J. 1853 A, 264, pl. vii, figs. 1-4.  
 Reinhardt, J. 1873 A.  
 Reynolds, S. H. 1897 A, 546.  
 Roth, S. 1908 A, 132, 138  
     1911 A, 191.  
 Scharff, R. F. 1911 A, 352.  
 Schlosser, M. 1899 U, 462, 467.  
 Schmidt, O. 1886 A, 114, fig. 8.  
 Schuchert, C. 1915 A, 958, fig. 514.  
 Schulthess, B. 1920 A, 74, 80, 99, 104, pl. v;  
     text-figs. 10, 40.  
 Scott, W. B. 1905 B, 495.  
     1913 A, 685.  
     1916 A, 119.  
 Sellards, E. H. 1914 A, 162.  
 Serres, M. 1852 A, 119.  
     1852 B, 183.  
 Sinclair, W. J. 1905 D, 495.  
 Southall, J. C. 1875 A, 326.  
 Steinmann, G. 1909 A, 76, fig. 12.  
 Stock, C. 1917 C, 275.  
     1925 A, *passim*.  
 Tomes, C. S. 1878 A, 35.  
 Trouessart, E. L. 1905 A, 796.  
 Troxell, E. L. 1925 D, 613.  
 Vertuch, C. 1803 A, 530, pl. xii.  
 Wallace, A. R. 1876 A, i, 130, 145, 147; ii, 245.  
 Ward, H. A. 1866 A, 11, figs.  
 Weber, M. 1904 A, 461.  
 Weber and Burlet 1927 A, 140, fig. 105.  
 Wilder, B. 1872 B, 321.  
 Winge, H. 1923 A, 314, 317, 326.  
 Woodward, A. S. 1899 D, 354.  
     1900 G, 67.  
     1923 C, 70, fig. 67.  
 Wright, G. F. 1911 B, 436.  
 Zittel and Schlosser 1911 A, 415.  
     1923 A, 499, 679, 681, fig. 617.
- Megatherium mirabile** Leidy.  
 Hay, O. P. 1902 A, 576 (M. americanum, M. mirabile).  
 Allen, G. M. 1926 A, 449.  
 Anonymous 1916 B, 480 ("megatherium").  
 Cuvier, G. 1825 A, v, 2, 519 ("Megatherium").  
 Falconer, H. 1863 A, 61.  
 Foster, J. W. 1869 A, 238 ("megatherium").  
     1873 A, 71 ("megatherium").  
 Freudenberg, W. 1921 A, 140 (M. americanum. This species?).  
     1922 A, 4 (M. americanum. This species?).  
 Gervais, P. 1859 A, 365.  
 Gidley, J. W. 1911 A, 436 (M. americanum?).  
 Godman, J. D. 1860 A, ii, 36-46 (M. cuvieri).  
 Haug, E. 1911 A, 1886 ("Megatherium").  
 Hay, O. P. 1918 A, 371 ("Megatherium").  
     1919 D, 364.  
     1923 A, 121, 490.  
     1924 B, 260, 262 ("Megatherium").  
     1924 D, 380.  
     1926 C, 1, 2.  
     1927 D, 286.  
     1928 B, 238 ("Megatherium").  
     1928 C, 426.  
 Holmes, F. S. 1859 A, 184 ("megatherium").  
     1860 A, iv, vi, vii ("megatherium").  
 Kampfen, P. N. 1905 A, 479.  
 Leidy, J. 1859 J, 181 ("megatherium").  
     1892 A, 120 (Megatherium sp.).  
 Lyell, C. 1845 B, i, 164 ("Megatherium").  
     1847 C, lxxxi ("megatherium").  
     1855 A, i, 347 ("Megatherium"); ii, 576 ("Megatherium").  
 Matson and Clapp 1909 A, 136 (Megatherium sp. This species?).  
 Matthew, W. D. 1917 E, 212 ("Megatherium." This species?).  
 Merrill, G. P. 1907 A, 46.  
 Murchison, R. I. 1843 B, 132 ("megatherium").  
 Osborn, H. F. 1910 B, 455 ("Megatherium").  
 Palacký, J. 1902 A, 2.  
 Rogers, H. D. 1844 A, 258 ("megatherium").  
 Schmidt, E. 1872 A, 250 ("megatherium").  
 Scott, W. B. 1913 A, 220, 599, fig. 122 (M. americanum).  
 Stock, C. 1917 A, 142 (M. americanum).  
 Veatch, A. C. 1906 A, 51 ("Megatherium").  
     Pleistocene (Early); Georgia, South Carolina, Florida, Texas, New Jersey.
- Megatherium sp. indet.**  
 Cahn, A. R. 1922 A, 23.  
 Hay, O. P. 1923 A, 121. Pleistocene; Florida.  
 Leidy, J. 1866 D, 275 (Nicaragua).  
 Merriam, J. C. 1917 A, 439. Pliocene (Alachua or Bone Valley); Florida.  
 Spencer, J. W. 1895 A, 136.

## NOTHROTHERIINÆ.

Kraglievich, L. 1925 B, 215, 228 (Nothrotheriinae).

Kraglievich, L. 1925 D, 177 (Nothrotheriinae).

PRONOTHROTHERIUM Ameghino. Type *P. typicum* Ameghino.

Ameghino, F. 1907 A, 117.

Frick, C. 1921 A, 349.

Kraglievich, L. 1925 D, 179-183.

Rovereto, C. 1914 A, 234.

Stock, C. 1925 A, 21, 43, fig. 10.

**Pronothrotherium** sp. indet.

Stock, C. 1925 A, 21. (This genus?). Lower Pliocene (Eden); California.

NOTHROTHERIUM Lydekker. Type *Cœlodon maquinense* Lund.

Lydekker, R. 1889, in Nicholson and Lydekker 1889 A, 1299.

Abel, O. 1910 B, (186) (Nototherium).

Ameghino, F. 1886 B, 463 (Cœlodon).

1889 A, 1009 (Cœlodon).

1891 E, 250 (Cœlodon).

1904 B, 30.

1907 A, 74, figs. 5-8.

Beddard, F. E. 1902 A, 184.

Bronn, H. G. 1849 A, 713 (Cœlodon).

Burmeister, H. 1879 B, 325, 387 (Cœlodon).

1881 A, 380 (Cœlodon).

1885 A, 567, pl. v (Cœlodon).

1886 A, 357 (Cœlodon).

1886 B, 1127, fig. 1 (Cœlodon).

1887 A, 857, figs. 1, 2 (Cœlodon).

Gervais, P. 1873 B, 23 (Cœlodon).

Gervais and Ameghino 1880 A, 140 (Cœlodon).

Hay, O. P. 1916 D, 121.

1916 F, 24.

1918 B, 12, 13.

1919 A, 311.

Heilprin, A. 1887 A, 339 (Cœlodon).

Kampfen, P. N. 1905 A, 482, figs. 40, 41.

Kraglievich, L. 1925 B, 231.

1925 D, 177.

1926 D, 169, figs. 1-8.

Lund, P. W. 1838 A, 7 (Cœlodon).

1839 B, 220 (Cœlodon).

1841 A, 72, 85, 280 (Cœlodon).

1842 A, 171 (Cœlodon); 197 (Megalonyx).

Lydekker, R. 1887 A, 113 (Cœlodon).

1894 A, 93.

1896 B, 107.

1914 A, 637.

Matthew, W. D. 1915 A, 262.

1918 H, 647.

Osborn, H. F. 1909 D, 88 (Nototherium).

1925 D, 532.

Owen, R. 1842 D, 13, 170 (Cœlodon).

1843 C, 361 (Cœlodon).

Palmer, T. S. 1904 A, 462, 819.

Pictet, F. J. 1853 A, 272 (Cœlodon).

Reinhardt, J. 1878 A, 259, pls. 1-v (Cœlodon).

Schulthess, B. 1920 A, 48, 57, 78, 98, 102, 105; text-figs. 15, 16, 44.

Scott, W. B. 1905 B, 496.

1913 A, 392.

Sinclair, W. J. 1905 D, 496.

Stock, C. 1913 A, 341.

1917 A.

1917 C, 275.

1917 E, 238.

1925 A, *passim*.

Trouessart, E. L. 1905 A, 802.

Weber, M. 1904 A, 433, 461, 463 (Cœlodon, Nothrotherium).

Weber and Abel 1928 A, 231, 232.

Winge, H. 1915 A, 136, 287, pls. xxiv, xxv (Cœlodon).

Woodward, A. S. 1902 A, 310 (Cœlodon).

Zittel, K. A. 1893 B, 133.

Zittel and Schlosser 1911 A, 416.

1923 A, 499, 681.

**Nothrotherium mexicanum** Freudenberg.

Freudenberg, W. 1921 A, 140, pl. ii, fig. 3.

Stock, C. 1925 A, 9.

Pleistocene (Early); Mexico.

**Nothrotherium shastense** Sinclair.

Sinclair, W. J. 1905 B, 153, pl. xxiii, figs. 1-5a, 8.

Abel, O. 1926 B, 237.

Freudenberg, W. 1921 A, 140 (N. shastense).

Hay, O. P. 1916 D, 116 (N. graciceps).

1927 D, 310 (N. shastense); 7 (N. graciceps).

Kraglievich, L. 1925 B, 229, 232, 235, pl. vii, fig. 7.

1925 D, 133.

1926 D, 176, 179, 186.

Merram and Stock 1925 A, 10, 11.

Osborn, H. F. 1925 D, 523, 531, 534, fig.

Schulthess, B. 1920 A, 57 (N. shastense, N. graciceps).

Stock, C. 1917 A, 139, 157, figs. 1-8 (N. graciceps a syn.).

1918 A, 492.

1925 A, 30, 40, 113, pls. i, ii; iv-xvi, text-figs. 4-26, 31-43, 53, 54.

Swarth, H. S. 1915 A, 23 (N. graciceps).

Wyman, L. E. 1922 A, 25, fig. 16.

1927 A, 88 ("Nothrotherium").

Pleistocene (Potter Creek, Samwel, and Hawver caves; La Brea); California.

**Nothrotherium shastense hawveri** Stock.

Stock, C. 1918 A, 492, figs. 11-32.

Hay, O. P. 1927 D, 4, 223.

Kraglievich, L. 1925 B, 232.

1925 C, 251.

Stock, C. 1925 A, 98.

Pleistocene (Hawver Cave); California.

**Nothrotherium texanum** Hay.

Hay, O. P. 1916 D, 116, pls. vi, vii.

1915 C, 878 (Nothrotherium).

- Hay, O. P. 1917 B, 14.  
1924 D, 1, 234, 238.  
1926 G, 131 ("Nothrotherium").  
Kraglievich, L. 1925 D, 183.  
1926 D, 176.  
Lull, R. S. 1928 A, 23 (N. shastense?).  
Stock, C. 1917 A, 138, 160.  
1925 A, 8 ("Nothrotherium").  
Turner, H. W. 1906 A, 275 ("ground-sloth."  
This species?).  
Pleistocene (Early); Texas.

**Nothrotherium** sp. indet.

- Frick, C. 1921 A, 349, figs. 56-57 ("Nothrotherium" or Pronothrotherium"). Pliocene (Eden); California.  
Furlong, E. L. 1925 A, 144, 152. Pleistocene; Monterey, Nuevo Leon; Mexico.  
Gidley, J. W. 1928 B, 14. Pleistocene; Oklahoma.  
Hay, O. P. 1924 D, 2, 184, 249. Pleistocene; Texas.  
1926 G, 127.  
1927 D, 172, 214. Pleistocene; California.  
Stock, C. 1913 A, 350, figs. 9-11 (This genus?). Pleistocene (San Pedro); California.  
1925 A, 21 (This genus?); Lower Pliocene (Eden); Pleistocene (Cave); California.

## MEGALONYCHINÆ Osborn.

- Osborn, H. F. 1910 B, 541.  
Unless otherwise indicated the authors, as quoted, use the family name Megalonychidæ.  
Hay, O. P. 1902 A, 575 (Megatheriidæ, in part).  
1913 B, 726 (Megalonychinae).  
Abel, O. 1914 A, 103 ("megalonychiden").  
1919 A, 775 (Megalonychinae).  
Ameghino, F. 1889 A, 1018 (Megalonychidæ).  
1893 A, 404.  
1905 A, 57.  
1907 A, 93.  
1912 A, 55.  
Ardt, T. 1907 D, 664.  
1912 A, 698, 699, 744 (Megalonychinae).  
Beddard, F. E. 1902 A, 183.  
Gervais, P. 1855 A, 44 ("mégalongyicidés").  
Hay, O. P. 1912 D, 556.  
1914 A, 106.

- Kraglievich, L. 1921 A, 21 (Megalonychidæ).  
1926 B, 22 (Megalonychidæ).  
Lane, H. H. 1909 A, 25.  
1910 A, 914.  
Matthew, W. D. 1909 C, 114, 119, 120.  
1913 B, 291.  
Palacky, J. 1902 A, 1 ("megalonychiden").  
Scharff, R. F. 1922 A, 66 (Megalonychidæ).  
Scott, W. B. 1905 B, 495.  
1913 A, 592, 604, 609.  
Sinclair, W. J. 1905 D, 178, 363, 495.  
Stock, C. 1925 A, 6, 13, 14, 39, 110.  
Trouessart, E. L. 1905 A, 790 (Megalonychidæ); 793 (Megalonychinae).  
Weber and Abel 1928 A, 224, 230.  
Wegner, R. N. 1922 A, 457 (Megalonychinae).  
Zittel and Schlosser 1911 A, 416.  
1923 A, 499.

SINCLAIRIA Ameghino. Type *S. oregoniana* Ameghino.

- Ameghino, F. 1912 A, 55.  
Matthew, W. D. 1924 C, 149.  
**Sinclairia oregoniana** Ameghino.  
Ameghino, F. 1912 A, 55.  
Matthew, W. D. 1924 C, 149 ("megalonychid").  
Rovereto, C. 1914 A, 21.

- Sinclair, W. J. 1906 A, 65, text-figs. 1-3 ("eden-tate-like remains").  
1915 A, 83, fig. 7 ("megalonychid").  
Stock, C. 1925 A, 15.  
Middle Miocene (MacCall) or Pliocene (Rattlesnake); Oregon.

MEGALONYX Jefferson. Type *M. jeffersonii* Desmarest.

- Hay, O. P. 1902 A, 577.  
Abel, O. 1912 F, 263.  
1914 A, 104.  
1919 A, 776, fig. 777.  
1921 A, 284.  
1926 B, 450.  
Ameghino, F. 1885 A, 111.  
1906 E, 233.  
1912 B, 178.  
Ardt, T. 1907 D, 118.  
Baker, F. C. 1920 A, 464.  
Beddard, F. E. 1902 A, 183.  
Boule, M. 1891 A, 40.  
1923 A, 399.  
Bronn, H. G. 1849 A, 713.  
Burmeister, H. 1881 A, 380.  
1886 B, 1132.  
1887 A, 861.  
Carus and Engelmann 1861 A, 1767.  
Case, E. C. 1898 C, 826.

- Cope, E. D. 1880 U, 158.  
1895 G, 596, 597.  
Cuvier, G. 1825 A, v, 1, 159-173.  
Depéret, C. 1892 A, 78.  
1907 B.  
Diener, C. 1912 A, 216.  
Eastman, C. R. 1904 A, 890.  
Falconer, H. 1863 A, 62.  
Frech and Geinitz 1903 A, 34.  
Furlong, E. L. 1907 A, 393.  
Gervais, P. 1873 B, 32, seq.  
Gidley, J. W. 1913, in Matson and Sanford 1913 A, 143.  
Giebel, C. G. 1855 A, 60.  
1855 C, 337.  
1878 C, 854.  
1883 A, 150.  
Haug, E. 1911 A, 1706, 1886.  
Hay, O. P. 1910 D, 371.  
1912 B, 9.



- Hay, O. P. 1912 D, 556.  
 1914 A, 106, text-fig. 3.  
 1916 E, 54.  
 1918 B, 10, seq.  
 1919 A, 311.  
 1919 D, 363, 375.  
 1923 A, 490.  
 1925 D, 242.
- Heilprin, A. 1887 A, 339.  
 Hoernes, R. 1886 A, 663.  
 Holland, W. J. 1912 B, 749.  
 Hovey, H. C. 1891 A, 161.  
 1900 B, 20839.
- Kraglievich, L. 1925 D, 177.  
 1926 B, 30.  
 1926 D, 175.
- Lobley, J. L. 1908 A, 214.  
 Lull, R. S. 1917 B, 370.  
 Lund, P. W. 1838 A, 12.  
 1839 C, 20.
- Lydekker, R. 1914 A, 637.  
 Lyell, C. 1845 B, II, 65 ("Megalonyx").  
 Mantell, G. A. 1839 A, 154.  
 Matthew, W. D. 1913 B, 291.  
 1915 A, 262.  
 1918 I, 661.  
 1919 B, 164, 172.  
 1924 C, 70.  
 1924 E, 748.
- Merriam, J. C. 1919 A, 531.  
 Miller, L. H. 1912 A, 74  
 1915 B, 71.
- Osborn, H. F. 1905 I, 108.  
 1909 D, 129.  
 1910 A, 214.  
 1910 B, 622.  
 1912 G, 251.  
 1918 A, 30.  
 1925 D, 532.
- Owen, R. 1843 C, 359.  
 1851 D, 351 (Megalonyx).  
 1866 B, 411.
- Palmer, T. S. 1904 A, 405, 818.  
 Perkins, H. C. 1871 A, 763.  
 Perrier, E. 1920 A, 365.  
 Rafinesque, C. S. 1832 B, 111 (Aulaxodon, Megalonyx).
- Rautenberg, M. 1906 A, 41, 48.  
 Reinhardt, J. 1878 A.  
 Scharff, R. F. 1911 A, 61, 152, 156, 235, 243, 358, 402.
- Schlosser, M. 1899 O, 150.  
 1899 U, 462, 466.
- Schulthess, B. 1920 A, 80, 98, 103.  
 Scott, W. B. 1905 B, 495.  
 1913 A, 206, 219, 221, 597, 604.
- Serres, M. 1852 A, 119.  
 Shimek, B. 1910 A, 128 ("Megalonyx").  
 Shumard, B. F. 1863 A, 141.  
 Sinclair, W. J. 1905 D, 495.  
 1910 A, 191.
- Spencer, J. W. 1898 A, 27.  
 Steinmann, G. 1899 A, 79.  
 Stock, C. 1913 A, 341.  
 1917 A.  
 1917 C, 275.  
 1925 A.
- Stremme, H. 1911 A, 89.
- Stromer, E. 1903 C, 63.  
 Todd, J. E. 1889 A, 203 (Megalonyx sp. indet.).  
 Trouessart, E. L. 1905 A, 794.  
 Upham, W. 1902 A, 149 ("Megalonyx").  
 1903 C, 22679 ("Megalonyx").
- Wallace, A. R. 1876 A, I, 130, 145, 147.  
 Weber, M. 1904 A, 451, 461, 462.  
 Weber and Abel 1928 A, 231.  
 Weber and Burlet 1927 A, 123, fig. 94.  
 Winchell, N. H. 1917 A, 133.
- Winge, H. 1915 A, 258.  
 Wright, G. F. 1909 A, 512 ("Megalonyx").  
 1911 B, 436.
- Zittel and Schlosser 1911 A, 416.  
 1923 A, 499, 680, 681, 682.
- Megalonyx curvidens** Matthew.  
 Matthew, W. D. 1924 C, 66, 149, fig. 40.  
 Lower Pliocene (Upper Snake Creek); Nebraska.
- Megalonyx dissimilis** Leidy.  
 Hay, O. P. 1902 A, 577.  
 Cope, E. D. 1899 A, 211 (=M. jeffersonii).  
 Foster, J. W. 1869 A, 253.  
 Hay, O. P. 1923 A, 490.  
 1928 C, 428.  
 Hrdlička, A. 1907 A, 18.  
 Peterson, O. A. 1917 A, 472, figs. 4, 5 (This species?).  
 Shimek, B. 1902 A, 285.  
 Stock, C. 1925 A, 33.  
 Trouessart, E. L. 1905 A, 794.  
 Wilson, T. 1892 A, 629.  
 1901 A, 322.  
 Pleistocene; Mississippi, Virginia.
- Megalonyx jeffersonii** (Desmarest).  
 Hay, O. P. 1902 A, 577.  
 Abel, O. 1913 B, 726, fig. 32 (M. jeffersoni).  
 1914 A, 104, figs. 66, 67.  
 1919 A, 777, fig. 582.  
 1920 A, 428, fig. 649.  
 1926 B, 81, 237 (M. jeffersoni).
- Allen, G. M. 1913 A, 327.  
 Ameghino, F. 1889 A, 1018 (M. jeffersoni).  
 1909 A, 16, fig. 5 (M. jeffersoni).  
 Bain, H. F. 1896 A, 277 ("Megalonyx").  
 Baker, F. C. 1920 A, 371 (Megatherium); 464 (Megalonyx).  
 Balch, E. S. 1917 A, 481 ("Megalonyx").  
 Barton, B. S. 1895 B, 152 ("Megalonyx").  
 1895 D, 165 ("Megalonyx").  
 Calvin, S. 1909 B, 353, 355 ("Megalonyx").  
 1910 A, xii ("sloth").  
 1911 A, 215, pl. xxiii.
- Clinton, D. W. 1815 A, 58 ("Megalonyx"; "claw of grizzly bear?").  
 Cook, H. J. 1927 A, 117 ("Megalonyx").  
 1927 C, 247.
- Cooper, Smith and Dekay 1831 A, 371 ("Megalonyx").  
 Cuvier, G. 1825 A, v, 1, 159, pl. xv ("Megalonyx").  
 Deeley, R. M. 1913 A, 14, tab. ("Megalonyx." This species?).  
 Desmarest, A. G. 1822 A, 366 (Megatherium).

- Dickeson, M. W. 1845 A, 78 ("nondescript quadruped").
- Figgins, J. D. 1923 A, 82 ("ground sloth").
- Fischer, J. B. 1829 A, 339 (Megatherium).
- Foster, J. W. 1869 A, 235, 253 ("megalonyx"). 1873 A, 59 ("megalonyx").
- Frech and Gemutz 1903 A, 34, 36 (M. jeffersoni).
- Frick, C. 1921 A, 320.
- Gervais, P. 1859 A, 365.
- Gidley, J. W. 1927 E, 274 (This species?).
- Gidley and Loomis 1926 A, 260 ("Megalonyx").
- Giebel, C. G. 1855 C, 337 (M. jeffersoni).
- Godman, J. D. 1860 A, II, 46, figs. (Megatherium).
- Greene, G. K. 1831 A, 60.
- Haug, E. 1911 A, 1886.
- Hay, O. P. 1912 B, 9.  
1912 D, 556, text-figs. 2-15, 17-20.  
1914 A, 38, 107, pl. in, figs. 2-7; pl. iv, fig. 3; pl. v; text-figs. 1-29.  
1915 A, 516.  
1918 B, 18.  
1919 D, 361.  
1920 B, 110.  
1921 A, 609 (This species?).  
1923 A, 490.  
1924 D, 380.  
1926 G, 129 ("sloth").  
1927 C, 281 ("megalonyx").  
1927 D, 302, 309.  
1928 B, 238 ("megalonyx").  
1928 C, 425, 428, 429.
- Hildreth, S. P. 1837 A, 93 ("Megalonyx").
- Hilgard, E. W. 1860 A, 196 ("Megalonyx").
- Holland, W. J. 1908 A, 230 ("Megalonyx." This species?).
- Hovey, H. C. 1891 A, 161.  
1900 B, 20839.
- Hrdlička, A. 1907 A, 17, 18.  
1918 A, 27.
- Joor, J. F. 1895 A, 398 ("Megalonyx." This genus and species?).
- Kampfen, P. N. 1905 A, 480.
- Kraglievich, L. 1925 B, 233, 235 (M. jeffersoni).  
1925 D, 180, 189 (M. jeffersoni).  
1926 B, 30, 32 (M. jeffersoni).  
1926 D, 178, 185, 186 (M. jeffersoni).
- Leidy, J. 1859 J, 181 ("Megalonyx").  
1868 K, 179.  
1921 A, 198 ("Megalonyx").
- Leighton, M. M. 1921 A, 513.
- Leverett, F. 1902 A, 403 ("Megalonyx").
- Loomis, F. B. 1924 C, 506 (M. jeffersoni).
- Lund, P. W. 1838 A, 12.  
1839 B, 231.  
1839 C, 20.
- McCornack, E. C. 1914 A, 15.
- Manigault, G. E. 1886 A, 92 ("Megalonyx").
- Mantell, G. A. 1850 A, 163, pl. lxii, figs. 10, 11.
- Matson and Clapp 1909 A, 136 (Megalonyx; misprint).
- Mercer, H. C. 1894 C, ("fossil sloth").  
1896 A, figures ("Megalonyx").
- Merriam, J. C. 1912 C, 221.
- Merriam and Stock 1925 A, 10 (This species?).
- Miller, L. H. 1912 A, 71 (This species?).
- Osborn, H. F. 1910 B, 465, 478, fig. 203.
- Owen, R. 1856 A, 23.
- Rautenberg, M. 1906 A, 39.
- Reinhardt, J. 1878 A, 269.
- Ruschenberger and Tryon 1879 A, 88 (M. laqueatus).
- Schmidt, E. 1872 A, 245 (M. jeffersoni).
- Schulthess, B. 1920 A, 78, 103, 104, text-fig. 17.
- Scott, W. B. 1913 A, 195, fig. 113.  
1924 A, 437 ("ground-sloth").
- Sellards, E. H. 1915 B, 143 ("Megalonyx." This species?).  
1916 C, 132, 148, 158, pl. xxv, fig. 2; pl. xxx, fig. 6.  
1916 D, 617.  
1916 E, 16.  
1916 F, 7, 9, fig. 6.
- Shumek, B. 1902 A, 285.  
1904 A, 305 ("Megalonyx").  
1910 B, 316, 327 ("Megalonyx").
- Sinclair, W. J. 1904 A, 18 (M. jeffersonii?).  
1905 B, 156, 161 (M. jeffersonii?).
- Spencer, J. W. 1895 A, 137.
- Stock, C. 1913 A, 345.  
1917 A, 143 (M. jeffersoni).  
1925 A, *passim*.
- Trouessart, E. L. 1905 A, 794.
- Usher, W. 1854 A, 344, 349 ("Megalonyx").
- Veatch, A. C. 1906 A, 51 ("Megalonyx").
- Ward, H. A. 1866 A, 15, figs.
- Weber, M. 1904 A, 97, fig. 76.
- Whitney, J. D. 1862 A, 135 ("Megalonyx").  
1866 A, 162 ("Megalonyx").
- Wilson, T. 1892 A, 629.  
1901 A, 322 (M. jeffersoni).
- Winge, H. 1915 A, 274.
- Worthen, A. H. 1890 A, 8 ("Megalonyx").
- Wyman, J. 1850 D, 280 ("Megalonyx").
- Zittel and Schlosser 1911 A, 416, fig. 579.  
1923 A, 500, fig. 618.
- Pleistocene; Ohio, Indiana, Illinois, Kentucky, Missouri, Iowa, Minnesota?, Virginia, West Virginia, South Carolina, Florida, Texas. In some other states with doubt.
- Megalonyx jeffersonii californicus**  
Stock.
- Stock, C. 1913 A, 352, figs. 12-18 (M. californicus).
- Hay, O. P. 1927 D, 183, 185, 190.
- Kraglievich, L. 1925 B, 233 (M. californicus).  
1926 B, 32 (M. californicus).
- Merriam and Stock 1925 A, 11 (M. j. californicus).
- Osborn, H. F. 1925 D, 531, 532, 534.
- Schulthess, B. 1920 A, 79, 104 (M. californicus).
- Stock, C. 1925 A, 30, 101, pls. xvii, xx; text-figs. 45-50 (M. j. californicus).
- Swarth, H. S. 1915 A, 23 (M. californicus).
- Wyman, L. E. 1922 A, 25 (M. californicus).  
Pleistocene (La Brea); California.
- Megalonyx leidyi** Lindahl.
- Hay, O. P. 1902 A, 578.
- Baker, F. C. 1920 A, 464.
- Cragin, F. W. 1896 A, 53.
- Deere, E. O. 1908 A, 117.
- Haug, E. 1911 A, 1886.
- Haworth and Beede 1897 A, 290 (M. leydelyi).

Hay, O. P. 1914 A, 26.  
1924 D, 380.

Matthew, W. D. 1918 A, 229 (This species?).

Osborn, H. F. 1910 B, 462.

Stock, C. 1917 A, 142.  
1925 A, 7.

Trouessart, E. L. 1905 A, 794.  
Pleistocene (Sheridan); Kansas.

### **Megalonyx leptostomus Cope.**

Hay, O. P. 1902 A, 578.

Dumble, E. T. 1894 A, 559.

Gidley, J. W. 1903 C, 627 (M. leptostoma).

Matthew, W. D. 1909 C, 120 (M. leptostoma).

1923 A, 12 (This species?).

1924 C, 150.

Merriam, J. C. 1917 A, 435.

Montgomery, T. H. 1904 A, 57.

Stock, C. 1925 A, 7, 16.

Trouessart, E. L. 1905 A, 795.

Upper Pliocene (Blanco); Texas.

### **Megalonyx loxodon Cope.**

Hay, O. P. 1902 A, 578.

Baker, F. C. 1920 A, 208, 213, 394.

Rhoads, S. N. 1903 A, 249.

Stock, C. 1925 A, 7.

Wheatley, C. M. 1871 B, 384 (M. toxodon).

Pleistocene (Early); Pennsylvania.

### **Megalonyx scalper Cope.**

Hay, O. P. 1902 A, 578.

Baker, F. C. 1920 A, 208, 213, 394.

Hay, O. P. 1923 A, 31, 312.

Rhoads, S. N. 1903 A, 250.

Schlosser, M. 1902 H, 141.

Stock, C. 1925 A, 7.

Trouessart, E. L. 1905 A, 795 (Syn. of *Ereptodon priscus*).

Pleistocene (Early); Pennsylvania.

### **Megalonyx sierrensis Sinclair.**

Sinclair, W. J. 1905 B, 155, pls. xx-xxii.

Hay, O. P. 1927 D, 4.

Holmes, W. H. 1902 A, 171 ("gigantic sloth").

Merriam, J. C. 1906 E, 222.

Schulthess, B. 1920 A, 104 (M. sierrensis).

Sinclair, W. J. 1903 A, 711 ("Megalonyx sp.").

1904 A, 18 ("Megalonyx sp.").

Stock, C. 1925 A, 8.

Pleistocene; California.

### **Megalonyx tortulus Cope.**

Hay, O. P. 1902 A, 578.

Baker, F. C. 1920 A, 208, 213, 394.

Hay, O. P. 1923 A, 31, 312.

Rhoads, S. N. 1903 A, 249.

Schlosser, M. 1902 H, 141.

Stock, C. 1925 A, 7.

Wheatley, C. M. 1871 B, 384.

Pleistocene (Early); Pennsylvania.

### **Megalonyx validus Leidy.**

Hay, O. P. 1902 A, 578.

1924 D, 3, 242.

Hayes and Kennedy 1903 A, 20 ("Megalonyx").

Pleistocene; Texas.

### **Megalonyx wheatleyi Cope.**

Hay, O. P. 1902 A, 578.

Baker, F. C. 1920 A, 208, 213, 394.

Frick, C. 1921 A, 320.

Hay, O. P. 1923 A, 31, 312.

1927 D, 4, 215.

Merriam and Stock 1925 A, 10 (This species?).

Miller, L. H. 1912 A, 71 (This species?).

Rhoads, S. N. 1903 A, 249.

Schlosser, M. 1899 M, 361.

1902 H, 141.

Schulthess, B. 1920 A, 79.

Simpson, G. G. 1928 H, 2, 11, fig. 8 (This species?).

Sinclair, W. J. 1904 A, 18 (M. wheatleyi?).

1905 B, 161, pl. xxiii, fig. 7 (M. wheatleyi?).

Stock, C. 1925 A, 7, 78, 113; text-figs. 27, 31

(M. wheatleyi, M. sphenodon).

Trouessart, E. L. 1905 A, 795.

Wheatley, C. M. 1871 B, 384 (M. wheatleyi, M.

sphenodon, M. dissimilis).

Pleistocene (Port Kennedy Cave); Pennsylvania; (Potter Creek Cave); California.

### **Megalonyx sp. indet.**

Chamberlin, R. T. 1916 A, 35 ("sloth").

Condon, T. 1902 A, 152, pl. xxviii, figs. 1, 3 ("Mylodon").

1910 A, 130, pl. xxviii, figs. 1, 3 ("Mylodon").

Cooke, C. W. 1926 A, 445. Pleistocene; Florida.

Diller, J. S. 1911 A, 27. Pleistocene; California.

Frick, C. 1921 A, 294, 320, figs. 1, 29 (This genus?). Pliocene (San Timoteo); California;

350, fig. 57 (This genus?). Phocene (Eden); California.

Furlong, E. L. 1904 A, 54, 55.

1906 A, 243, 245. Pleistocene; California.

Gidley, J. W. 1903 C, 627. Phocene (Blanco); Texas.

1915 D, 20 ("Megalonyx"). Pleistocene; Florida.

Gregory, H. E. 1917 A, 82 ("Megalonyx"). Pleistocene; Arizona.

Harris, G. D. 1899 A, 20 ("Megalonyx"). Pleistocene; Louisiana.

Hay, O. P. 1927 D, 302, 309. Pleistocene; Arizona, California.

Matthew, W. D. 1918 A, 186 ("megalonychid." This genus?). Pliocene (Snake Creek); Nebraska.

1925 B, 222 ("Megalonyx"). Staked Plains, Texas.

Matthew and Cook 1909 A, 383. Pliocene (Snake Creek); Nebraska.

Merriam, J. C. 1917 A, 439. (Dunnellon?); Florida.

Merriam and Buwalda 1917 A, 258. Washington.

Merriam and Stock 1925 A, 10. Pleistocene (Potter Creek Cave); California.

Merriam, Stock, Moody 1925 A, 58, 70, fig. 25 ("megalonychid." This genus?). Pliocene (Rattlesnake); Oregon.

Miller, L. H. 1912 A, 71, 73, 74 Pleistocene (Potter Creek, Samwel, and Hawver, caves); California.

Shimek, B. 1910 A, 128.

Sinclair, W. J. 1905 B, 160, pl. xxiii, fig. 6. Miocene (Mascal); Oregon.

1915 A, 83, fig. 7 ("megalongychid." This genus?). Pliocene (Snake Creek); Nebraska.

Stock, C. 1921 C, 320, fig. 29 (This genus?). Pliocene (San Timoteo); California.

Stock, C. 1925 A, 18, fig. 2 (This genus?); Lower Pliocene (Rattlesnake); Oregon: 20, fig. 2 (This genus?); Lower Pliocene (Pinole-Orinda-Siesta); California: 21. Pliocene (Timoteo); California: 21 (This genus?); Pliocene (Eden); California: Pleistocene (La Brea, Upper San Pedro, Bautista and caves); California: 16. Pliocene (Alachua); Florida: Pleistocene; Washington.

### EREPTODON Leidy. Type *E. priscus* Leidy.

Hay, O. P. 1902 A, 578.

Palacký, J. 1902 A, 2.

Palmer, T. S. 1904 A, 268, 818.

Wallace, A. R. 1876 A, i, 130.

### *Ereptodon priscus* Leidy.

Hay, O. P. 1902 A, 578.

Foster, J. W. 1869 A, 253.

Gervais, P. 1859 A, 365.

Hay, O. P. 1923 A, 484.

1928 C, 428.

Hrdlička, A. 1907 A, 18.

Shimek, B. 1902 A, 285.

Trouessart, E. L. 1905 A, 794 (Megalonyx).

Wilson, T. 1892 A, 629.

1901 A, 322.

Pleistocene; Mississippi.

### MYLODONTINÆ Gill.

Gill, T. 1872 B, 24.

Unless otherwise indicated the authors quoted use the family name Mylodontidæ.

Abel, O. 1913 B, 721 (Mylodontinæ).

1914 A, 105 (Mylodontinæ).

1919 A, 776 (Mylodontinæ).

Ameghino, F. 1889 A, 665, 895, 1019.

1897 B, 260 ("mylodonts").

Arlt, T. 1907 D, 666.

1912 A, 744 (Mylodontinæ).

Beddard, F. E. 1902 A, 179.

Gill, T. 1872 B, 24 (Mylodontinæ).

Hay, O. P. 1912 D, 573.

1914 A, 131.

Kraglievich, L. 1921 A, 95, seq.

1922 A, 451 (Mylodontinæ).

1922 B, 457 (Mylodontinæ).

1925 B, 216.

Kraglievich, L. 1926 B, 22 (Mylodontidæ); 23 (Mylodontinæ).

Lull, R. S. 1915 B, 383.

Matthew, W. D. 1913 B, 291.

Nordenskjöld, E. 1900 A, 29 (Glossotherium).

Osborn, H. F. 1910 B, 541 (Mylodontinæ).

Palacký, J. 1902 A, 2 ("mylodontinen").

Palmer, T. S. 1904 A, 755, 819.

Scott, W. B. 1903 A, 901.

1905 B, 495.

1913 A, 206, 598, 686.

Sefve, I. 1915 A, 61 (Scelidotherium).

Sinclair, W. J. 1905 D, 345, 362, 495.

Stock, C. 1917 C, 275.

Trouessart, E. L. 1905 A, 796.

Weber and Abel 1928 A, 224, 229, 322.

Woodward, A. S. 1899 F, 226 ("ground-sloth").

Zittel and Schlosser 1911 A, 416 (Mylodontinæ).

1923 A, 500 (Mylodontinæ).

### MYLODON Owen. Type *M. harlani* Owen.

Hay, O. P. 1902 A, 578.

Abel, O. 1912 F, 261, 373, fig. 192.

1913 B, 726, fig. 34.

1920 A, 428, fig. 648.

1921 A, 284, fig. 103.

Allen, G. M. 1913 A, 319 (Mylodon); 344 (Paramylodon).

Ameghino, F. 1885 A, 111, 204.

1889 A, 1019.

1900 B, 258.

1904 C, 135.

1905 A, 55.

1906 E, 231.

1907 A, 101.

1912 A, 60.

1912 B, 178.

Anonymous 1921 C, 557, fig.

Baker, F. C. 1920 A, 202, 210.

Beddard, F. E. 1902 A, 179.

Boule, M. 1891 A, 40.

1923 A, 399.

Boule and Thevenin 1920 A, 220.

Bronn, H. G. 1848 A, 764.

1849 A, 713.

Brown, B. 1903 A, 569 (Paramylodon).

Burmeister, H. 1881 A, 378.

1886 B, 1132.

1886 C, 96, 110, pl. xvi.

1887 A, 861.

Case, E. C. 1898 C, 827.

Clark, F. W. 1892 A, 630 ("mylodon").

Coleman, A. P. 1914 A, 448.

Cope, E. D. 1880 U, 158.

1895 G, 596, 597, 599.

Depéret, C. 1892 A, 78.

1907 B.

Diener, C. 1912 A, 216.

Eastman, C. R. 1913 B, 677.

Eaton, G. F. 1914 A, 148.

Falconer, H. 1863 A, 62.

Frech, F. 1908 A, 493.

Frech and Geinitz 1903 A, 36.

Frets, G. P. 1910 A, 572.

Gervais, P. 1873 B, 26, seq.

- Giebel, C. G. 1855 A, 60, pl. xxv.  
1878 C, 854.  
1883 A, pls. xxviii, xlv, lvii, lxx, lxxvii, lxxxix.  
Haug, E. 1911 A, 1706, 1886.  
Hay, O. P. 1910 D, 371, 372.  
1912 B, 9 (Mylodon, Paramylodon).  
1912 D, 573, text-figs. 16, 22, 23, 27, 28.  
1914 A, 131, pl. vii; text-figs. 31, 34, 36-39 (M. robustus).  
1917 D, 41, pl. i, figs. 4, 5; pl. ii, figs. 2-4.  
1918 B, 10, seq.  
1919 A, 311.  
1923 A, 491.  
1925 D, 242.  
Heilprin, A. 1887 A, 339.  
Hoernes, R. 1886 A, 663.  
Kampfen, P. N. 1905 A, 479.  
Kraglievich, L. 1921 A, 9, 13, 24, 25, seq. (Mylodon, Paramylodon).  
1922 A, 451.  
1922 B, 459, 463 (Mylodon, Paramylodon).  
1926 B, 22.  
Lankester, E. R. 1905 A, 172, fig. 122.  
Leche, W. 1887 A.  
Lehman-Nitsche, R. 1900 A, 103.  
Mabley, J. L. 1908 A, 214, 217.  
Mönnberg, E. 1910 A, 58.  
Moomis, F. B. 1926 A, 153.  
Mull, R. S. 1915 B, 337 (Paramylodon); 380 (Mylodon).  
1917 B, 370.  
Fantell, G. A. 1844 A, 845.  
Matthew, W. D. 1910 G, 159.  
1911 B.  
1913 B, 291.  
1913 D, 296.  
1914 A, 144 (Paramylodon).  
1915 A, 262.  
1915 K, 403 (Paramylodon); 468 (Mylodon).  
1921 G, 557, fig.  
1924 E, 748.  
Merriam, J. C. 1906 D, 249.  
Mivart, St. G. 1879 B, 511.  
Moreno, F. P. 1902 A, 301.  
Murchison, R. I. 1843 A, 132.  
1843 B, 147.  
Mönnberg, H. F. 1905 I, 108, 110.  
1906 C, 851.  
1909 D, 131.  
1910 B, 624 (Mylodon); 627 (Paramylodon).  
1912 G, 251 (Paramylodon).  
1925 D, 532.  
Munro, R. 1843 C, 360.  
1845 B, 334.  
1851 D, 351.  
1860 E, 389, fig.  
1866 B, 401, figs. 287, 268.  
1868 A, 895.  
1879 C, 581.  
Munro, T. S. 1904 A, 438, 819 (Mylodon); 14, 820 (Paramylodon).  
Munks, H. C. 1871 A, 763.  
Munro, E. 1920 A, 366.  
Munro, M. 1906 A, 38, 48.  
Munro, J. 1878 A.  
Munro, W. G. 1901 A, 393, 405, pl. xxvi, figs. 24, 25.  
Roth, S. 1908 A, 132.  
Scharff, R. F. 1911 A, 153, 235, 352.  
Schlosser, M. 1899 U, 462, 466.  
Schmidt, E. 1872 A, 250 ("mylodonten").  
Schmidt, O. 1886 A, 114.  
Schulthess, B. 1920 A, 35, 76, 80, 100, 104, pl. v, fig. 11; pl. vi; text-figs. 11, 12, 41.  
Scott, W. B. 1905 B, 495.  
1913 A, 686, fig. 290.  
Sefve, I. 1915 A, 77.  
Serres, M. 1852 A, 119.  
Sinclair, W. J. 1905 D, 346, 495.  
1910 A, 191 (Paramylodon); 194 (Mylodon).  
Steinmann, G. 1909 A, 79.  
Stock, C. 1914 C, 143 ("mylodont"); 144 (Paramylodon).  
1917 A.  
1917 B.  
1917 C.  
1920 C, 514.  
1925 A, *passim*.  
Terra, P. 1911 A, 263, fig. 92.  
Trouessart, E. L. 1905 A, 799 (Paramylodon); 800 (Mylodon).  
Troxell, E. L. 1915 B, 479.  
Wallace, A. R. 1876 A, I, 130, 147.  
Weber, M. 1904 A, 433, 451, 460, 461.  
Weber and Abel 1923 A, 225, 232, 233, figs. 139, 146.  
Wilson, T. 1892 A, 628.  
Winge, H. 1915 A, 139, 258, pl. xxvi.  
1923 A, 317, 353 (Mylodon, Paramylodon).  
Woodward, A. S. 1899 D, 351.  
1899 F, 226.  
1900 G, 64.  
1902 A, 305, figs. (Mylodon?).  
1923 C, 72.  
Wright, G. F. 1911 B, 436.  
Zittel and Schlosser 1911 A, 417 (Mylodon, Paramylodon).  
1923 A, 500, 680, 681, fig. 620.
- Mylodon? freudentbergi Hay.**  
Freudentberg, W. 1921 A, 140, pl. ia, figs. 1, 2 ("M? sp. major; M? sp. minor").  
Pleistocene?; Mexico.
- Mylodon garmani Allen.**  
Allen, G. M. 1913 A, 319, pls. i-iii; pl. iv, figs. 17-21.  
Freudentberg, W. 1922 A, 4.  
Hay, O. P. 1924 D, 5, 8, 9.  
Kraglievich, L. 1921 A, 101, seq.  
1922 B, tab.  
Lull, R. S. 1915 B, 337, 379.  
Matthew, W. D. 1914 A, 144.  
Reinhardt, J. 1879 B, 268, seq.  
Schulthess, B. 1920 A, 101.  
Stock, C. 1914 B, 319, 326, 329.  
1917 B, 166.  
1917 C, 276.  
1925 A, 12, 133.  
Pleistocene (Sheridan); Nebraska.
- Mylodon harlani Owen.**  
Hay, O. P. 1902 A, 579.  
Allen, G. M. 1913 A, pl. iv, fig. 16.  
Ameghino, F. 1904 C, 135.

- Archer, W. J. 1918 B, 13 ("giant sloth").
- Baker, F. C. 1920 A, 464 (M. harlani); 465 (Paramylodon nebrascensis).
- Blake, W. P. 1884 A, 273, fig. 2 ("mylodon", Homo nevadensis).
- Brown, B. 1903 A, 571, pls. 1, li (Paramylodon nebrascensis).
- Calvin, S. 1909 B, 353, pl. xxvi ("Mylodon"). 1910 A, xii ("sloth").
- Campbell, G. D. 1883 A, 578 ("human").
- Chamberlin, R. T. 1916 A, 35 ("sloth").
- Chamberlin, T. C. 1919 A, 316 ("Mylodon").
- Collins, H. O. 1910 A, 6 ("ground sloth").
- Conklin, E. G. 1925, in Stock, C. 1925 A, 121.
- Cook, H. J. 1927 A, 117 ("Mylodon"). 1927 C, 245 ("Mylodon").
- Deeley, R. M. 1913 A, 14, tab. ("Mylodon").
- Deussen, A. 1924 A, 108 (This genus?).
- Falconer, H. 1863 A, 61.
- Featherstonhaugh, G. W. 1831 C, 45 (Megalonyx laqueatus).
- Figgins, J. D. 1928 A, 82 ("ground sloth").
- Foster, J. W. 1869 A, 253. 1873 A, 60 ("mylodon").
- Freudenberg, W. 1922 A, 4.
- Gervais, P. 1859 A, 365 (M. harlani).
- Gidley and Loomis 1926 A, 260 ("Mylodon").
- Gilbert, J. Z. 1910 B, 25, 39, figs. 10-12, 15 ("ground sloth").
- Harkness, H. W. 1882 A, 3 ("human foot prints").
- Harris, G. D. 1899 A, 38 (This species?).
- Haug, E. 1911 A, 1886.
- Hay, O. P. 1912 D, 573, text-figs. 21, 24. 1914 A, 26, 132, pl. vi, figs. 3, 4; pl. viii, figs. 1, 2; text-figs. 32, 33, 35, 40-42. 1916 E, 54 ("Mylodon"). 1917 A, 15. 1918 B, 13. 1923 A, 491. 1923 B, 116. 1924 D, 381. 1926 F, 426 ("sloths"). 1926 G, 129 ("sloth"). 1927 C, 281 ("mylodons"). 1927 D, 303, 309 (M. harlani); 8, 51 (Orycterotherium); 7 (Paramylodon nebrascensis). 1928 B, 237 ("Mylodon"). 1928 C, 425, 428.
- Holmes, F. S. 1860 A, iv, vi ("mylodon").
- Hrdlička, A. 1907 A, 18.
- Joor, J. F. 1895 A, 397.
- Kraglievich, L. 1921 A, 97, seq. 1922 A, 453 (M. harlani, Paramylodon nebrascensis). 1922 B, 457, tab. (M. harlani, Paramylodon nebrascensis). 1925 B, 223, 224.
- Le Conte, J. 1832 A, 923 ("Mylodon"). 1832 B, 8 ("mylodon"). 1833 A, 102 ("Mylodon").
- Leidy, J. 1859 J, 181.
- Leunis and Ludwig 1883 A, 288.
- Louderback, G. D. 1907 A, 211 ("mylodon").
- Lull, R. S. 1913 B, 117 ("Mylodon"). 1915 B, 327, figs. 1-12 (Mylodon); 338, 380 (Paramylodon a syn.).
- Lydekker, R. 1915 C, 623.
- Lyell, C. 1845 B, 1, 164 ("Mylodon"). 1847 C, lxxxi ("mylodon"). 1855 A, 1, 348 ("Mylodon").
- McCornack, E. C. 1920 A, 18, 19, 23.
- MacCurdy, G. G. 1917 A, 259, 261 ("Mylodon" This species?).
- Matthew, W. D. 1916 F, 471 ("ground sloths"). 1918 A, 227 (M. nebrascensis).
- Mercer, H. C. 1896 A ("Mylodon").
- Merriam, J. C. 1900 A, 613 ("Orycterotherium oregonense").
- Merriam and Stock 1925 A, 11.
- Merrill, G. P. 1907 A, 49.
- Miller, L. H. 1912 A, 78 (Paramylodon sp.).
- Murchison, R. I. 1843 A, 131.
- Osborn, H. F. 1910 B, 472. 1925 D, 528, 531, 534, figs.
- Owen, R. 1843 C, 360.
- Perkins, H. C. 1842 B, 57 ("Mylodon." This species).
- Rhoads, S. N. 1903 A, 249 (M. missouriensis).
- Rogers, H. D. 1844 A, 253 ("mylodon").
- Schulthess, B. 1920 A, 101.
- Sellards, E. H. 1916 E, 15, 16 ("Mylodon"). 1916 F, 9 (Mylodon sp.).
- Shumek, B. 1902 A, 285. 1904 A, 305 ("Mylodon." This species?). 1910 A, 136 ("Mylodon"). 1910 B, 316, 327 (Mylodon).
- Sinclair, W. J. 1910 B, 191, fig. 1 (Paramylodon nebrascensis).
- Stock, C. 1914 A, 761. 1914 B, 319, 320, 326, 329, figs. 1-6. 1916 A, 169 ("Mylodon"). 1917 A, 140. 1917 B, 166, 174 ("nebraska skull"). 1917 C, 267, figs. 1-5, 7, 8. 1917 D, 226. 1920 B, 425, pl. li. 1925 A, 10, 30, 113, 120, pls. xxi-xlvii; text-figs. 55-117.
- Stoner, R. C. 1913 A, 390 ("sloth").
- Swarth, H. S. 1915 A, 22, fig. 10.
- Trouessart, E. L. 1905 A, 799 (Paramylodon nebrascensis); 800 (M. harlani).
- Troxell, E. L. 1915 A, 616, 636. 1917 A, 88, fig. 1.
- Usher, W. 1854 A, 344 ("Mylodon").
- Veatch, A. C. 1899 A, 245. 1906 A, 51 ("Mylodon").
- Veatch and Stevenson 1911 A, 437 ("Mylodon").
- Villada, M. M. 1903 A, 451 (M. robustus. This species?).
- Wheatley, C. M. 1871 B, 384.
- Wilson, T. 1892 A, 620. 1901 A, 322.
- Winge, H. 1915 A, 288.
- Woodward, A. S. 1893 B, 280.
- Wyman, J. E. 1922 A, 24, fig. 24 ("ground-sloth"). 1927 A, 83, fig. ("giant sloth").
- Zittel and Schlosser 1911 A, 417. 1923 A, 500.
- Pleistocene (Early to Middle). Reported from about 15 states, from Pennsylvania to Florida, west to Washington, south to Nevada and Mexico.

**Mylodon harlani tenuiceps** Stock.

- Stock, C. 1917 B, 171, pls. iii, iv.  
 Abel, O. 1926 B, 237.  
 Hay, O. P. 1927 D, 183, 185, 190.  
 Kraglievich, L. 1922 B, tab.  
 Merriam, J. C. 1908 D, 470, fig. ("ground sloth").  
 Merriam and Stock 1925 A, 11.  
 Osborn, H. F. 1925 D, 531.  
 Stock, C. 1925 A, 30, 192, pls. xli, xliii.  
 Pleistocene (Early); California.

**Mylodon renidens** Cope.

- Hay, O. P. 1902 A, 579.  
 Allen, G. M. 1913 A, 320.  
 Hay, O. P. 1923 A, 43.  
 1924 D, 1, 218.  
 1927 D, 7.  
 Kraglievich, L. 1921 A, 101, seq.  
 Lull, R. S. 1915 B, 334, 380 (= M. harlani).  
 Stock, C. 1914 B, 320, 331 (Syn. of M. harlani).  
 Veatch, A. C. 1899 A, 246.  
 Pleistocene; Louisiana.

**Mylodon sodalis** Cope.

- Hay, O. P. 1902 A, 579.  
 Allen, G. M. 1913 A, 320, 340.  
 Cope, E. D. 1878 II, 125 ("Mylodon").  
 Dumble, E. T. 1894 A, 564.  
 Gidley, J. W. 1903 C, 623 (This species?).  
 Gilbert, G. K. 1890 A, 304, 394.  
 Haug, E. 1911 A, 1836.  
 Hay, O. P. 1924 D, 1, 239.  
 1927 D, 309.  
 Hodge, E. T. 1925 A, x ("giant sloth").  
 Lull, R. S. 1915 B, 333, 380 (= M. harlani).  
 McCormack, E. C. 1914 A, 15 ("sloth").  
 1920 A, 17 ("Mylodon").  
 Matthew, W. D. 1902 F, 320, 321 ("Mylodon").  
 Miller, L. H. 1912 A, 81.  
 Osborn, H. F. 1910 B, 458, 459.  
 Russell, I. C. 1884 A, 460 ("edentate").  
 Stock, C. 1914 B, 320.  
 1925 A, 10, 195 (Syn. of M. harlani).  
 Pleistocene (Fossil Lake); Oregon: Pleistocene; Texas?

**Mylodon sulcidens** Cope.

- Hay, O. P. 1902 A, 579.  
 Allen, G. M. 1913 A, 320.  
 Hay, O. P. 1923 A, 43.  
 1924 D, 1, 218.  
 1927 D, 7.  
 Lull, R. S. 1915 B, 336, 380 (Syn. of M. harlani).  
 Stock, C. 1914 B, 320, 331 (Syn. of M. harlani).  
 Veatch, A. C. 1899 A, 246.  
 Pleistocene; Louisiana.  
**Mylodon** sp. indet.  
 Cooke, C. W. 1926 A, 445. Pleistocene; Florida.  
 Cope, E. D. 1895 G, 597 ("small mylodon").  
 Pleistocene (Cave deposit); Tennessee.  
 Freudenberg, W. 1922 A, 25. Pleistocene; Mexico.  
 Gidley, J. W. 1903 C, 627. Pliocene (Blanco); Texas.  
 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1914 A, 26. Pleistocene (Early); Nebraska.  
 1923 A, 491. Pleistocene; Tennessee.  
 1924 B, 260 ("mylodon"). Pleistocene; Florida.  
 1924 D, 381. Pleistocene; Kansas, Louisiana, Missouri, Nebraska, Texas.  
 1925 C, 28. Pleistocene; Mexico.  
 1927 D, 303, 309. Pleistocene; California, Florida, Oklahoma.  
 Matthew, W. D. 1909 C, 120. Pliocene (Blanco); Texas.  
 Mercer, H. C. 1894 B, 356 ("extinct edentate").  
 Merriam and Stock 1921 A, 567. Pleistocene (Early); California.  
 1925 A, 11. Pleistocene (McKittrick); California.  
 Miller, L. H. 1925 A, 309 ("mylodont"). Pleistocene (McKittrick); California.  
 Stock, C. 1925 A, 196, figs. 119, 120 (M. near harlani. Pleistocene (Christmas Lake); Oregon; 199 (Delight); Washington.  
 Swingle, W. F. 1925 A, 201 ("ground-sloth." This genus?). Pleistocene (Early); California.  
 Veatch, A. C. 1899 A, 245 (M. cf. robustus?). Pleistocene; Louisiana.

**THINOBADISTES** Hay. Type *T. segnis* Hay.

Hay, O. P. 1919 C, 104.

**Thinobadistes segnis** Hay.

- Hay, O. P. 1919 C, 104-106, pl. xxvii, figs. 1, 2.  
 1921 A, 638, pl. cxix, figs. 6-11.  
 1923 A, 37, 375.  
 Pleistocene (Early); Florida.

**MOROTHERIUM** Marsh. Type *M. gigas* Marsh.

- Hay, O. P. 1902 A, 579.  
 Cope, E. D. 1880 U, 157.  
 Depéret, C. 1907 B.  
 Hoernes, R. 1886 A, 664.  
 Lohley, J. L. 1908 A, 214.  
 Merriam, J. C. 1900 A, 614.  
 Palacký, J. 1902 A, 2.  
 Palmer, T. S. 1904 A, 433, 818.  
 Schlosser, M. 1899 U, 461.

- Stock, C. 1925 A, 117.  
 Trouessart, E. L. 1905 A, 795.  
 Wallace, A. R. 1876 A, i, 140.  
 Winge, H. 1915 A, 313.

**Morotherium gigas** Marsh.

- Hay, O. P. 1902 A, 580.  
 1927 D, 802.  
 Lawson, A. 1914 A, 15.

Merriam, J. C. 1900 A, 612, pl. lviii ("Morotherium". This species?).

1914 D, 15.

Sinclair, W. J. 1904 A, 20.

Stock, C. 1925 A, 117.

Trouessart, E. L. 1905 A, 795.

Pleistocene (San Antonio); California.

### **Morotherium leptonyx Marsh.**

Hay, O. P. 1902 A, 580.

1923 A, 8.

1929 D, 265, 268.

Leidy, J. 1871 C, 365 ("sloth").

Merriam, J. C. 1917 A, 432.

Russell, I. C. 1902 A, 56 ("Morotherium." This species?).

Pleistocene (Idaho); Idaho.

### **Morotherium sp. indet.**

Hay, O. P. 1927 D, 302, 309. Pleistocene; California, Idaho.

Winslow, C. F. 1875 A, 141 (This genus?). Pleistocene; California.

## Suborder HICANODONTA Ameghino.

Ameghino, F. 1889 A, 753, 1015.

Abel, O. 1912 F, 377.

1913 B, 727.

1914 A, 100, 110.

1919 A, 779.

1920 A, 427.

Ameghino, F. 1906 D, 90.

1909 A, 2, 28.

1909 B, 107, 109.

Flower, W. H. 1883 A, 178 (Loricata).

Flower and Lydekker 1891 A, 179 (Loricata).

Gidley, J. W. 1926 A, 91 (Glyptodontia).

Gill, T. 1872 A, 24 (Loricata. Preoccupied for Crocodilia).

Gregory, W. K. 1910 A, 465.

Osborn, H. F. 1910 B, 541 (Loricata).

Schulthess, B. 1920 A, 66, 92.

Scott, W. B. 1913 A, 592, 610 (Loricata).

Weber, M. 1904 A, 458, 464.

Weber and Abel 1928 A, 217, 223.

Winge, H. 1923 A, 330.

Zittel and Schlosser 1911 A, 418.

1923 A, 501.

## Superfamily DASYPODOIDÆ, new form.

For this group most of the authors here cited the name Dasypoda.

Ameghino, F. 1906 B, 1.

1906 D, 70, 91.

1906 E, 242.

1907 A, 122.

1909 A, 2, 29.

Ardt, T. 1907 C, 677.

1907 D, 29, 144.

Gill, T. 1886 A, 47 (Loricata).

Hoernes, R. 1886 A, 662.

Illiger, C. 1811 A, 110 (Cingulati).

Kingsley, J. S. 1925 A, 50 (Dasypoda).

Osborn, H. F. 1909 D, 124.

1910 B, 541.

Scharff, R. F. 1911 A, 399.

Scott, W. B. 1905 A, 242.

1913 A, 189, 592, 610.

Sinclair, W. J. 1905 D, 7, 362, 492.

Trouessart, E. L. 1905 A, 811.

Vicq d'Azyr, F. 1819 A, 55 (Loricati).

Zittel and Schlosser 1911 A, 421.

1923 A, 505 (Dasypoda).

## DASYPODIDÆ Bonaparte.

Bonaparte, C. L. 1831 A, 10, 23.

Hay, O. P. 1902 A, 581.

Abel, O. 1901 A, 29 ("dasypodites").

1912 F, 377.

1913 B, 727.

1919 A, 780.

Agar, W. E. 1909 A, 374, figs. 1-4 ("armadillo").

Allessandrini, A. 1849 B, 396 ("armadili").

Ameghino, F. 1883 A, 1 ("dasypideos").

1889 A, 1009 (Chlamydothoridae); 1010 (Dasypodidae).

1893 A, 428 (Dasypidae).

1909 B, 93 ("tatous").

Anthony, R. 1912 A.

Ardt, T. 1907 A, 239, 243.

1907 B, 455 ("dasypoden").

1907 D, 649.

1912 A, 698, 699.

Beddard, F. E. 1902 A, 173.

Beyer, H. 1908 A, 87 ("gürteltiere").

Black, N. 1900 A, 10 ("armadillos").

Bonaparte, C. L. 1832 A, 290.

1838 B, 111.

Boule and Thevenin 1920 A, 210 ("dasypodes").

Burmester, H. 1866 B, 231 (Loricata).

1879 B, 426 (Dasypidae).

Clark and Sonntag 1926 A, 455.

Elliott, D. G. 1901 A, 4.

Flower, W. H. 1870 A, 244 ("armadillos").

1883 D, 386.

Flower and Lydekker 1891 A, 194.

Gervais, P. 1855 A, 54 ("dasypidés").

Giebel, C. G. 1883 A ("gürteltiere").

Gill, T. 1885 B, 21.

1886 A, 48 (Tatusiidae).

Grant, M. 1904 B, 205.

Gray, J. E. 1821 A, 305 (Dasypidae).

1825 B, 343 (Dasypidae).

Gregory, W. K. 1913 E, 24, fig. 17 (Tatusia).

Grevé, C. 1902 A, 91.

Hay, O. P. 1923 A, 5.

Hogben, L. T. 1919 A, 73.

Huxley, T. H. 1863 B, 319 ("armadillos").

1863 F, 529, 530 ("armadillos").

Kampfen, P. N. 1905 A, 341.

Kükenenthal, W. 1913 A, 679.

Lane, H. H. 1909 A, 25 (Dasypodidae).



- Lane, H. H. 1910 A, 914.  
 Leche, W. 1887 A.  
     1895 A, 110 (Tatusia).  
     1900 A, 1006.  
 Leenhardt, L. E. E. 1906 A ("tatous").  
 Lubosch, W. 1908 B.  
 Lydekker, R. 1914 A, 637 ("armadillo").  
 Matthew, W. D. 1910 I, 151 ("armadillos").  
     1912 F, 301 ("armadillos").  
     1915 K, 468, fig. 17 ("armadillos").  
     1918 H, 620 ("armadillos").  
     1928 B, 965 ("armadillos").  
 Meckel, J. F. 1825 A ("gürteltiere").  
 Miller, G. S. 1912 B, 378.  
 Osborn, H. F. 1909 D, 31.  
 Owen, R. 1845 B, 320, 326 ("armadillos").  
     1866 B, 279, 296, 407.  
     1868 A, 876.  
 Palmer, T. S. 1904 A, 736, 813 (Dasypodidæ);  
     773, 813 (Tatusidæ).  
 Pander and Alton 1825 A, 5 ("dasypoden").  
 Parker, W. K. 1885 C, 7-46, pls. i-vii.  
 Pictet, F. J. 1853 A, 272 ("dasypides").  
 Reche, O. 1905 B, 244.

- Rehs, J. 1914 A, 39.  
 Römer, F. 1893 A, 527 ("gürteltiere").  
 Schlosser, M. 1905 B, 126 ("dasypodiden").  
 Schulthess, B. 1920 A, 63, 81, 105.  
 Scott, W. B. 1905 B, 40.  
     1913 A, 592.  
     1917 A, 134 ("armadillos").  
 Sinclair, W. J. 1905 D, 40, 362, 492.  
 Taschenberg, O. 1899 A, 4537.  
 Terra, P. 1911 A, 260.  
 Thomas, O. 1888 A, 456.  
 Tims, H. W. M. 1908 A, 386.  
 Tomes, C. S. 1874 A, 44 (Tatusia).  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Wallace, A. R. 1876 A, II, 245.  
 Weber, M. 1904 A, 453, 454, 464.  
 Weber and Abel 1928 A, 171, 218, 223.  
 Wegner, R. N. 1922 A, 413.  
 Wilson, C. W. 1914 A, 5 (Dasypidæ).  
 Winge, H. 1915 A, 219, 225, 238.  
     1923 A, 282, 288, 303.  
 Woodward, H. 1904 B, 156.  
 Zittel and Schlosser 1911 A, 421.  
     1923 A, 505.

## DASYPODINÆ.

- Flower, W. H. 1883 D, 387.  
 Miller, G. S. 1912 B, 378.  
     1924 C, 502.  
 Schulthess, B. 1920 A, 82, 84, 106 (Dasypodine, Tatusine).

- Trouessart, E. L. 1905 A, 814.  
 Weber, M. 1904 A, 453, 455.  
 Weber and Abel 1928 A, 219, 223.  
 Winge, H. 1915 A, 219, 238 (Dasypodini).  
     1923 A, 282, 304 (Dasypodini).

## DASYPUS Linnæus.

- Linnaeus*, C. 1758 A, 50-51.  
 Abel, O. 1912 F, 371.  
 Agar, W. E. 1909 A, 377.  
 Alessandrini, A. 1849 A, 379, pl. xxiv, fig. 3; pl.  
     xxvi, figs. 1, 2; pl. xxviii, fig. 3.  
     1849 B, 393, pls. xxviii, xxix.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1883 A, 6.  
     1889 A, 1010.  
     1906 D, 72, 83.  
     1906 E, 246.  
     1909 A, 31, figs. 16-18, 39.  
     1909 B, 99 (Tatusia).  
 Anderson, R. J. 1912 E, 908.  
 Arldt, T. 1907 B, 455.  
 Ballowitz, E. 1892 A, 133.  
 Bardeleben, K. 1885 B, 86.  
     1906 A, 133.  
 Bayer, F. 1897 A, 147, fig. 16.  
 Baysley, B. A. 1902 A, 7, pl. i, fig. 6 (Tatusia).  
 Bertelli, D. 1909 A, 161.  
 Bojanus, L. H. 1819 A, 1364.  
 Bonsdorff, E. J. 1871 A, 315, pl. iv.  
 Bronn, H. G. 1848 A, 404.  
     1849 A, 712.  
 Broom, R. 1903 I, 549.  
     1906 E, 370.  
     1915 C, 27.  
 Burmeister, H. 1866 B, 231, 232.  
     1879 B, 434.  
 Clark and Sonntag 1926 A.  
 Cleland, J. 1863 B, 302 ("armadillo").  
 Cuvier, G. 1805 A.  
     1825 A, v, 1, 120-142, pl. xi ("tatous").

## Type not specified.

- Depéret, C. 1907 B ("tatous").  
 Diener, C. 1912 A, 224.  
 Doran, A. H. G. 1878 A, 472, pl. lxiv.  
 Eggeling, H. 1904 A, 87, figs. 22, 23.  
 Emmer, G. H. T. 1901 A, 257.  
 Elliot, D. G. 1901 A, 4, pl. i (Cabassous).  
 Fawcett, E. 1918 A, pls. xvi, xvii (Tatusia).  
     1921 A, 187-217, pls. vi-ix (Tatusia).  
 Fernandez, M. 1921 A, 516.  
 Fischer, E. 1903 A, 702.  
 Fischer, J. B. 1829 A, 389.  
 Fleischmann, A. 1904 A, 484.  
 Flower, W. H. 1868 A, 378 (Tatusia).  
     1883 D, 387.  
 Flower and Lydekker 1891 A, 197 (Dasypus);  
     200 (Tatusia).  
 Foote, J. S. 1916 A, 112 (Tatu).  
 Fuchs, H. 1907 A, 154.  
     1911 B, 383, fig. 18.  
     1912 D, 147.  
     1914 A, 30.  
 Gaupp, E. 1905 E, 160.  
     1906 B, 821.  
     1913 A, 62.  
 Gegenbaur, C. 1864 C, 184.  
     1865 C, 556, 563.  
 Gervais, P. 1853 B, 67 ("tatou").  
 Giebel, C. G. 1855 A, 61, pl. xxv, figs. 9, 10.  
     1883 A, pls. xxix, lviii, lxii, lxx, lxxvi,  
     lxxxiv, lxxxviii.  
 Gill, T. 1886 A, 49.  
 Gottlieb, H. 1914 A, 187.  
 Gregory, W. K. 1920 A, 167, fig. 114.  
     1921 A, 77.

- Grevé, C. 1902 A, 92 (*Tatusia*).  
 Hasse and Schwarck 1870 A, 123, fig. 41.  
 Hay, O. P. 1918 B, 13.  
 Hogben, L. T. 1919 A, 73.  
 Howes, G. B. 1893 C, 589 (*Tatusia*).  
 Huxley, T. H. 1863 B, 324.  
     1863 D, 233, figs. 2, 3.  
     1865 B, 40, 65.  
 Kampfen, P. N. 1905 A, 493, fig. 44.  
 Kerbert, C. 1876 A, 253.  
 Kingsley, J. S. 1925 A, 260, 291, figs. 196, 278, 316.  
 Kostlin, O. 1844 A.  
 Leboucq, H. 1884 A, 75.  
 Leunis and Ludwig 1883 A, 286.  
 Leydig, F. 1859 A, 703.  
 Lubosch, W. 1908 B.  
     1911 A, 326.  
     1911 B, 742, 746.  
     1926 A, 110.  
 Lund, P. W. 1841 A, 68, 225.  
 Lydekker, R. 1903 D, 125 ("armadillos").  
 Martin, B. 1916 A, 647, pls. i-iv; text-figs. 1-15.  
 Matthew, W. D. 1912 F, 302 ("armadillo").  
     1915 K, 467.  
     1918 H, 625, 644, figs. 61, 62, 64-68.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 60 (*Tatusia*).  
 Meyer, G. H. 1847 A, 87.  
 Miller, G. S. 1912 B, 378.  
     1924 C, 503.  
 Mysberg, W. A. 1917 A, 652, fig. 4 (*Tatusia*).  
 Newman, H. H. 1913 A, 513, figs. 1-7.  
     1916 A, 173.  
 Owen, R. 1845 B, 326, pl. lxxxv (*Tatusia*).  
     1848 B, 94.  
     1851 D, 350.  
     1866 B, 393, 408, figs. 260, 261, 276.  
 Palmer, T. S. 1904 A, 217, 814.  
 Pander and Alton 1825 A, 5, pl. vii.  
 Parker, W. K. 1885 C, 118.  
 Parker and Haswell 1897 A, 470, figs. 1049, 1072, 1077, 1088.  
 Paulli, S. 1900 B, 511, fig. 25.  
 Pictet, F. J. 1853 A, 275.  
 Rehs, J. 1914 A, 39.  
 Retzius, A. 1837 A, 489.  
     1849 A, 651.  
 Reynolds, S. H. 1897 A, 424, 459, 487, 505.  
 Ridewood, W. S. 1901 A, 404, pl. xxvi, figs. 18, 19.  
 Römer, F. 1893 A, 527.  
 Schmidt, O. 1886 A, 120.  
 Schmidt, W. J. 1910 A, 637.  
 Schulthess, B. 1920 A, 28, 63, 82, 106; text-figs. 19, 23, 47, 50 (*Dasyypus tatusia*).  
 Schwalbe, G. 1904 A, 207.  
 Scott, W. B. 1905 B, 492.  
     1916 A, 115 ("armadillo").  
 Seeley, H. G. 1876 C, 176 ("armadillo").  
 Simpson, G. G. 1927 H, 288, 291.  
     1928 H, 4 (*Tatu*).  
 Sinclair, W. J. 1905 D, 8, 492.  
 Spurgin, A. M. 1904 A, 75, pls. i, ii.  
 Stromer, E. 1902 B, 556.  
 Taschenberg, O. 1899 A, 4537.  
 Terra, P. 1911 A, 260.  
 Thomas, O. 1887 A, 312 (*Tatusia*).  
     1888 A, 458.  
 Toldt, C. 1905 A, 328, figs.  
 Tornier, G. 1891 A, 189.  
 Trouessart, E. L. 1905 A, 820.  
 Vicq-d'Azyr, F. 1819 A, 56.  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A, 1, 145, 147.  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Weber and Abel 1928 A, 189, 193, 204, 217; figs. 111, 112, 116, 128, 129, 138, 219, 220.  
 Weber and Burlet 1927 A.  
 Wegner, R. N. 1922 A, 414.  
 Wiedersheim, R. 1892 A, 61, pl. vii, fig. 18.  
 Wilder, W. B. 1872 B, 321.  
 Wilson, C. W. 1914 A, 5, pls. i-x (*Dasyypus tatusia*).  
 Winge, H. 1915 A, 52, 278.  
     1923 A, 292, 296.  
 Woodward, M. F. 1894 B, 444.  
 Wortman, J. L. 1920 A, 15.  
 Ziegler, H. 1901 A, 237 (*Dasyypus*).  
 Zittel and Schlosser 1911 A, 421 (*Tatusia*).  
     1923 A, 505 (*Tatusia*).

**Dasyypus sp. indet.**

- Abel, O. 1926 B, 81. Pleistocene; Florida.  
 Chamberlin, R. T. 1916 A, 35 ("armadillo").  
 Cooke, C. W. 1926 A, 445 (*Dasyypus*). Pleistocene; Florida.  
 Gidley, J. W. 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1917 E, 44.  
     1919 C, 106.  
     1923 A, 483. Pleistocene; Florida.  
     1927 D, 274. Pleistocene; Florida.  
 Matthew, W. D. 1925 A, 97. Pleistocene (Early); Florida.  
 Sellards, E. H. 1916 B, 103. Pleistocene; Florida.  
     1916 C, 139, 140, 148, 158, pl. xxix, figs. 1, 2. Pleistocene (Early); Florida.  
     1916 D, 616. Pleistocene (Early); Florida.  
     1916 E, 16, 17. Pleistocene; Florida.  
 Simpson, G. G. 1928 H, 2 (*Tatu*). Pleistocene (Early); Florida.

**TOMIOPSIS Cope. Type *T. ferruminatus* Cope.**

- Hay, O. P. 1902 A, 581.  
 Palmer, T. S. 1904 A, 682, 822.  
     A genus of uncertain position.

**Tomiopsis ferruminatus Cope.**

- Hay, O. P. 1902 A, 581.  
 Montgomery, T. H. 1904 A, 57.  
     Neocene?; Texas.

**CHLAMYTHERIINÆ.**

- Ardt, T. 1912 A, 744 (*Chlamydothierinae*).  
 Castellanos, A. 1927 B, 1 (*Chlamydothierinae*).  
 Palacký, J. 1902 A, 2 ("chlamydothieren").  
 Schulthess, B. 1920 A, 81 (*Chlamydothierinae*).

Trouessart, E. L. 1905 A, 812 (Chlamydo-  
theriinae).  
Weber, M. 1904 A, 465 (Chlamydotheriinae).

## CHLAMYTHERIUM Lund.

Unless otherwise indicated the authors, as  
quoted, use the form Chlamydotherium.

- Lund, P. W. 1838 A, 11 (Chlamytherium).  
Hay, O. P. 1902 A, 581 (Chlamytherium).  
Abel, O. 1919 A, 780.  
Ameghino, F. 1883 A, 4, 33.  
1885 A, 137, 170.  
1889 A, 1009.  
1897 B, 263.  
1904 B, 23.  
1906 E, 246.  
1912 B, 179.  
Bronn, H. G. 1838 A, 1258.  
1848 A, 292.  
1849 A, 712.  
Castellanos, A. 1927 B, 1.  
Depéret, C. 1907 B.  
Diener, C. 1912 A, 224 (Chlamytherium).  
Gervais, P. 1873 B, 23.  
Giebel, C. G. 1855 A, 62.  
1883 A, 149.  
Hay, O. P. 1918 B, 13, 14 (Chlamytherium).  
1926 E, 389 (Chlamytherium).  
Huxley, T. H. 1895 B, 43.  
Janensch, W. 1904 A, 90.  
Lund, P. W. 1839 B, 217.  
1841 A, 69, 232.  
MacCurdy, G. G. 1917 A, 261 (Chlamytherium).  
Matthew, W. D. 1915 A, 262.  
1918 H, 647.  
1925 A, 97.  
Osborn, H. F. 1910 B, 542.  
Oswald, F. 1909 A, 125.  
Owen, R. 1845 B, 323.  
Palacký, J. 1902 B, 142.  
Palmer, T. S. 1904 A, 184, 814.  
Pictet, F. J. 1853 A, 274, pl. viii, fig. 12.  
Schulthess, B. 1920 A, 27.  
Scott, W. B. 1913 A, 596, 612, 678.  
Sellards, E. H. 1915 B, 139.  
1915 D, 77.  
1917 A, 249.  
1917 C, 76.  
Serres, M. 1852 A, 120.  
1852 B, 183.  
Terra, P. 1911 A, 261.  
Trouessart, E. L. 1905 A, 812.  
Weber, M. 1904 A, 465, 467.  
Weber and Abel 1928 A, 226.

Winge, H. 1915 A, 219, 258 (Chlamydotherini).  
1923 A, 282 (Chlamydotherini).

Type *C. humboldtii* Lund.

Winge, H. 1915 A, 8, 88, pls. viii-xv.  
1923 A, 298, 304.  
Zittel and Schlosser 1911 A, 421.  
1923 A, 505.

## Chlamytherium septentrionale Leidy.

- Hay, O. P. 1902 A, 581 (*C. humboldtii*).  
Abel, O. 1926 B, 81.  
Baker, F. C. 1920 A, 373 (*C. septentrionalis*).  
Cahn, A. R. 1922 A, 22, pls. ii, iii.  
Chamberlin, R. T. 1916 A, 35 ("armadillo").  
1917 A, 675 ("armadillo").  
Chamberlin, T. C. 1919 A, 316 ("Chlamytherium").  
Gidley, J. W. 1927 E, 274.  
Gidley and Loomis 1926 A, 260 ("Chlamytherium").  
Hay, O. P. 1916 E, 55 ("Chlamytherium").  
1917 E, 44 (chlamytherium).  
1918 D, 461 ("armadillo").  
1923 A, 482 (Chlamytherium).  
1924 B, 259 ("giant armadillo").  
1926 C, 2, pl. ii, fig. 2 (Chlamytherium).  
1927 D, 273, 274, 286 (Chlamytherium).  
1928 B, 238 ("Chlamytherium").  
1928 C, 426 (Chlamytherium).  
Hrdlička, A. 1926 A, 9 ("giant armadillo").  
Loomis, F. B. 1924 C, 506 (Chlamydotherium).  
MacCurdy, G. G. 1917 A, 261 ("Chlamytherium").  
Matson and Clapp 1909 A, 136, 137 (Chlamydotherium humboldtii).  
Sellards, E. H. 1915 B, 139, figs. 1-6.  
1915 D, 77, 78, figs. 10, 47-49, 51, 52.  
1916 B, 103, 104.  
1916 C, 139, 140, 148, 158, pl. xxviii, figs. 4-6; pl. xxx, fig. 7.  
1916 D, 616.  
1916 E, 16, 17, 23.  
1916 F, 9.  
1917 E, 198 ("Chlamytherium").  
Simpson, G. G. 1928 H, 2, 13, fig. 9.  
Spencer, J. W. 1895 A, 137 (Chlamydotherium humboldtii).  
Pleistocene (Early); Florida, Texas.

## Chlamytherium sp. indet.

Cooke, C. W. 1926 A, 445. Pleistocene; Florida.

## Superfamily GLYPTODONTOIDÆ, new name.

Unless otherwise indicated, the writers, as  
cited, use for this group the name Glypto-  
dontia.

- Abel, O. 1901 A, 28 ("glyptodontes").  
1908 D, (215) ("glyptodonten").  
Ameghino, F. 1885 A, 129.  
1889 A, 1014.  
1906 D, 91.  
1906 E, 242.  
1907 A, 122.  
1909 A, 2.

- Ardt, T. 1907 B, 455 ("glyptodontier")  
1907 C, 677.  
1907 D, 29, 144.  
Brown, B. 1912 C, 175.  
Osborn, H. F. 1906 C, 776.  
1909 D, 126.  
1910 B, 542.  
Richter, J. 1911 A, 257 (Hoplophorus).  
Scharff, R. F. 1911 A, 399.  
Scott, W. B. 1903 A, 901.  
1905 A, 242.

Scott, W. B. 1905 B, 494.  
1912 A, 205, 592, 617, 681.  
Sinclair, W. J. 1905 D, 107, 362, 494.

Trouessart, E. L. 1905 A, 805.  
Zittel, K. A. 1893 B, 140.

## GLYPTODONTIDÆ Burmeister.

Burmeister, H. 1879 B, 421.  
Hay, O. P. 1902 A, 580.  
1927 E, 77 ("glyptodonts").  
Abel, O. 1912 F, 377, 562.  
1913 B, 727 (Glyptodontidæ).  
1914 A, 111, 114 ("glyptodontiden").  
1921 A, 188 ("glyptodontiden").  
Ameghino, F. 1889 A, 1014 (Glyptodontidæ);  
1015 (Hoplophoridæ).  
1897 B, 260 ("glyptodonts").  
1912 A, 70.  
Arlt, T. 1907 A, 239, 243.  
1907 D, 656.  
1912 A, 699 (Glyptodontidæ); 744 (Glyptodontinæ).  
Beddard, F. E. 1902 A, 184.  
Boule, M. 1891 A, 40 ("glyptodontes").  
Boule and Thevenin 1920 A, 208 ("glyptodontes").  
Brown, B. 1912 C, 175.  
Case, E. C. 1898 C, 827 (Glyptodontia).  
Cope, E. D. 1891 N, 70.  
Dall and Harris 1892 A, 284.  
Frech and Geinitz 1903 A, 36 (Glyptodontia).  
Gervais and Ameghino 1880 A, 177 ("glyptodontidés").  
Gill, T. 1872 B, 24 (Hoplophoridæ).  
1886 A, 65.  
1910 A, 56 (Hoplophoridæ).  
Hay, O. P. 1923 A, 5.  
Hogben, L. T. 1919 A, 73.  
Huxley, T. H. 1864 B, 108 (Hoplophoridæ).  
1865 B, 48 (Hoplophoridæ).  
Jaekel, O. 1909 C, 706 ("glyptodonten").  
Janensch, W. 1904 A, 67 ("glyptodontiden").

Kampfen, P. N. 1905 A, 496 (Glyptodontidæ).  
Lane, H. H. 1909 A, 25.  
1910 A, 914.  
Lonnberg, E. 1910 A, 65 (Glyptodontidæ).  
Matthew, W. D. 1909 C, 120.  
1912 F, 301 ("glyptodonts").  
1913 B, 291.  
1915 K, fig. 37 ("glyptodonts").  
1928 B, 977 ("glyptodonts").  
Moodie, R. L. 1923 B, 245 ("glyptodonts").  
Osborn, H. F. 1910 B, 616.  
Palacký, J. 1902 A, 2 ("glyptodontinen").  
Reynolds, S. H. 1897 A, 459.  
Roger, O. 1896 A, 101 (Glyptodontidæ); 103 (Hoplophoridæ).  
Schulthess, B. 1920 A, 50, 64, 88, 110.  
Scott, W. B. 1905 B, 115.  
1913 A, 592.  
1916 A, 116 ("glyptodonts").  
1917 A, 133, 135 ("glyptodonts").  
1928 B, 259 ("glyptodonts").  
Sinclair, W. J. 1905 D, 115, 494.  
Steinmann, G. 1907 A, 474 (Glyptodontia).  
1909 A, 70 ("glyptodonten").  
Terra, P. 1911 A, 261 ("glyptodonten").  
Trouessart, E. L. 1905 A, 805.  
Weber, M. 1904 A, 464, 466.  
Weber and Abel 1928 A, 223, 227 (Glyptodontidæ, Glyptodontinæ).  
Wegner, R. N. 1922 A, 480.  
Winge, H. 1915 A, 220, 239 (Glyptodontini).  
1923 A, 282, 298, 301, 305 (Glyptodontini).  
Zittel and Schlosser 1911 A, 418.  
1923 A, 502.

GLYPTODON Owen. Type *G. clavipes* Owen.

Hay, O. P. 1902 A, 580.  
Abel, O. 1908 D, (212).  
1909 D, (226).  
1912 F, 591, 623, fig. 458.  
1913 B, 728, figs. 36, 37.  
1914 A, 115, fig. 79.  
1919 A, 781, figs. 586, 589, 590.  
1920 A, 429, figs. 650, 651.  
Ameghino, F. 1883 A, 4, 28.  
1885 A, 170.  
1889 A, 1013.  
1912 A, 60.  
1912 B, 178.  
Beddard, F. E. 1902 A, 184.  
Boule, M. 1902 B, 914 ("glyptodonte").  
1923 A, 492.  
Boule and Thevenin 1920 A, 206.  
Brandes, G. 1900 A, 106 ("glyptodonten").  
Bonn, H. G. 1848 A, 536.  
1849 A, 712.  
Brown, B. 1912 C, 169, 172, 175.  
Case, E. C. 1898 C, 828.  
Depéret, C. 1907 B ("glyptodontes").  
Frets, G. P. 1910 A, 574.  
Gervais and Ameghino 1880 A, 197.

Gidley, J. W. 1912 C, 19 ("glyptodont")  
1926 A, 92.  
Giebel, C. G. 1855 A, 62, pl. xi.  
1883 A, pls. xxix, xlv, lxxxix.  
Grandidier, G. 1912 A, 401.  
Hase, A. 1913 A, 125.  
Hay, O. P. 1910 D, 372 ("glyptodonts").  
1916 D, 111.  
1918 B, 12, 13, 14.  
1919 A, 311.  
1923 A, 485.  
1926 E, 388 ("glyptodonts").  
1928 B, 238.  
Heilprin, A. 1887 A, 338, 339.  
Floerns, R. 1886 A, 662.  
Howes, G. B. 1903 A, 327.  
Hutchinson, H. N. 1910 A, 292, pl. liii.  
Huxley, T. H. 1863 B, 816.  
1863 D, 205, 233, figs. 1-4.  
1864 B, 108.  
1865 B, 37, pls. v-x.  
Ihering, H. 1909 A, 285.  
Janensch, W. 1904 A, 67, figs. 1-8.  
Kampfen, P. N. 1905 A, 496.  
Kingsley, J. S. 1925 A, 50.

- Koken, E. 1893 B, 494.  
 Lankester, E. R. 1905 A, 170, fig. 120.  
 Leche, W. 1887 A.  
 Lobley, J. L. 1908 A, 213, 217.  
 Lydekker, R. 1894 B, 32.  
 Mantell, G. A. 1844 A, 843, fig. 156.  
 Matthew, W. D. 1910 G, 159.  
 1915 A, 260.  
 1924 E, 748.  
 Osborn, H. F. 1905 I, 108.  
 1910 A, 213 ("glyptodonts").  
 1910 B, 542.  
 1916 E, 505, figs. 1, 2.  
 1917 B, 148, fig.  
 Oswald, F. 1909 A, 125.  
 Owen, R. 1839 F, 156.  
 1845 B, 323, pl. lxxxvi, figs. 1-3.  
 1860 E, 392, figs.  
 1868 A, 882.  
 Palacký, J. 1902 A, 1.  
 Palmer, T. S. 1904 A, 298, 816.  
 Pictet, F. J. 1853 A, 273.  
 Reche, O. 1905 B, 245.  
 Reynolds, S. H. 1897 A, 542.  
 Roth, S. 1908 A, 132, 138, 140.  
 Schlosser, M. 1899 I, 351.  
 Schmidt, O. 1886 A, 120 ("glyptodonts").  
 Schulthess, B. 1920 A, 10, 90, 111, pl. i; pl. iii, figs. 4, 6; pl. iv, fig. 4.  
 Schwarz, E. 1924 A, 422 ("glyptodonts").  
 Scott, W. B. 1905 B, 494.  
 1913 A, 219, 618, 681.  
 Serres, M. 1863 A, 885.  
 1863 B, 1028.  
 Sinclair, W. J. 1905 D, 109, 494.  
 Smith, G. E. 1903 B, 48.  
 Steinmann, G. 1907 A, 475.  
 1909 A, 67, figs. 1, 6.  
 Trouessart, E. L. 1905 A, 808.  
 Veatch, A. C. 1906 A, 51 ("glyptodon").  
 Wallace, A. R. 1876 A, 1, 147.  
 Weber, M. 1904 A, 82, 150, 165, 451, 466, figs. 63, 113, 121, 354, 355.  
 Weber and Abel 1928 A, 196, 227, figs. 119, 120, 141, 143.  
 Weber and Burlet 1927 A, 106, 237, figs. 77, 175.  
 Wegner, R. N. 1922 A, 460, fig. 30.  
 Winge, H. 1915 A, 120, 240, 282, pls. xx-xxiii.  
 1923 A, 303.  
 Woodward, H. 1904 B, 156.  
 1923 C, 74, fig. 68.  
 Zittel and Schlosser 1911 A, 419.  
 1923 A, 502, figs. 622, 623.

## GLYPTOTHERIUM Osborn.

- Osborn, H. F. 1903 B, 491.  
 Ameghino, F. 1912 B, 178.  
 Andrews, C. W. 1908 D, figs. 12-16, 19, 20.  
 Anonymous 1921 C, 558, fig.  
 Brown, B. 1912 C, 175.  
 Diener, C. 1912 A, 216.  
 Gidley, J. W. 1926 A, 91.  
 Haug, E. 1911 A, 1706, 1836.  
 Hay, O. P. 1923 A, 2, 4, 15.  
 Matthew, W. D. 1915 A, 262.  
 1918 E, 647.  
 1924 E, 748.  
 Merriam, J. C. 1919 A, 531.

## Glyptodon petaliferus Cope.

- Hay, O. P. 1902 A, 580 (G. euphractus, part; G. petaliferus); 581 (G. reticulatus, part).  
 Cook, H. J. 1927 A, 117 ("Glyptodon").  
 1927 C, 247 ("Glyptodon").  
 Deussen, A. 1924 A, 110.  
 Dumble, E. T. 1894 A, 564.  
 Gidley, J. W. 1926 A, 91-93.  
 Hay, O. P. 1916 D, 107, pls. iii-v.  
 1917 B, 14.  
 1923 A, 39, 381.  
 1924 D, 378.  
 1926 C, 2, pl. i, fig. 1; pl. ii, fig. 3.  
 1927 C, 282 ("glyptodonts").  
 1927 D, 286.  
 1928 C, 425, 426.  
 Leidy, J. 1889 E, 25, pl. iv, fig. 9; pl. vi, fig. 1.  
 1892 A, 129 (G. euphractus).  
 Matson and Clapp 1909 A, 136 (Hoplophorus euphractus); 137 (Glyptodon petaliferus).  
 Osborn, H. F. 1910 B, 368 ("Glyptotherium").  
 Spier, L. 1928 A, 161 ("glyptodon").  
 The Florida remains here referred to G. petaliferus belong possibly to G. rivipacis.  
 Pleistocene (Early); Texas, Oklahoma, Florida?

## Glyptodon rivipacis Hay.

- Hay, O. P. 1923 A, 40, 381.  
 1902 A, 581 (G. reticulatus, part).  
 Leidy, J. 1889 E, 25, 26, pl. v, figs. 11, 12 ("glyptodon").  
 1892 A, 129 (Glyptodon sp.).  
 Spencer, J. W. 1895 A, 137 (G. petaliferus).  
 Pleistocene (Early); Florida.

## Glyptodon sp. indet.

- Deussen, A. 1924 A, 108. Pleistocene (Lissie); Texas.  
 Freudenberg, W. 1910 A, 5. Pleistocene; Mexico.  
 Furlong, E. L. 1925 A, 139. Pleistocene; Tequiquamac, Mexico.  
 Gidley, J. W. 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1927 D, 274, 287. Pleistocene; Florida, Texas.  
 Hrdlička, A. 1926 A, 7 ("glyptodon").  
 Matthew, W. D. 1925 B, 222 ("Glyptodon").  
 Staked Plains; Texas.  
 Troxell, E. L. 1917 A, 89. Pleistocene (Early); Texas.

## Type G. texanum Osborn.

- Osborn, H. F. 1901 F, 499, 622 (Glyptodon).  
 1903 G, 667.  
 1909 D, 23, 65, 82.  
 1910 B, 360-366, 542, fig. 170.  
 1912 G, 250.  
 1913 A, 30.  
 1925 A, 8.  
 Palmer, T. S. 1904 A, 298, 816.  
 Scharff, R. F. 1911 A, 153.  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 221, 592.  
 Sinclair, W. J. 1905 D, 134.  
 Trouessart, E. L. 1905 A, 809.

Weber and Abel 1928 A, xxii, 228.

Winge, H. 1915 A, 313.

1923 A, 341, 353.

Zittel and Schlosser 1911 A, 420.

1923 A, 504, 680.

### **Glyptotherium arizonæ** Gidley.

Gidley, J. W. 1926 A, 91, pls. xl-xliv; text-fig. 4.

1922 B, 120, 127, pl. xxxv, fig. 11 (This genus?).

Hay, O. P. 1927 D, 3, 136, 137.

Lower Pleistocene; Arizona.

### **Glyptotherium texanum** Osborn.

Osborn, H. F. 1903 B, 492, pl. xliii.

Gidley, J. W. 1902 A, 24 ("glyptodont").

1903 C, 619, 627.

Matthew, W. D. 1909 C, 120.

1921 G, 558, fig. ("Glyptotherium").

Merriam, J. C. 1917 A, 435.

Osborn, H. F. 1905 H, 223.

1905 I, 108, pl. xv.

1910 B, 365, figs. 169, 170.

Scott, W. B. 1905 B, 134.

Trouessart, E. L. 1905 A, 809.

Pliocene (Blanco); Texas.

### **Glyptotherium** sp. indet.

Matthew, W. D. 1924 G, 631 (This genus?).

Pliocene; Texas.

## **HOPLOPHORIDÆ** Huxley.

Huxley, T. H. 1884 B, 108.

Ameghino, F. 1891, Rev. Argent. Hist. Nat., entr. 4a, 251 (*Sclerocalyptus* to replace *Hoplophorus* supposed preoccupied).

Brown, B. 1912 C, 175, 176 (*Sclerocalyptids*).

Gill, T. 1886 A, 66 ("hoplophorines").

Trouessart, E. L. 1897 A, 129 (*Sclerocalyptines*).

### **BRACHYOSTRACON** Brown, B.

Brown, B. 1912 C, 169

Anonymous 1921 C, 558, fig.

Gidley, J. W. 1926 A, 91.

Matthew, W. D. 1915 A, 262.

Zittel and Schlosser 1923 A, 504.

### Type *B. cylindricus* Brown.

Barcena, M. 1882 A, 20 ("glyptodon").

Brown, B. 1912 C, 168, 171, pls. xiii-xv.

Cope, E. D. 1884 G, 2 (*Glyptodon* sp. indet.).

Espinosa, L. 1902 A, 27, 2 pls. (*Glyptodon clavipes*).

Felix and Lenk 1891 A, 138 (*Glyptodon*).

Freudenberg, W. 1921 A, 140.

Gidley, J. W. 1926 A, 91.

Osborn, H. F. 1905 E, 931, 932 (*Glyptodon*).

Villads, M. M. 1903 A, 443, pl. i (*Glyptodon*).

Pleistocene (Early); Mexico.

### **Brachyostracon cylindricus** Brown, B.

Brown, B. 1912 C, 169, pls. xvi-xviii; text-figs. 2, 3.

Freudenberg, W. 1921 A, 140.

Pleistocene (Early); Mexico.

### **Brachyostracon mexicanus** Cuatáparo and Ramirez.

Cuatáparo and Ramirez 1875 A, 362, pl. (*Glyptodon*).

### **Brachyostracon** sp. indet.

Rath, G. 1886 A, 105 ("Glyptodon"). Pleistocene; Mexico.

## **Suborder PALÆANODONTA** Matthew.

Matthew, W. D. 1918 H, 621.

1923 B, 109.

1928 A, 71.

Simpson, G. G. 1927 H, 294.

Weber and Abel 1928 A, 187, 237, 238.

## **METACHEIROMYIDÆ** Wortman.

Wortman, J. L. 1903 A, xv, 411; xvi, 347.

Gregory, W. K. 1916 B, 261.

Matthew, W. D. 1909 C, 102.

1914 B, 387.

1918 H, 10, 62.

Matthew, W. D. 1921 D, 214.

Osborn, H. F. 1909 D, 97.

Palmer, T. S. 1904 A, 753, 903.

Schlosser, M. 1905 A, 331.

### **METACHEIROMYS** Wortman.

Wortman, J. L. 1903 A, xvi, 347.

Abel, O. 1922 C, 291.

Ameghino, F. 1906 E, 234.

Haug, E. 1911 A, 1528.

Hubrecht, A. A. W. 1908 A, 161.

Matthew, W. D. 1906 B, 361.

1909 C, 102.

1909 D, 308, 347.

1915 A, 260.

1915 F, 431.

### Type *M. marshi* Wortman.

Matthew, W. D. 1915 G, 383.

1915 K, 470, figs. 37, 39.

1918 H, 620, 647, fig. 64.

1923 B, 109.

1928 A, 71.

1928 B, 965, 977.

Mead, C. S. 1906 A, 480.

Osborn, H. F. 1904 A, 164.

1905 H, 213.

1905 I, 99.

- Osborn, H. F. 1909 D, 50, 52.  
 1910 B, 162, 163, 164, 541, fig. 61.  
 Palmer, T. S. 1904 A, 417, 903.  
 Scharff, R. F. 1909 A, 517, 518 ("armadillo").  
 1911 A, 244, 401.  
 Schlosser, M. 1905 A, 328.  
 1905 B, 125.  
 Scott, W. B. 1913 A, 269, 592, 616.  
 Simpson, G. G. 1927 H, 294.  
 Stehlin, H. G. 1916 B, 1502.  
 Weber and Abel 1928 A, 237, 238.  
 Woodward, A. S. 1910 C, 13.  
 Wortman, J. L. 1903 A, xv, 401.  
 Zittel and Schlosser 1911 A, 550 (*Metacheiromys*).  
 1923 A, 505, 643, 667, 684 (*Metacheiromys*).

### ***Metacheiromys dasypus* Osborn.**

- Osborn, H. F.* 1904 A, 164.  
*Matthew, W. D.* 1909 C, 97.  
 1918 H, 641.  
*Schlosser, M.* 1905 B, 126.  
 Middle Eocene (Bridger); Wyoming.

### ***Metacheiromys marshi* Wortman.**

- Wortman, J. L.* 1903 A, xvi, 347, figs. 105-109.  
*Abel, O.* 1908 C, (38).  
*Matthew, W. D.* 1909 C, 97.  
 1918 H, 641.  
*Schlosser, M.* 1905 B, 126.  
 Middle Eocene (Bridger); Wyoming.

### ***Metacheiromys tatusia* Osborn.**

- Osborn, H. F.* 1904 A, 165.  
*Abel, O.* 1922 C, 291, fig. 245.  
*Matthew, W. D.* 1909 C, 97.  
 1918 H, 641.

- Osborn, H. F.* 1910 B, 164, fig. 64.  
*Schlosser, M.* 1905 B, 126.  
 Middle Eocene (Bridger); Wyoming.

### ***Metacheiromys* sp. indet.**

- Matthew, W. D.* 1909 C, 97. Middle Eocene (Bridger); Wyoming.

### **PALÆANODON Matthew. Type *P. ignavus* Matthew.**

- Matthew, W. D.* 1918 H, 621, 643, figs. 61, 62, 65.  
*Abel, O.* 1922 C, 292.  
*Gregory, W. K.* 1921 A, 69.  
*Matthew, W. D.* 1915 A, 260, fig. 30 (No description).  
 1915 K, 470, fig. 37 (No description).  
 1923 B, 109.  
 1928 A, 71.  
 1928 B, 965, 977.  
*Weber and Abel* 1928 A, 237, 238.

### ***Palæanodon ignavus* Matthew.**

- Matthew, W. D.* 1918 H, 622, figs. 39-56, 61, 62, 65-68.  
*Abel, O.* 1922 C, 292.  
*Gregory, W. K.* 1921 A, 69.  
 Paleocene (Clarks Fork): Lower Eocene (Wasatch); Wyoming.

### ***Palæanodon parvulus* Matthew.**

- Matthew, W. D.* 1918 H, 640, fig. 57.  
 Lower Eocene (Wasatch); Wyoming.

### **EPOICOTHERIIDÆ Simpson.**

- Simpson, G. G.* 1927 H, 285.

### **EPOICOTHERIUM Simpson. Type *Xenotherium unicum* (Douglass).**

- Simpson, G. G.* 1927 H, 285.  
 Unless otherwise indicated the authors, as cited, use the name *Xenotherium*.  
*Abel, O.* 1914 A, 54.  
*Boulenger, G. A.* 1918 B, 198.  
*Douglass, E.* 1905 A, 204, 211 (*Xenotherium*; preoccupied by Ameghino, 1904).  
*Gregory, W. K.* 1910 A, 258.  
 1912 C, 193.  
*Joleaud, L.* 1919 A, 705.  
*Lydekker, R.* 1907 E, 681.  
 1908 A, 506.  
*Matthew, W. D.* 1906 A, 787.  
 1909 C, 110.  
 1910 A, 33.  
 1913 A, 308.  
 1915 A, 270.  
 1928 A, 70.  
*Osborn, H. F.* 1910 B, 520.  
*Scharff, R. F.* 1911 A, 246, 404.  
*Schlosser, M.* 1911 A, 166.

- Simpson, G. G.* 1928 B, 182.  
*Weber and Abel* 1928 A, 128.  
*Winge, H.* 1917 A, 193.  
*Zdansky, O.* 1926 A, 231.  
*Zittel and Schlosser* 1911 A, 366.  
 1923 A, 444.

### ***Epoicotherium unicum* (Douglass).**

- Douglass, E.* 1905 A, 204, pl. xxii, figs. 13-15 (*Xenotherium*, preoccupied).  
*Gregory, W. K.* 1910 A, 258 (*Xenotherium*).  
*Lydekker, R.* 1907 C, 451 (*Xenotherium*).  
*Matthew, W. D.* 1909 C, 103 (*Xenotherium*).  
*Simpson, G. G.* 1927 H, 285, pl. xxiv (*Epoicotherium*).  
*Weber and Abel* 1928 A, 128, fig. 128 (*Xenotherium*).  
*Zdansky, O.* 1926 A, 231, fig. 2 (*Xenotherium*).  
 Lower Oligocene (Titanotherium beds); Montana.

### **Order INSECTIVORA Latreille.**

- Latreille, P. A.* 1825 A, 48.  
*Hay, O. P.* 1902 A, 737.  
*Abel, O.* 1901 B, 313 ("insectenfresser").

- Abel, O.* 1908 F, (234) ("insektivoren").  
 1912 F, 173, 294, 679.  
 1913 B, 710.

- Abel, O. 1914 A, 50 ("insectivoren")  
 1919 A, 723.  
 1920 A, 419.  
 1921 A, 138 ("insectfresser").
- Adloff, P. 1903 A, 370 ("insectivoren").  
 1910 B, 230.  
 1913 B, 190 ("insectivoren").  
 1916 A, 593.  
 1917 B, 350 ("insectivoren").  
 1920 A, 188 ("insectivoren").
- Ärnback-Christie-Linde, A. 1907 A, 463.  
 1912 A, 620 ("insectivores").
- Allis, E. P. 1919 D, 219.
- Ameghino, F. 1889 A, 1016.  
 1905 C, 439.  
 1906 A, 389 ("insectivores").
- Anderson, R. J. 1912 D, 252.
- Anthony, R. 1912 A ("insectivoren").
- Arlt, T. 1907 C, 676.  
 1907 D, 660.  
 1912 A, 686.
- Bardeleben, K. 1885 B, 85 ("insectivoren").  
 1885 C, 150 ("insectivoren").  
 1889 B, 259.  
 1904 A, 111 ("insectivoren").
- Bardenfleth, K. S. 1913 A, 87.
- Bayer, F. 1897 A, 149.
- Beddard, F. E. 1902 A, 508.
- Behlen, H. 1906 A, 197 ("insectivoren").
- Bertelli, D. 1909 A, 180 ("insectivori").
- Beyer, H. 1908 A, 81 ("insektenfresser").
- Black, N. 1900 A, 18.
- Boas, J. E. V. 1914 B, 577 ("insectivoren").
- Bonaparte, C. L. 1832 A, 285.  
 1833 A, 1043.
- Brandt and Woldrich 1887 A, 18.
- Broom, R. 1897 B, 252.  
 1902 D, 549.  
 1903 I, 549.  
 1911 C, 319.  
 1914 F, 296 ("insectivores").  
 1915 A, 162.
- Carter, J. T. 1922 A, 603.
- Carus, V. 1875 A, 86.
- Carus and Engelmann 1861 A, 1300, 1753.
- Case, E. C. 1899 B, 182.
- Chandler, A. C. 1914 B, 134.
- Chapman, H. C. 1904 A, 149.
- Chardin, T. 1922 A, 16 ("insectivores").
- Clark and Sonntag 1926 A, 454, 459 ("insectivores").
- Cockerell, Miller and Prinz 1914 A, 350.
- Cope, E. D. 1875 Y, 445, 447.  
 1883 BB, 72.  
 1891 N, 73, 90.
- Coues, E. 1877 C, 631.
- Cuvier, F. 1825 A, 68 ("insectivores").
- Cuvier, G. 1825 A, xv, 258 ("insectivores").
- Dana, J. D. 1863 C, 334 ("insectivores").
- Dependorf, T. 1907 C, 109 ("insectivoren").
- Depéret, C. 1905 C, 703 ("insectivores").  
 1908 A, 112.
- Dobson, G. E. 1891 A, 349.
- Doran, A. H. G. 1878 A, 432.
- Earle, C. 1897 A, 570, 681.  
 1897 B, 312.
- Eggeling, H. 1904 A, 94 ("insectivoren").
- Elliot, D. G. 1901 A, 366.
- Frassetto, F. 1915 A.
- Frey, H. 1911 A, 395.
- Fuchs, H. 1909 B, 142 ("insectivoren").  
 1914 A, 38 ("insectivoren").  
 1926 B, 2.
- Gadow, H. 1913 A, 124 ("insectivores").
- Gaupp, E. 1906 B, 850.  
 1911 B, 101.  
 1911 D, 621 ("insectivoren").  
 1912 B, 219 ("insectivoren").  
 1913 A, 63.
- Gegenbaur, C. 1864 C, 182 ("insecter").  
 1888 A, 396 ("insectivoren").
- Gervais, P. 1852 A, 10 ("insectivores").  
 1859 A, 51 ("insectivores").
- Ghigi, A. 1900 B, 99 ("insectivori").
- Giebel, C. G. 1883 A ("insectivoren").
- Gill, T. 1886 B, 134.
- Gottlieb, H. 1914 A, 185.
- Gray, J. E. 1821 A, 299 (Insectivora).
- Gregory, W. K. 1910 A, 518.  
 1910 C, 297.  
 1912 C, 192.  
 1916 A, 248 ("insectivores").  
 1920 A, 163, 239.  
 1921 A, 70, 171.  
 1922 A, 538.  
 1926 B, 415.
- Gregory and Hellman 1926 A, 11 ("insectivores").
- Gregory and Simpson 1920 A, 3.
- Haeckel, E. 1868 A, 484.  
 1873 A, 544.
- Hasse and Schwarck 1870 A, 89.
- Heilprin, A. 1887 A, 345.
- Hensel, R. 1879 A, 531 ("insectivoren").
- Hertz, M. 1925 A ("insectivoren").
- Hilzheimer, M. 1913 A, 521, 564.
- Hoernes, R. 1886 A, 700.
- Hogben, L. T. 1919 A, 76.
- Howes, G. B. 1891 A, 153.
- Hubrecht, A. A. W. 1897 A, 5, 40.  
 1908 A, 159.
- Huxley, T. H. 1859 D, 435.  
 1863 E, 553.  
 1868 C, 314.  
 1870 F, 527, 537.  
 1879 A, 404.  
 1880 D, 452.  
 1880 E, 459.
- Jacobi, A. 1921 A, 216.
- Jaekel, O. 1911 A, 209 (Insectivori).
- Kampfen, P. N. 1905 A ("insectivoren").  
 1922 A, 56.
- Kaudern, W. 1910 A, 561 ("insectivoren").
- Kingsley, J. S. 1925 A, 205, 294.
- Köstlin, O. 1844 A ("insectivoren").
- Koken, E. 1893 B, 374, 480, 517.
- Kükenthal, W. 1913 A, 677.
- Lankester, E. R. 1908 A, 324.
- Lataste, F. 1887 A, 270 ("insectivores").
- Leboucq, H. 1884 A, 73 ("insectivores").
- Leche, W. 1837 A.  
 1900 A, 1007.  
 1902 A, 28.  
 1905 A, 578 ("insectivoren").  
 1907 A, 50.
- Le Damany, P. 1903 G, 322 ("insectivores").



- Leunis and Ludwig 1883 A, 206.  
 Lobley, J. L. 1908 A, 194.  
 Lubosch, W. 1911 A, 329 ("insectivoren").  
 1911 B, 744 ("insectivoren").  
 1914 A, 425 ("insectivoren").  
 Lull, R. S. 1906 B, 558.  
 1917 B, 308, 322, 338.  
 Lydekker, R. 1903 D, 101.  
 1910 F, 657.  
 Major, C. J. F. 1880 A, 40.  
 1899 B, 62.  
 1901 A, 150.  
 Martins, C. 1857 A ("insectivores").  
 Matthew, W. D. 1905 C, 298.  
 1905 D, 46.  
 1906 A, 787.  
 1907 B, 532 ("insectivores").  
 1909 C, 128.  
 1909 D, 298, 308, 334, 502-507, 551.  
 1910 I, 158.  
 1912 E, 256.  
 1913 A, 307.  
 1914 H, 351.  
 1915 A, 224.  
 1915 F, 465.  
 1915 K, 439, 444, 470.  
 1916 A, 480.  
 1916 I, 108.  
 1918 H, 565.  
 1918 I, 658.  
 1921 D, 212, 214.  
 1928 B, 948, 953, 965, 975.  
 Mead, C. S. 1906 A, 480.  
 Meunier, S. 1903 A, 776 ("insectivores").  
 Miller, G. S. 1912 A, 1.  
 1920 B, 190.  
 Mitchell, P. C. 1905 A, 490.  
 Mivart, St. G. 1868 A, 117.  
 Moodie, R. L. 1922 C, 348, 369.  
 Mysberg, W. A. 1917 A, 648.  
 Nopcsa, F. 1923 E, 1047.  
 Oehngren, S. 1919 A, 165.  
 O'Harra, C. C. 1910 A, 84, 126, 130.  
 Oken, L. 1823 A, 304 ("spitzmausartige thiere").  
 Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 1902 E, 356, fig. 1.  
 1905 I, 99.  
 1905 N, 241 ("insectivores").  
 1907 G, 1, 12, 117, 225.  
 1909 D, 128.  
 1910 B, 619.  
 1925 B, 18.  
 Owan, R. 1857 E.  
 1858 A, 22.  
 1868 A, 886.  
 Palacký, J. 1902 B, 150 ("insectivoren").  
 1903 C, 342.  
 Pander and Alton 1831 A, 17 ("insectivoren").  
 Parker, W. K. 1888 C, 397 ("insectivores").  
 Parker and Haswell 1897 A, 517.  
 Peterson, O. A. 1912 B, 164.  
 Pictet, F. J. 1853 A, 168 ("insectivores").  
 Pocock, R. I. 1916 G, 549.  
 Puccioni, N. 1908 A, 41.  
 Rehs, J. 1914 A, 2, 103.  
 Retzius, A. 1849 A, 615.  
 Reynoldus, S. H. 1897 A, 544.  
 Römer, F. 1907 A, 70 ("insectivoren").  
 Scharff, R. F. 1911 A, 142, 201, 399.  
 Schlosser, M. 1897 B, 18 ("insectivoren").  
 1898 B, 360.  
 1899 J, 353.  
 1901 F, 299.  
 1905 A, 324.  
 1910 A, 501 ("insectivoren").  
 1911 A, 147, 157 ("insectivoren").  
 Schmidt, O. 1886 A, 291.  
 Schwarz, E. 1924 A, 419.  
 Schlater, P. L. 1875 A, 209.  
 Scott, W. B. 1896 C, 308.  
 1905 B, 365.  
 1913 A, 268, 276, 683.  
 Seeley, H. G. 1878 A, 225.  
 Seydel, O. 1899 A, 517 ("insectivoren").  
 Simpson, G. G. 1928 C, 182 ("insectivores").  
 1928 J, 1, 8.  
 Sinclair, W. J. 1905 D, 365.  
 Smith, G. E. 1912 A, 425.  
 Steinmann, G. 1907 A, 469.  
 Stromer, E. 1902 B, 554, 560 ("insectivoren").  
 1912 A, 175, 243.  
 1916 A, 404.  
 Taschenberg, O. 1899 A, 4441.  
 Terra, P. 1911 A, 264.  
 Thacker, A. G. 1922 A, 603.  
 Tims, H. W. M. 1902 A, 321.  
 1905 B, 1785.  
 Todd, T. W. 1922 A, 288.  
 Tornier, G. 1891 A, 185 ("insectivoren").  
 Trouessart, E. L. 1904 A, 121.  
 Underhill, B. M. 1910 A, 76, 85.  
 Vallois, H. V. 1921 E, 975 ("insectivores").  
 Wagner, R. 1843 A, 12.  
 Wallace, A. R. 1876 A, I, 496; II, 186, 191, 541.  
 1894 A, 435.  
 Watson, D. M. S. 1916 A, 354.  
 Weber, M. 1904 A, 362.  
 Weber and Abel 1928 A, 89, 93, 111, 123, 888.  
 Weber and Burret 1927 A.  
 Weidenreich, F. 1925 A, 39 ("insectivoren").  
 Wilder, B. 1872 B, 320.  
 Williston, S. W. 1912 E, 261.  
 Winge, H. 1896 A, 125 ("insectivores").  
 1917 A, 83-203.  
 1923 A, 116, 123, 183.  
 Woodward, A. S. 1895 F, 736.  
 Woodward, H. 1904 B, 163.  
 Woodward, M. F. 1894 B, 450.  
 Wortman, J. L. 1901 B, 325.  
 1902 A, XIII, 45.  
 1903 A, 430.  
 1920 A, 1.  
 1921 A, 184 ("insectivores").  
 Zaaier, T. 1894 A, 339.  
 Zittel and Schlosser 1911 A, 364.  
 1923 A, 443.

## Suborder ЛІПОТΥПНІА Haeckel.

- Haeckel, E. 1866, Gen. Morphol.  
 Carlsson, A. 1922 A, 231.

- Carter, J. T. 1922 A, 603.  
 Clark and Sonntag 1926 A, 463.

Gill, T. 1886 B, 136 (Zalambdodonta).  
 Gregory, W. K. 1910 A, 464.  
     1912 C, 193.  
 Haeckel, E. 1868 A, 484.  
 Hilzheimer, M. 1913 A, 565.  
 Jaekel, O. 1911 A, 210.  
 Matthew, W. D. 1928 B, 950, 975 ("zalambdo-  
 donts").

Osborn, H. F. 1910 B, 519.  
 Simpson, G. G. 1928 J, 3, 8, 11 ("zalambdo-  
 dont group").  
 Todd, T. W. 1922 A, 269 ("lipotyphlous").  
 Weber and Abel 1928 A, 97, 115, 117, 126.  
 Weber and Burlet 1927 A, xiii.  
 Winge, H. 1923 A, 183.

*Superfamily PANTOLESTOIDÆ, new form.*

Hay, O. P. 1902 A, 648 (Pantolestoides).

Cope, E. D. 1891 N, 89 (Pantolestoides).  
 A group of uncertain position.

**PANTOLESTIDÆ.**

Hay, O. P. 1902 A, 648.  
 Abel, O. 1913 B, 711.  
     1914 A, 52 ("pantolestiden").  
     1919 B, 727.  
     1922 C, 290.  
 Arldt, T. 1907 D, 671.  
     1912 A, 700.  
 Chardin, T. 1922 A, 55 ("pantolestidés").  
 Cope, E. D. 1891 N, 89.  
 Dollo, L. 1889 D, 681.  
 Gregory, W. K. 1912 C, 194.  
 Lydekker, R. 1910 F, 657.  
 Matthew, W. D. 1905 C, 298.  
     1909 C, 92, 93, 96, 101 (Pantolestidæ); 95  
     (Trigonolestidæ).  
     1909 D, 299, 508, 522.

Matthew, W. D. 1914 B, 387.  
     1918 H, 586, 590.  
     1921 D, 214.  
 Osborn, H. F. 1909 D, 45, 46, 52.  
     1910 B, 109, 125, 519 (Pantolestidæ); 127,  
     547 (Trigonolestidæ).  
 Palačák, J. 1903 B, 306, 307 ("pantolestiden").  
 Schlosser, M. 1899 I, 349 (Trigonolestidæ).  
 Scott, W. B. 1913 A, 361 (Trigonolestidæ).  
 Van Bemmelen, J. F. 1918 A, 571.  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Weber, M. 1904 A, 664, 693.  
 Weber and Abel 1928 A, 125, 126.  
 Winge, H. 1923 A, 190.  
 Zittel and Schlosser 1911 A, 371.  
     1923 A, 449, 667.

**PENTACODON** Scott. Type *Chriacus inversus* Cope.

Hay, O. P. 1902 A, 745.  
 Granger, W. 1917 A, 825.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1905 C, 298.  
     1909 C, 101.  
     1909 D, 523.  
     1921 D, 212.  
 Osborn, H. F. 1909 D, 34.  
 Palmer, T. S. 1904 A, 521, 811.  
 Simpson, G. G. 1927 B, 3.

**Pentacodon inversus** (Cope).

Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
     1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Simpson, G. G. 1928 A, 4, fig. 2. (This genus  
 and species?).  
 Trouessart, E. L. 1904 A, 159.  
     Paleocene (Torrejon); New Mexico.

**PROPALÆOSINOPA** Simpson. Type *P. albertensis* Simpson.

Simpson, G. G. 1927 B, 2.

**Propalæosinopa albertensis** Simpson.

Simpson, G. G. 1927 B, 1, 2, figs. 2, 3.  
 Upper Cretaceous (Paskapoo); Alberta.

**PALÆOSINOPA** Matthew. Type *P. veterrima* Matthew.

Matthew, W. D. 1901 A, 6, 19, 20, 22.  
 Hay, O. P. 1902 A, 754.  
 Broom, R. 1909 C, 133.  
 Chardin, T. 1922 A, 55, 80, pl. iii.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1905 C, 298.  
     1909 C, 101.  
     1909 D, 464, 523.  
     1915 K, 421.  
     1918 H, 581, 586.  
 Osborn, H. F. 1907 G, 127, fig. 78.  
     1909 D, 45.  
     1910 B, 125, 519.  
     1912 G, 236, fig. 3.  
 Palmer, T. S. 1904 A, 504, 811.  
 Schlosser, M. 1911 A, 77.  
 Simpson, G. G. 1927 B, 3.

Simpson, G. G. 1928 A, 5, 9.  
 Trouessart, E. L. 1904 A, 170.  
 Weber and Abel 1928 A, 126.  
 Wortman, J. L. 1901 B, xii, 285.  
     1902 A, xiii, 433.  
 Zittel and Schlosser 1911 A, 371.  
     1923 A, 449, 666.

**Palæosinopa didelphoides** (Cope).

Hay, O. P. 1902 A, 739 (Ictops).  
 Douglass, E. 1905 A, 213 (Ictops?).  
 Matthew, W. D. 1901 A, 23 (Palæosinopa?).  
     1909 C, 93.  
     1918 H, 588, fig. 16.  
 Trouessart, E. L. 1904 A, 171.  
     Eocene (Wind River); Wyoming.

**Palæosinopa lutreola** Matthew.

Matthew, W. D. 1918 H, 589, figs. 17, 18.

Chardin, T. 1922 A, 82.

Lower Eocene (Wasatch); Wyoming.

**Palæosinopa veterrima** Matthew.

Matthew, W. D. 1901 A, 22, fig. 8.

Hay, O. P. 1902 A, 754.

Matthew, W. D. 1909 C, 93.

1918 H, 590, fig. 19.

Trouessart, E. L. 1904 A, 170.

Lower Eocene (Wasatch); Wyoming.

**PANTOLESTES** Cope. Type *P. longicaudus* Cope.

Cope, E. D. 1872 OO, 2.

Hay, O. P. 1902 A, 648 (*Pantolestes*); 740 (*Anisacodon*, *Passalacodon*).

Abel, O. 1913 B, 711.

1914 A, 52.

1922 C, 290.

Chardin, T. 1922 A, 55, 88.

Gregory, W. K. 1912 C, 194.

Haug, E. 1911 A, 1528.

Hilzheimer, M. 1913 A, 566.

Koken, E. 1893 B, 481.

Matthew, W. D. 1903 C, 229 (*Anisacodon*, *Passalacodon*).

1905 C, 298.

1909 C, 101 (*Pantolestes*, *Anisacodon*, *Passalacodon*).

1909 D, 523, 531, 533.

1918 H, 567, 586.

Osborn, H. F. 1893 V, 206.

1910 B, 161, 519.

Palacký, J. 1903 B, 307.

Palmer, T. S. 1904 A, 510, 927 (*Pantolestes*);103, 870 (*Anisacodon*); 517, 870 (*Passalacodon*).

Schlosser, M. 1899 T, 453.

1901 D, 466.

1903 A, 292.

Seeley, H. G. 1886 A, 476.

Stehlin, H. G. 1906 A, 669.

Trouessart, E. L. 1905 A, 648.

Weber, M. 1904 A, 664, 693.

Weber and Abel 1928 A, 126, 354.

Winge, H. 1917 A, 175.

Wortman, J. L. 1903 A, xv, 431.

Zierler, F. E. 1905 A, 515.

Zittel and Schlosser 1911 A, 371.

1923 A, 449.

**Pantolestes elegans** (Marsh).Hay, O. P. 1902 A, 740 (*Anisacodon*).Matthew, W. D. 1909 C, 96 (*Anisacodon*).

1909 D, 532, 533, pl. xlix, fig. 2.

Middle Eocene (Bridger); Wyoming.

**Pantolestes intermedius** Matthew.

Matthew, W. D. 1909 D, 533, text-fig. 113.

Middle Eocene (Bridger); Wyoming.

**Pantolestes longicaudus** Cope.Cope, E. D. 1872 OO, 2 (*P. longieundus*, *errore*).Hay, O. P. 1902 A, 649 (*P. longicaudus*); 740 (*Passalacodon litoralis*).Matthew, W. D. 1909 C, 96 (*P. longicaudus*, *Passalacodon littoralis*).

1909 D, 522, 532.

Osborn, H. F. 1902 C, 173.

Stehlin, H. G. 1906 A, 669.

Trouessart, E. L. 1905 A, 648 (*P. longicaudatus*).

Middle Eocene (Bridger); Wyoming.

**Pantolestes natans** Matthew.

Matthew, W. D. 1909 D, 533, pl. xlvii, fig. 3; text-figs. 106, 110, 112, 114-118.

Gregory, W. K. 1920 A, 165.

Middle Eocene (Bridger); Wyoming.

**Pantolestes phocipes** Matthew.

Matthew, W. D. 1909 D, 532, text-fig. 111.

Middle Eocene (Bridger); Wyoming.

**Pantolestes** sp. *indet.*

Matthew, W. D. 1909 C, 96. Middle Eocene (Bridger); Wyoming.

**Superfamily TENRECOIDÆ**, new name.

Unless otherwise indicated the authors, as quoted, use the name Centetoidea for this superfamily.

Dobson, G. E. 1883 A, 2.

Gill, T. 1872 B, 19.

1875 A, 102, 111.

1883 B, 120.

Gregory, W. K. 1910 A, 267.

1920 A, 165.

Leche, W. 1907 A, 146.

Schlosser, M. 1887 B, 89 (*Centetoidea*); 91 (*Centetinae*).

Weber and Abel 1928 A, 114.

**APTERNODONTIDÆ** Matthew.

Matthew, W. D. in Osborn, H. F. 1910 B, 519. Arldt, T. 1912 A, 704.

Matthew, W. D. 1910 A, 35 (*Apternodontinae*).**APTERNODUS** Matthew. Type *A. mediævus* Matthew.

Matthew, W. D. 1903 B, 202.

Broom, R. 1909 C, 133.

Gregory, W. K. 1910 A, 258.

1912 C, 193.

1916 A, 244, pl. i, F.

Gregory, W. K. 1922 A, 105, 107, 156, pl. v.

Haug, E. 1911 A, 1528.

Joleaud, L. 1919 A, 704.

Leche, W. 1907 A, 54.

Matthew, W. D. 1906 A, 787.

- Matthew, W. D. 1909 C, 110.  
 1909 D, 543.  
 1909 E, 196.  
 1910 A, 33.  
 1913 A, 308, 311.  
 1928 A, 70.  
 Matthew and Granger 1924 B, 3.  
 Osborn, H. F. 1907 G, 121, fig. 70.  
 1910 B, 216, 519.  
 Palmer, T. S. 1904 A, 113, 871.  
 Scharff, R. F. 1911 A, 246.  
 Schlosser, M. 1911 A, 166.  
 Simpson, G. G. 1927 H, 283, 295.  
 Winge, H. 1917 A, 161.

- Zdansky, O. 1926 A, 231.  
 Zittel and Schlosser 1911 A, 366.  
 1923 A, 445.

### ***Apternodus mediævus* Matthew.**

- Matthew, W. D. 1903 B, 202, fig. 2.  
 Granger, W. 1910 A, 241.  
 Gregory, W. K. 1910 A, 259.  
 Matthew, W. D. 1909 C, 103.  
 1909 D, 543, pl. li, fig. 2.  
 1910 A, 33, pl. vi.  
 Zdansky, O. 1926 A, 231, fig. 1.  
 Lower Oligocene (Titanotherium beds);  
 Montana.

## SOLENODONTIDÆ Dobson.

- Dobson, G. E. 1833 A (1832), 87.  
 Allen, J. A. 1908 B, 505, pls. xxviii-xxxiii; text-  
 figs. 1-9 (Solenodon).  
 Beddard, F. E. 1902 A, 513.  
 Brandt, J. F. 1833 B, 459, pls. i, ii (Solenodon).

- Gregory, W. K. 1910 A, 240.  
 Leche, W. 1907 A, 5.  
 Palmer, T. S. 1904 A, 872.  
 Peters, W. 1864 B, 1, pls. i-iii (Solenodon).  
 Schlosser, M. 1887 B, 113.

### ***Micropternodus* Matthew.**

- Matthew, W. D. 1903 B, 204.  
 Broom, R. 1909 C, 133.  
 Gregory, W. K. 1910 A, 259.  
 Haug, E. 1911 A, 1528.  
 Joleaud, L. 1919 A, 704.  
 Leche, W. 1907 A, 54.  
 Matthew, W. D. 1909 C, 110.  
 1909 D, 543.  
 1913 A, 308.  
 1919 B, 174.  
 Osborn, H. F. 1907 G, 121, fig. 71.  
 Schlosser, M. 1911 A, 166.

### **Type *M. borealis* Matthew.**

- Zdansky, O. 1926 A, 236.  
 Zittel and Schlosser 1911 A, 366.  
 1923 A, 445.  
***Micropternodus borealis* Matthew.**  
 Matthew, W. D. 1903 B, 204, fig. 3.  
 1905 D, 49, fig. 23.  
 1909 C, 103.  
 1909 D, 543, pl. li, fig. 1.  
 Zittel and Schlosser 1911 A, 366, fig. 525.  
 Lower Oligocene (Titanotherium beds);  
 Montana.

## TENRECIDÆ Gray.

- Gray, J. E. 1821 A.  
 Unless otherwise indicated the writers, as  
 quoted, employ the name *Centetidæ*.  
 Abel, O. 1913 B, 711 ("centetiden").  
 Adloff, P. 1910 B, 253.  
 1916 A, 583.  
 Arldt, T. 1907 C, 676.  
 1907 D, 644.  
 Bardeleben, K. 1885 C, 150 (Centetes).  
 1889 B, 261 (Centetes).  
 Beddard, F. E. 1902 A, 511.  
 Broom, R. 1915 A, 351 (Centetes).  
 Carlsson, A. 1922 A, 236.  
 Carus, V. 1875 A, 89 (Centolina).  
 Cockerell, Miller, and Prinz 1914 A, 350.  
 Cuvier, F. 1808 A, 46, pl. iii ("tenrecs").  
 Dobson, G. E. 1833 A, 2, 67, 72.  
 Doran, A. H. G. 1878 A, 444.  
 Flower, W. H. 1883 D, 464.  
 Ghigi, A. 1900 B, 105 ("centetidi").  
 Gill, T. 1875 A, 111.  
 1883 B, 120.  
 1885 B, 20.  
 1886 B, 137.  
 Gregory, W. K. 1910 A, 236.  
 1920 A, 165.  
 Hertz, M. 1925 A, 579, fig. 39 (Centetes).  
 Hilsheimer, M. 1913 A, 565.  
 Jacobi, A. 1921 A, 203 (Centetes).  
 Kampfen, P. N. 1905 A (Centetes).

- Köstlin, O. 1844 A (Centetes).  
 Kükenthal, W. 1913 A, 678.  
 Leche, W. 1887 A.  
 1900 A, 1011.  
 1904 A, 219.  
 1907 A.  
 1921 A, 6.  
 Leunis and Ludwig 1883 A, 207 (Centetina).  
 Lobley, J. L. 1908 A, 194, 204.  
 Lubosch, W. 1911 A, 330.  
 Lydekker, R. 1914 A, 629.  
 Major, C. J. F. 1897 A, 525.  
 1899 A, 508.  
 Mathew, W. D. 1910 A, 35.  
 1913 A, 309, 313.  
 Matthew and Granger 1917 A, 323.  
 Mivart, St. G. 1868 A, 147.  
 Oehngren, S. 1919 A, 165.  
 Osborn, H. F. 1909 D, 52.  
 Palacky, J. 1903 C, 343 ("centetiden").  
 Pander and Alton 1831 A, 23, pl. ii (Centetes).  
 Palmer, T. S. 1904 A, 874 (Tenrecids).  
 Parker, W. K. 1886 A, 218, pl. xvi, figs. 13, 14;  
 pls. xxxii-xxxvi.  
 Paulli, S. 1900 B, 486 (Centetes).  
 Rehs, J. 1914 A, 103.  
 Scharff, R. F. 1911 A, 246, 282.  
 1922 A, 66 (Centetes).  
 Schlosser, M. 1887 B, 89, 91, 109.  
 1901 F, 300.

Taschenberg, O. 1899 A, 4521 (Centetes).  
 Terra, P. 1911 A, 265 ("centetiden").  
 Tims, H. W. M. 1902 A, 335.  
 1905 B, 1786 (Centetes).  
 Trouessart, E. L. 1904 A, 153.  
 Van Bemmelen, J. F. 1914 A, 524.  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Wagner, R. 1943 A (Centetes).  
 Wallace, A. R. 1876 A, i, 118; ii, 188.

Weber and Abel 1928 A, 94, 97, 115, 117, 127.  
 Weber and Burlet 1927 A, 242, 260.  
 Winge, H. 1917 A, 93, 148, 189 (Centetini).  
 1923 A, 124, 170, 180, 184, 207, 214 (Centetidae, Centetini, Solenodontini).  
 Woodward, M. F. 1896 A, 558, 589.  
 Wortman, J. L. 1920 A, 12.  
 Zittel and Schlosser 1911 A, 366.  
 1923 A, 444, 669.

**PALÆORYCTES** Matthew. Type *P. puercensis* Matthew.

Matthew, W. D. 1913 A, 309.  
 Gregory, W. K. 1916 A, 248.  
 1920 A, 240.  
 1922 A, 101, 102, 104, 513.  
 Gregory and Simpson 1920 A, 1.  
 Matthew, W. D. 1921 D, 212.  
 Simpson, G. G. 1928 J, 3, 4, 8 (Palæoryctes, Palæolestes).  
 Weber and Abel 1928 A, 90, 127.  
 Winge, H. 1917 A, 161.  
 Zittel and Schlosser 1923 A, 445.

**Palæoryctes puercensis** Matthew.  
 Matthew, W. D. 1913 A, 309, pls. lx, lxi; text-figs. 2, 3.  
 Abel, O. 1914 A, 54, fig. 27.  
 Gregory, W. K. 1920 A, 163.  
 1922 A, 102, fig. 43.  
 Lydekker, R. 1914 A, 629.  
 Matthew, W. D. 1914 B, 384.  
 Matthew and Granger 1921 A, 3 (Palæolestes).  
 Reeside, J. B. 1924 A, 41.  
 Simpson, G. G. 1928 J, 5, fig. 1.  
 Paleocene (Torrejon); New Mexico.

**CENTRACODON** Marsh. Type *C. delicatus* Marsh.

Hay, O. P. 1902 A, 740.  
 Matthew, W. D. 1909 C, 101.  
 1928 B, 975.  
 Palmer, T. S. 1904 A, 167, 871.  
 Troxell, E. L. 1923 F, 507.  
 Zittel and Schlosser 1911 A, 368 (Syn. of Entomacodon).  
 1923 A, 446 (Syn. of Entomacodon).

**Centracodon delicatus** Marsh.

Hay, O. P. 1902 A, 740.  
 Matthew, W. D. 1909 C, 96.  
 Middle Eocene (Bridger); Wyoming.

**Superfamily CHRYSOCHLOEIDÆ**, new form.

Unless otherwise indicated the authors, as quoted, use the form Chrysochloroidea.

Broom, R. 1915 A, 353.  
 1916 A, 458 (Chrysochloroidea).  
 Dobson, G. E. 1883 A (1882), 2 (Chrysochloroidea).

Gill, T. 1872 B, 19 (Chrysochloroidea).  
 1875 A, 102, 109, 112.  
 1883 B, 120.  
 1885 J, 120.  
 Gregory, W. K. 1910 A, 267.  
 Schlosser, M. 1887 B, 89 (Chrysochloridæ).

**CHRYSOCHLORIDÆ** Mivart.

Mivart, St. G. 1868 A, 150.  
 Abel, O. 1909 D, (221) (Chrysochloris).  
 1912 F, 364, 381, 666 (Chrysochloris).  
 1913 B, 714 ("chrysochloriden").  
 Adloff, P. 1910 B, 253.  
 1916 A, 594.  
 Ameghino, F. 1902 B, 11.  
 1906 A, 391.  
 Anderson, C. 1925 A, 18 (Chrysochloris).  
 Anthony, R. 1913 A, 261 (Chrysochloris).  
 Arldt, T. 1907 C, 676.  
 1907 D, 646.  
 1912 A, 704.  
 Bardenfleth, K. S. 1913 A, 75 (Chrysochloris).  
 Beddard, F. E. 1902 A, 514.  
 Bensley, B. A. 1902 A, 7, pl., fig. 7.  
 Broom, R. 1899 A, 762 (Chrysochloris).  
 1907 B, 283 ("golden moles").  
 1908 F, 14.  
 1909 C, 129 (Chrysochloris).  
 1910 B, 765 (Chrysochloris).  
 1915 A, 351 (Chrysochloris).

1916 A, 449, pls. i, ii; text-figs. 1-3 (Chrysochloris).  
 1917 A, 978 (Chrysochloris).  
 Carlsson, A. 1922 A, 236.  
 Cope, E. D. 1883 I, 80.  
 Cuvier, F. 1808 A, 49, pl. iii ("chrysochlore").  
 1825 A, 65, pl. xviii ("chrysochlores").  
 Diener, C. 1909 A, 55 (Chrysochloris).  
 Dobson, G. E. 1883 A, 2, 108.  
 Doran, A. H. G. 1878 A, 436.  
 Flower, W. H. 1883 D, 465.  
 Gervais, P. 1853 B, 44 ("chrysochlores").  
 Gidley, J. W. 1906 F, 93, pl. iv, fig. 6 (Chrysochloris).  
 Giebel, C. G. 1855 A, 16 (Chrysochloris).  
 1883 A, pls. lxii, xc (Chrysochloris).  
 Gill, T. 1875 A, 109, 112.  
 1883 B, 120.  
 1885 B, 20.  
 1886 B, 136.  
 Gottlieb, H. 1914 A, 209 (Chrysochloris).  
 Gregory, W. K. 1910 A, 255.

- Gregory, W. K. 1912 C, 193 ("chrysochlorids").  
 1914 E, 525 (Chrysochloris).  
 1916 A, 244, pl. i (Chrysochloris).  
 1922 A, 107 (Chrysochloris).  
 Günther, A. 1876 A, 346.  
 Heilprin, A. 1887 A, 346.  
 Hertz, M. 1925 A, 545, 579, fig. 38 (Chrysochloris).  
 Hilzheimer, M. 1913 A, 564.  
 Kampfen, P. N. 1905 A, 442.  
 Köstlin, O. 1844 A (Chrysochloris).  
 Kükenthal, W. 1913 A, 678.  
 Leche, W. 1887 A (Chrysochloris).  
 1904 A, 220, figs. 1-3 (Chrysochloris).  
 1905 A, 577.  
 1907 A, 35, 57.  
 1912 A, 65, figs. 1, m (Chrysochloris).  
 Lobley, J. L. 1908 A, 204.  
 Major, C. J. F. 1897 A, 534.  
 1899 A, 498.  
 Matthew, W. D. 1906 A, 786.  
 1909 C, 103, 110, 112, 118.  
 1913 A, 313.  
 1915 K, fig. 17 ("golden moles").  
 1928 A, 71.  
 Meckel, J. F. 1825 A (Chrysochloris).  
 Osborn, H. F. 1907 G, 64, 81, 119-126, 227, figs. 42, 43, 69 (Chrysochloris).  
 1909 D, 75.  
 1910 B, 213, 520.  
 Owen, R. 1845 B, 412, pl. cx ("chrisochlore").  
 1868 A, 873, fig. 240 (Chrysochloris).  
 Palacký, J. 1903 C, 343 ("chrysochloriden").  
 Palmer, T. S. 1904 A, 188, 869.  
 Pander and Alton 1831 A, 17, pl. v (Chrysochloris).  
 Parsons, F. G. 1901 A, 26 (Chrysochloris).  
 Reynolds, S. H. 1897 A, 418, 440, 488 (Chrysochloris).  
 Scharff, R. F. 1911 A, 245.  
 Schlosser, M. 1887 B, 89, 137.  
 1911 A, 166 ("chrysochloriden").  
 Scott, W. B. 1905 B, 492 (Chrysochloris).  
 1928 B, 258.  
 Simpson, G. G. 1927 H, 284 (Chrysochloris).  
 Sinclair, W. J. 1905 D, 492.  
 Tims, H. W. M. 1903 A, 137 (Chrysochloris).  
 Trouessart, E. L. 1904 A, 154.  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Wallace, A. R. 1876 A, II, 189.  
 Weber and Abel 1928 A, 94, 97, 118, 128.  
 Weber and Burlet 1927 A, fig. 45 (Chrysochloris).  
 Winge, H. 1917 A, 93, 160 (Chrysochloridini).  
 1923 A, 124, 180, 184 (Chrysochloridini).  
 Woodward, M. F. 1896 A, 558, 589 (Chrysochloris).  
 Wortman, J. L. 1921 A, 180 (Chrysochloris).  
 Zdansky, O. 1926 A, 232, fig. 2 (Chrysochloris).  
 Zittel and Schlosser 1911 A, 366.  
 1923 A, 444, 670.

#### ARCTORYCTES Matthew. Type *A. terrenus* Matthew.

- Matthew, W. D. 1907 A, 172.  
 1909 C, 118.  
 1913 A, 308.  
 1928 A, 71.  
 Osborn, H. F. 1909 D, 75.  
 1910 B, 287, 520.  
 1912 G, 249.  
 Scharff, R. F. 1911 A, 246, 404.  
 Simpson, G. G. 1927 H, 285.  
 Winge, H. 1917 A, 193.

#### Arctoryctes terrenus Matthew.

- Matthew, W. D. 1907 A, 172.  
 1906 A, 787 ("chrysochlorid").  
 1909 C, 112.  
 1928 A, 71.  
 Gregory, W. K. 1910 A, 258.  
 O'Harra, C. C. 1910 A, 85.  
 Miocene; South Dakota.

#### Superfamily ERINACEOIDÆ, new form.

- Unless otherwise indicated the authors, as quoted, use the form Erinaceoidea.  
 Dobson, G. E. 1883 A, 2.  
 Gill, T. 1872 B, 18.  
 1875 A, 109.  
 1883 J, 119.  
 Gregory, W. K. 1910 A, 266 (Erinaceoidea); 464 (Erinaceomorpha).  
 Leche, W. 1907 A, 146.  
 Osborn, H. F. 1910 B, 520 (Erinaceoidea, Erinaceomorpha).  
 Schlosser, M. 1887 B, 89 (Erinaceoidea); 91 (Erinaceinae).  
 Weber and Abel 1928 A, 115, 118, 119.

#### LEPTICTIDÆ.

- Hay, O. P. 1902 A, 738.  
 Abel, O. 1913 B, 710.  
 1914 A, 50.  
 1922 C, 289 ("leptictiden").  
 Ameghino, F. 1902 B, 11 (Ictopsidae).  
 Arldt, T. 1907 D, 660 (Ictopsidae).  
 1912 A, 704 (Ictopsidae).  
 Cope, E. D. 1880 U, 151, 152, 156.  
 Douglass, E. 1905 A, 209.  
 Gregory, W. K. 1910 A, 260.  
 Hilzheimer, M. 1913 A, 565.  
 Leche, W. 1907 A, 47, 49, 54, 145.  
 Lydekker, R. 1910 F, 657.  
 Matthew, W. D. 1901 B, 370, 375.  
 1903 C, 227.  
 1905 D, 47.  
 1909 C, 93, 96, 101, 103, 105, 110.  
 1909 D, 298, 507, 534.  
 1910 A, 36.  
 1914 B, 387.  
 1918 H, 587, 571, 606.  
 1921 D, 214.  
 1928 B, 965.  
 Matthew and Granger 1924 A, 1.

Mathew and Granger 1925 A, 7, 12.

1925 B, 3.

Osborn, H. F. 1909 D, 128.

1910 B, 125, 213, 520.

Moodie, R. L. 1922 C, 348.

Palacký, J. 1903 C, 343 ("ictophiden"); 344 ("lepticien").

Simpson, G. G. 1927 F, 122, 128.

Simpson, G. G. 1928 J, 3.

Weber, M. 1904 A, 381.

Weber and Abel 1928 A, 125, 127.

Winge, H. 1917 A, 91, 97, 178 (Leptictididae).

1923 A, 123, 128, 194, 212 (Leptictididae).

Woodward, A. S. 1898 B, 403.

Zittel and Schlosser 1911 A, 366.

1923 A, 445, 667, 670.

#### LEPTICTINÆ Mathew.

Mathew, W. D. 1918 H, 571.

#### Ictops Leidy. Type *I. dakotensis* Leidy.

Hay, O. P. 1902 A, 658 (Nanohyus); 739 (Ictops).

Douglass, E. 1905 A, 210, 211, 212.

1909 C, 283, 285.

Edinger, T. 1928 A, 383.

Gregory, W. K. 1910 A, 238, 260.

Haug, E. 1911 A, 1528.

Hertz, M. 1925 A, 579.

Hilzheimer, M. 1913 A, 564.

Lambe, L. M. 1905 D, 369A.

Leche, W. 1902 A, 41.

1907 A, 47, 54.

1912 A, 82.

Lobley, J. L. 1908 A, 211.

Mathew, W. D. 1901 B, 369.

1903 C, 229.

1909 C, 110.

1909 D, 535.

1913 A, 311.

1915 K, 420.

1918 H, 571, 606.

1928 B, 975.

Osborn, H. F. 1907 G, 118, figs. 66, 67.

Palacký, J. 1903 B, 312 (Nanohyus).

1903 C, 343.

Palmer, T. S. 1904 A, 348, 871 (Ictops); 447, 929 (Nanohyus).

Schlosser, M. 1905 A, 327.

1911 A, 166.

Seeley, H. G. 1886 A, 418.

Wallace, A. R. 1876 A, 1, 133 (Ictops); 137 (Nanohyus).

Weber, M. 1904 A, 381 (Ictidops).

Weber and Abel 1928 A, 126.

Winge, H. 1917 A, 91, 98.

1923 A, 128, 212, 215, 216 (Ictidops).

Zittel and Schlosser 1911 A, 367.

1923 A, 445.

#### *Ictops acutidens* Douglass.

Douglass, E. 1901 B, 242, 245, 279.

1903 A, 149.

1905 A, 213, 222, pl. xxii, figs. 7, 21, 22, 31-34.

Gregory, W. K. 1910 A, 260.

Leche, W. 1907 A, 47.

Mathew, W. D. 1903 B, 205, fig. 4.

1905 D, 47, fig. 22.

1909 C, 103.

Moodie, R. L. 1922 C, 348.

Trouessart, E. L. 1904 A, 155.

Winge, H. 1923 A, 216 (Ictidops).

Oligocene (White River); Montana.

#### *Ictops bullatus* Mathew.

Hay, O. P. 1902 A, 739.

Cook, H. J. 1912 D, 36.

Mathew, W. D. 1909 C, 105.

O'Harra, C. C. 1910 A, 85, 126.

1920 A, 151.

Trouessart, E. L. 1904 A, 155.

Middle Oligocene (Brule); Nebraska.

#### *Ictops dakotensis* Leidy.

Hay, O. P. 1902 A, 739.

Cook, H. J. 1912 D, 36.

Douglass, E. 1905 A, 212.

Gregory, W. K. 1920 A, 240.

Leche, W. 1915 A, 357, fig. 124.

Mathew, W. D. 1909 C, 105.

O'Harra, C. C. 1910 A, 85, 126.

Sinclair, W. J. 1924 A, 101, 119.

Trouessart, E. L. 1904 A, 155.

Middle Oligocene (Brule); Dakota, Nebraska.

#### *Ictops intermedius* Douglass.

Douglass, E. 1905 A, 217, 222, pl. xxii, figs. 6, 10-12.

Mathew, W. D. 1909 C, 103.

Lower Oligocene (Titanotherium beds); Montana.

#### *Ictops major* Douglass.

Douglass, E. 1905 A, 220, 222, pl. xxii, figs. 8, 9, 19, 24-30.

Gregory, W. K. 1910 A, 260.

Mathew, W. D. 1909 C, 103.

Lower Oligocene (Titanotherium beds); Montana.

#### *Ictops montanus* Douglass.

Douglass, E. 1905 A, 214, 222, pl. xxii, figs. 1-4.

Mathew, W. D. 1909 C, 103.

Lower Oligocene (Titanotherium beds); Montana.

#### *Ictops porcinus* (Leidy).

Hay, O. P. 1902 A, 658 (Nanohyus).

Cook, H. J. 1912 D, 36.

Mathew, W. D. 1909 C, 105.

Trouessart, E. L. 1905 A, 657 (Nanohyus).

Middle Oligocene (Brule); Nebraska.

#### *Ictops tenuis* Douglass.

Douglass, E. 1905 A, 218, 222, pl. xxii, figs. 5, 17, 18, 20, 23.

Matthew, W. D. 1909 C, 103.  
Lower Oligocene (Titanotherium beds);  
Montana.

**Ictops thomsoni** Matthew.

Matthew, W. D. 1903 B, 207, fig. 5.

Douglass, E. 1905 A, 214 (I. thomsoni).

Gregory, W. K. 1910 A, 238, 260, fig. 17.

Leche, W. 1915 A, 357.

Matthew, W. D. 1909 C, 103.

Lower Oligocene (Titanotherium beds);  
Montana.

**MESODECTES** Cope. Type *M. caniculus* Cope.

Hay, O. P. 1902 A, 739.

Edinger, T. 1928 A, 384.

Haug, E. 1911 A, 1528.

Lambe, L. M. 1905 D, 369 A.

Leche, W. 1902 A, 41.

1912 A, 82.

Matthew, W. D. 1903 C, 229.

1909 C, 110.

1909 D, 535.

1918 H, 571.

1928 B, 975.

Palmer, T. S. 1904 A, 414, 871.

Seelcy, H. G. 1886 A, 514.

Wallace, A. R. 1876 A, 1, 133 (Isacis).

**Mesodectes caniculus** Cope.

Hay, O. P. 1902 A, 739.

Matthew, W. D. 1901 B, 357.

1909 C, 105.

Trouessart, E. L. 1904 A, 158.

Middle Oligocene; Colorado.

**LEPTICTIS** Leidy. Type *L. haydeni* Leidy.

Hay, O. P. 1902 A, 739.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 348.

Hilzheimer, M. 1913 A, 566.

Leche, W. 1902 A, 41.

1912 A, 82.

Lobley, J. L. 1908 A, 211.

Matthew, W. D. 1903 C, 229.

1909 C, 110.

1909 D, 535.

1918 H, 571.

1928 B, 975.

Osborn, H. F. 1910 B, 520.

Schlosser, M. 1905 A, 327.

Simpson, G. G. 1928 J, 3.

Weber, M. 1904 A, 381.

Weber and Abel 1928 A, 126.

Winge, H. 1917 A, 91, 98.

1923 A, 129, 212, 215, 216.

Zittel and Schlosser 1911 A, 367.

1923 A, 445.

**Leptictis haydeni** Leidy.

Hay, O. P. 1902 A, 739.

Cook, H. J. 1912 D, 36.

Matthew, W. D. 1909 C, 105.

O'Harra, C. C. 1910 A, 85, 126.

Zittel and Schlosser 1923 A, 445, fig. 563.

Middle Oligocene (Brule); Nebraska, South  
Dakota.

**DIACODON** Cope. Type *D. alticuspis* Cope.

Hay, O. P. 1902 A, 739 (Palmictops); 740  
(Diacodon).

Granger, W. 1910 A, 250 (Palmictops).

Haug, E. 1911 A, 1528 (Palmictops, Diacodon).

Leche, W. 1912 A, 82 (Palmictops).

Matthew, W. D. 1903 C, 229 (Palmictops).

1909 C, 101 (Palmictops, Diacodon).

1909 D, 535 (Palmictops).

1915 K, 420.

1918 H, 571, 581 (Diacodon; subgenus *Palmicolestes*).

1928 B, 975.

Osborn, H. F. 1909 D, 38, 45, 46 (Palmictops).

1910 B, 125.

1912 G, 236, fig. 3 (Palmictops).

Palacky, J. 1903 C, 342.

Palmer, T. S. 1904 A, 224, 871 (Diacodon);

498, 871 (Palmictops).

Simpson, G. G. 1928 J, 5, fig. 1.

Winge, H. 1917 A, 98 (Palmictops).

Zittel and Schlosser 1911 A, 367 (Palmictops).

1923 A, 445, 666 (Palmictops).

Trouessart, E. L. 1904 A, 156 (Palmictops).

**Diacodon alticuspis** Cope.

Hay, O. P. 1902 A, 740.

Matthew, W. D. 1909 C, 93.

1918 H, 572, figs. 1, 2.

Merrill, G. P. 1907 A, 32.

Reeside, J. B. 1924 A, 46.

Lower Eocene (Wasatch); New Mexico;  
(Wind River); Wyoming.

**Diacodon bicuspis** (Cope).

Hay, O. P. 1902 A, 739 (Palmictops).

Chardin, T. 1922 A, 91.

Matthew, W. D. 1909 C, 93 (Palmictops).

1913 A, 311, fig. 4 (Palmictops).

1918 H, 572, 574, figs. 3-5 (Diacodon).

1928 B, 961, fig. 8.

Trouessart, E. L. 1904 A, 156 (Palmictops).

Lower Eocene (Wasatch?, Wind River);  
Wyoming; (Wasatch) New Mexico.

**Diacodon puercensis** Matthew.

Matthew, W. D. 1918 H, 576, figs. 6-9 [D.  
(Palmolestes)].

Paleocene (Torrejon); New Mexico.



PARICTOPS Granger. Type *P. multicuspis* Granger.

Granger, W. 1910 A, 250.

Matthew, W. D. 1918 H, 571, 579.

Osborn, H. F. 1912 G, 236, fig. 3.

**Parictops multicuspis** Granger.

Granger, W. 1910 A, 250, fig. 6.

Matthew, W. D. 1918 H, 579.

Eocene (Wind River); Wyoming.

LEPTACODON Matthew and Granger. Type *L. tener* Matthew and Granger.

Matthew and Granger 1921 A, 2.

**Leptacodon tener** Matthew and Granger.

Matthew and Granger 1921 A, 2.

Reeside, J. B. 1924 A, 47.

Paleocene (Tiffany); Colorado.

XENACODON Matthew and Granger. Type *X. mutilatus* Matthew and Granger.

Matthew and Granger 1921 A, 3.

**Xenacodon mutilatus** Matthew and Granger.

Matthew and Granger 1921 A, 3.

Reeside, J. B. 1924 A, 47.

Paleocene (Tiffany); Colorado.

ACMEODON Matthew and Granger. Type *A. secans* Matthew and Granger.

Matthew and Granger 1921 A, 3.

Simpson, G. G. 1928 J, 3.

Winge, H. 1923 A, 195 (Acmodon).

**Acmeodon secans** Matthew and Granger.

Matthew and Granger 1921 A, 3.

Paleocene (Torrejon); New Mexico.

GYPSONICTOPS Simpson. Type *G. hypoconus* Simpson.

Simpson, G. G. 1927 A, 6.

1927 F, 128.

**Gypsonictops hypoconus** Simpson.

Simpson, G. G. 1927 A, 6, fig. 6.

1927 F, 122.

Upper Cretaceous (Hell Creek); Montana.

## DIDELPHODONTINÆ Matthew.

Matthew, W. D. 1918 H, 571.

DIDELPHODUS Cope. Type *Deltatherium absarokæ* Cope.

Hay, O. P. 1902 A, 753.

Bardenfleth, K. S. 1913 A, 76.

Gregory, W. K. 1922 A, 534, pl. v.  
1926 B, 408, 415, fig. 1.

Gregory and Simpson 1920 A, 1, 6.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1901 A, 6, 19, 20.

1909 C, 101.

1909 D, 465.

1913 A, 311.

1918 H, 571, 579.

Osborn, H. F. 1909 D, 49.

1910 B, 125, 133.

Palmer, T. S. 1904 A, 230, 811.

Seeley, H. G. 1886 A, 418.

Simpson, G. G. 1928 J, 7.

Wortman, J. L. 1901 B, xii, 285.

1902 A, xiii, 433.

**Didelphodus absarokæ** Cope.

Hay, O. P. 1902 A, 753.

Gregory, W. K. 1916 A, 244, pl. i, H.

1922 A, 108, figs. 45, 47.

Matthew, W. D. 1909 C, 93.

1913 A, 311, fig. 5.

1918 H, 582, figs. 11-13.

Simpson, G. G. 1928 J, 5, fig. 1.

Lower Eocene (Wasatch); Wyoming.

**Didelphodus absarokæ secundus** Matthew.

Matthew, W. D. 1918 H, 584, fig. 14.

Lower Eocene (Wasatch); Wyoming.

**Didelphodus absarokæ ventanus** Matthew.

Matthew, W. D. 1918 H, 585, fig. 15.

Lower Eocene (Wind River); Wyoming.

MYRMECOBOIDES Gidley. Type *M. montanensis* Gidley.

Gidley, J. W. 1915 A, 395.

Longman, H. A. 1924 A, 6.

Matthew, W. D. 1916 I, 110.

1928 B, 957.

Winge, H. 1923 A, 100 (Myrmecobioides).

Zittel and Schlosser 1923 A, 438.

**Myrmecoboides montanensis** Gidley.

Gidley, J. W. 1915 A, 395, pl. xxiii.

Paleocene (Fort Union); Montana.

PHENACOPS Matthew. Type *P. incerta* Matthew.

Matthew, W. D. 1909 D, 303, 535.

1918 H, 571.

Winge, H. 1923 A, 194.

**Phenacops incerta** Matthew.

Matthew, W. D. 1909 D, 535, pl. xlix, fig. 1.  
Middle Eocene (Bridger); Wyoming.

## ERINACEIDÆ Bonaparte.

Bonaparte, C. L. 1838 A, 113.

Abel, O. 1914 A, 50.

Adloff, P. 1910 B, 250.

Ameghino, F. 1902 B, 11.

1905 C, 452, fig. 57 (Erinaceus).

1906 C, 45 ("erinacéidés").

Anthony, R. 1912 A.

Ardt, T. 1912 A, 704.

Aymard, A. 1850 A, 107 ("hérissou").

Baur, G. 1894 B, 350 (Erinaceus).

Bertelli, D. 1909 A, 180 (Erinaceus).

Beyer, H. 1908 A, 84, fig. 20 (Erinaceus).

Bolk, L. 1921 C, 228 (Erinaceus).

Brandt and Woldrich 1887 A, 18 (Erinacei).

Bronn, H. G. 1849 A, 724 (Erinaceus).

Broom, R. 1909 C, 133 (Erinaceus).

Burlet, H. M. 1913 B, 394 (Erinaceus).

Carlsson, A. 1922 A, 227.

Carus, V. 1875 A, 88 (Erinacei).

Cuvier, F. 1808 A, 44 ("hérissous").

1825 A, 66, pl. xvi ("hérissous").

Cuvier, G. 1805 A ("hérissous").

Denker, A. 1901 A, 643 (Erinaceus).

Dependorf, T. 1898 A, 384 (Erinaceus).

Depéret, C. 1908 A, 306.

Dietrich, K. 1841 A, 74 (Erinaceus).

Dobson, G. E. 1883 A, 2, 6.

Doran, A. H. G. 1878 A, 438, 444 ("hedgehogs").

Earl, C. 1897 A, 571 (Erinaceus).

Eggeling, H. 1904 A, 95 (Erinaceus).

Fawcett, E. 1918 A, 211, pls. i-ix, xi, xvi-xviii;  
text-figs. 1-15 (Erinaceus).

Flower, W. H. 1883 D, 402.

Flower and Lydekker 1891 A, 618.

Frey, H. 1911 A, 396 (Erinaceus).

Fuchs, H. 1906 A, 27 (Erinaceus).

1912 C, 519.

1912 D, 141 (Erinaceus).

Gegenbaur, C. 1865 C, 554, fig. 7 (Erinaceus).

Gervais, P. 1852 A, 11 ("Erinaceus").

1859 A, 52 ("erinacéides").

Giebel, C. G. 1883 A, pl. x (Erinaceus).

Gill, T. 1875 A, 102, 108.

1883 B, 119.

1886 B, 143.

Gray, J. E. 1821 A, 300 (Erinacidae).

Gregory, W. K. 1910 A, 260.

1913 E, 8, fig. 5 (Erinaceus).

1920 A, 163, 208.

1921 A, 173, fig. 65 (Erinaceus).

Hasse and Schwarck 1870 A, 93, fig. 26 (Erinaceus).

Hilsheimer, M. 1913 A, 564.

Hoernes, R. 1886 A, 701.

Hogben, L. T. 1919 A, 76.

Hommers, J. H. 1924 A, 23, figs. 20, 38 (Erinaceus).

Hubrecht, A. A. W. 1897 A, 5, 20, 22 (Erinaceus).

Kampfen, P. N. 1905 A (Erinaceus).

Kingsley, J. S. 1925 A, 190, fig. 201 (Erinaceus).

Köstlin, O. 1844 A, (Erinaceus).

Lataste, F. 1887 A, 271 ("hérissous").

Leboucq, H. 1884 A, 73 (Erinaceus).

Leche, W. 1887 A.

1895 A, 11 (Erinaceus).

1900 A, 992, pls. cx, cxi; text-figs. 84, 85, 88, 89, 92, 94, 95-97.

1962 A.

1903 A, 511.

1905 A, 578.

1907 A, 48, 120, 146.

1921 A, 4.

Leunis and Ludwig 1883 A, 207 (Erinacei).

Lobley, J. L. 1908 A, 200, 204.

Lubosch, W. 1911 A, 330.

Major, C. J. F. 1899 A, 502 (Erinaceus).

Matthew, W. D. 1903 C, 227.

1905 D, 48.

1909 C, 105, 110.

1915 A, 225 ("hedgehogs").

1915 K, fig. 17 ("hedgehogs").

1928 B, 975.

Meckel, J. F. 1825 A (Erinaceus).

Michellson, G. 1922 A, figs. 1-4 (Erinaceus).

Miller, G. S. 1912 A, 114.

Mivart, St. G. 1868 A, 146.

Mysberg, W. A. 1917 A, 649, fig. 3 (Erinaceus).

Oken, L. 1823 A, 306 (Erinaceus).

Osborn, H. F. 1905 I, 103.

1909 D, 52.

1910 B, 149, 221, 520.

Owen, R. 1845 B, 419.

1886 B, 296, 300.

Palacký, J. 1903 C, 343, 345 ("erinacéiden").

Pander and Alton 1831 A, 17, pl. iii (Erinaceus).

Parker, W. K. 1886 A, pl. xvi, figs. 8, 9; pls. xvii-xxii (Erinaceus).

Paulli, S. 1900 B, 484, figs. 1-3 (Erinaceus).

Piotet, F. J. 1853 A, 170, pl. 1, figs. 4-6 ("hérissous").

Rehs, J. 1914 A, 103.

Retzius, A. 1849 A, 615, figs. 3, 4 (Erinaceus).

Roger, O. 1896 A, 27.

Scharff, R. F. 1895 A, 471.

Schlosser, M. 1887 B, 89, 91, 93.

1897 B, 17 (Erinaceus).

1898 D, 123 (Erinaceus).

1899 J, 353, 355 (Erinaceus).

1901 F, 299 ("erinacéiden").

Stehlin, H. G. 1916 B, 1537 ("erinacéiden").

Stromer, E. 1902 B, 554 (Erinaceus).

Taschenberg, O. 1899 A, 4566 (Erinaceus).

Terra, P. 1911 A, 266.

Thomas, O. 1918 A, 193 ("hedgehogs").

Trouessart, E. L. 1904 A, 126.

Van Bemmelen, J. F. 1901 A, 755 (Erinaceus).

- Van den Broeck, A. J. P. 1912 A, 734 (Erinaceidae).  
 Veith, A. 1912 A, 16 (Erinaceus).  
 Vicq-d'Azyr, F. 1792 A, 597 ("épineux").  
 Wallace, A. R. 1876 A, II, 187.  
 1894 A, 435.  
 Weber, M. 1904 A, 377, 379.  
 Weber and Abel 1923 A, 115, 119, 125.
- Weber and Burlet 1927 A, fig. 196 (Erinaceus).  
 Winge, H. 1917 A, 93, 141, 189.  
 1923 A, 124, 165, 170, 184, 205, 214 (Erinaceidae, Erinaceini).  
 Woodward, M. F. 1896 A, 558 (Erinaceus).  
 Wortman, J. L. 1921 A, 180 (Erinaceus).  
 Zittel and Schlosser 1911 A, 369.  
 1923 A, 447.

## ERINACEINÆ Gill.

- Gill, T. 1872 B, 18.  
 Dobson, G. E. 1883 A, 2, 6.  
 Gill, T. 1875 A, 109.  
 1886 B, 143.  
 Fuchs, H. 1912 C, 519.  
 Leche, W. 1902 A.
- Leche, W. 1903 A, 513 (Erinaceini).  
 1921 A, 4 (Erinaceini).  
 Matthew, W. D. 1903 C, 227.  
 Trouessart, E. L. 1904 A, 127.  
 Zittel and Schlosser 1911 A, 369.  
 1923 A, 447.

PROTERIX Matthew. Type *P. loomisi* Matthew.

- Matthew, W. D. 1903 C, 228, 229.  
 Gregory, W. K. 1910 A, 260.  
 1912 C, 194.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1903 D, 48.  
 1909 C, 110.  
 1915 A, 226.  
 Osborn, H. F. 1905 I, 103.  
 1907 G, 118, fig. 64.  
 1909 D, 63.  
 1910 B, 221, 520.  
 Palmer, T. S. 1904 A, 579, 870.
- Winge, H. 1917 H, 146.  
 1923 A, 168, 182.  
 Zittel and Schlosser 1911 A, 369.  
 1923 A, 447.
- Proterix loomisi** Matthew.  
 Matthew, W. D. 1903 C, 228, fig. 1.  
 Cook, H. J. 1912 D, 36.  
 Gregory, W. K. 1920 A, 163, fig. 105.  
 Matthew, W. D. 1909 C, 105.  
 O'Harra, C. C. 1910 A, 85, 126.  
 Trouessart, E. L. 1904 A, 126.  
 Middle Oligocene (Brule); Nebraska.

## Superfamily SORICOIDÆ, new form.

- Dobson, G. E. 1883 A, 2 (Soricoides).  
 Gill, T. 1872 B, 18 (Soricoides).  
 1875 A, 102, 110 (Soricoides).  
 1883 B, 119 (Soricoides).  
 Gregory, W. K. 1910 A, 465 (Soricomorpha).  
 Hilzheimer, M. 1913 A, 565 (Soricoides).
- Leche, W. 1907 A, 146 (Soricoides).  
 Matthew and Granger 1924 A, 2, 3 (Soricoides).  
 Schlosser, M. 1887 A, 89 (Soricoides); 91 (Soricinæ).  
 Weber and Abel 1923 A, 115, 120 (Soricoides).  
 Weber and Burlet 1927 A, xiii (Soricoides).

## NYCTITHERIIDÆ Simpson.

Simpson, G. G. 1923 A, 3.

## NYCTITHERIUM Marsh.

- Hay, O. P. 1902 A, 738 (Talpavus); 742 (Nyctitherium, Nyctilestes).  
 Abel, O. 1913 B, 710.  
 Gill, T. 1886 B, 158 (Talpavus).  
 Haug, E. 1911 A, 1528 (Nyctitherium, Talpavus, Nyctilestes).  
 Heilprin, A. 1877 A, 348 (Talpavus).  
 Matthew, W. D. 1909 C, 101 (Talpavus, Nyctitherium, Nyctilestes).  
 1909 D, 537.  
 1917 B, 569 (Nyctitherium, Nyctilestes).  
 1918 H, 603.  
 Palacký, J. 1902 D, 2.  
 Palmer, T. S. 1904 A, 467, 808 (Nyctitherium); 466, 807 (Nyctilestes); 660, 874 (Talpavus).  
 Revilleod, P. 1917 A, 194.  
 Trouessart, E. L. 1904 A, 76.  
 Weber, M. 1904 A, 382 (Talpavus).  
 Weber and Abel 1923 A, 127.  
 Zittel and Schlosser 1911 A, 367.  
 1923 A, 446.

This genus may belong to the Chiroptera.

Type *N. velox* Marsh.

- Nyctitherium celatus** (Cope).  
 Hay, O. P. 1902 A, 740 (Diacodon).  
 Matthew, W. D. 1909 C, 93 (Diacodon).  
 1918 H, 572, 604, figs. 33, 34.  
 Merrill, G. P. 1907 A, 32 (Diacodon).  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico, Wyoming.
- Nyctitherium curtidentis** Matthew.  
 Matthew, W. D. 1909 D, 539, pl. 1, fig. 5.  
 Middle Eocene (Bridger); Wyoming.
- Nyctitherium nitidum** (Marsh).  
 Hay, O. P. 1902 A, 738 (Talpavus).  
 Matthew, W. D. 1909 C, 96 (Talpavus).  
 1909 D, 538, pl. 1, figs. 6, 7.  
 Palacký, J. 1903 C, 343, 348 (Talpavus).  
 Middle Eocene (Bridger); Wyoming.

**Nyctitherium priscum** Marsh.

Hay, O. P. 1902 A, 742.

Matthew, W. D. 1909 C, 96.

1909 D, 539.

Middle Eocene (Bridger); Wyoming.

**Nyctitherium serotinum** (Marsh).

Hay, O. P. 1902 A, 742 (Nyctilestes).

Matthew, W. D. 1909 C, 96 (Nyctilestes).

## PROTENTOMODON Simpson.

Simpson, G. G. 1928 A, 3.

## ENTOMACODON Marsh.

Hay, O. P. 1902 A, 741.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 D, 539.

Palmer, T. S. 1904 A, 261, 871.

Revilliod, P. 1917 A, 194.

Troxell, E. L. 1923 F, 507.

Zittel and Schlosser 1911 A, 368.

1923 A, 446.

## CENTETODON Marsh.

Hay, O. P. 1902 A, 740.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 348.

Matthew, W. D. 1905 D, 49.

1909 C, 101.

1909 D, 540.

Palmer, T. S. 1904 A, 167, 871.

## MYOLESTES Matthew.

Matthew, W. D. 1909 D, 541, pl. 1, fig. 3.

Zittel and Schlosser 1911 A, 368.

## TALPIDÆ Gray.

Gray, J. E. 1825 B, 339.

Hay, O. P. 1902 A, 737.

Abel, O. 1913 B, 710.

1914 A, 50.

1922 C, 289 ("talpiden").

Ameghino, F. 1902 B, 11.

1906 C, 49 ("talpidés").

Arlt, T. 1907 D, 684.

1912 A, 704, 750.

Beddard, F. E. 1902 A, 516.

Branca, W. 1915 A, 50.

Brandt and Woldrich 1887 A, 21 (Talpina).

Carter, J. T. 1922 A, 603 (Talpina).

Chandler, A. C. 1914 B, 134.

Cockerell, Miller and Prinz 1914 A, 350.

Cope, E. D. 1889 R, 876 (Scalopidæ).

Coues, E. 1877 C, 632 (Talpidae); 633 (Talpina).

Cuvier, F. 1808 A, 38, pl. iii ("taupes").

Matthew, W. D. 1909 D, 539.

Palacký, J. 1902 D, 2 (Vesperugo).

Middle Eocene (Bridger); Wyoming.

**Nyctitherium velox** Marsh.

Hay, O. P. 1902 A, 742.

Matthew, W. D. 1909 C, 96.

1909 D, 538, pl. 1, fig. 8.

Middle Eocene (Bridger); Wyoming.

Type *P. ursirivalis* Simpson.**Protentomodon ursirivalis** Simpson.

Simpson, G. G. 1928 A, 3, fig. 1.

Upper Cretaceous (Fort Union); Montana.

Type *E. minutus* Marsh.**Entomacodon angustidens** Marsh.

Hay, O. P. 1902 A, 741.

Matthew, W. D. 1909 C, 96.

Middle Eocene (Bridger); Wyoming.

**Entomacodon minutus** Marsh.

Hay, O. P. 1902 A, 741.

Matthew, W. D. 1909 C, 96.

1909 D, 540, pl. 1, fig. 4.

Lower Eocene (Wasatch); Wyoming; Middle Eocene (Bridger); Wyoming.

Type *C. pulcher* Marsh.**Centetodon altidens** Marsh.

Hay, O. P. 1902 A, 740.

Matthew, W. D. 1909 C, 96.

Middle Eocene (Bridger); Wyoming.

**Centetodon pulcher** Marsh.

Hay, O. P. 1902 A, 740.

Matthew, W. D. 1909 C, 96.

Middle Eocene (Bridger); Wyoming.

Type *M. dasypelix* Matthew.**Myolestes dasypelix** Matthew.

Matthew, W. D. 1909 D, 541, pl. 1, fig. 1.

Middle Eocene (Bridger); Wyoming.

- Leche, W. 1907 A, 50, 146.  
 Leunis and Ludwig 1883 A, 210 (Talpina).  
 Lobley, J. L. 1908 A, 194, 200, 204.  
 Lubosch, W. 1911 A, 330.  
 Matthew, W. D. 1901 B, 370.  
     1905 D, 49.  
     1909 C, 95, 105, 107, 110, 114, 118.  
     1909 D, 299, 508, 536.  
     1910 A, 36.  
     1914 B, 337.  
     1915 A, 226 ("moles").  
     1915 K, 449, fig. 17 ("moles").  
     1918 H, 567.  
     1921 D, 214.  
     1923 B, 975 ("moles").  
 Meckel, J. F. 1825 A ("maulwürfe").  
 Miller, G. S. 1912 A, 2.  
     1912 B, 7 (Talpidae, Scalopinæ).  
     1924 C, 10 (Talpidae, Scalopinæ).  
 Mivart, St. G. 1868 A, 133, 150.  
 Osborn, H. F. 1909 D, 52, 64.  
     1910 B, 149, 221, 254, 521.  
 Owen, R. 1845 B, 412.  
     1868 A, 910.  
 Palacký, J. 1903 C, 343 ("talpiden").  
 Palmer, T. S. 1904 A, 772, 873.

- Pictet, F. J. 1853 A, 176 ("talpiens").  
 Rehs, J. 1914 A, 103.  
 Scharff, R. F. 1910 A, 142.  
 Schlosser, M. 1901 F, 301.  
     1924 A, 4.  
 Schwarz, E. 1924 A, 420 ("moles").  
 Seton, E. T. 1909 A, 1136.  
 Slonaker, J. R. 1920 A, 363.  
 Taschenberg, O. 1899 A, 4890.  
 Terra, P. 1911 A, 269.  
 Trouessart, E. L. 1904 A, 146.  
 Vioq-d'Azyr, F. 1792 A, cu, (Talpiti).  
     1819 A, 25 (Talpiti).  
 Wallace, A. R. 1876 A, II, 190.  
     1894 A, 435.  
 Weber, M. 1904 A, 377, 378 (Talpidae, Talpinæ).  
 Weber and Abel 1923 A, 97, 115, 121, 127.  
 Weber and Burlet 1927 A.  
 Weidenreich, F. 1925 A, 39 ("talpiden").  
 Winge, H. 1917 A, 92, 115, 128, 184 (Talpidae);  
     129 (Talpinæ).  
     1923 A, 123, 143, 154, 183, 201 (Talpidae,  
     Talpinæ).  
 Woodward, A. S. 1898 B, 403.  
 Zittel and Schlosser 1911 A, 367.  
     1923 A, 445, 667, fig. 564.

PROSCALOPS Matthew. Type *P. miocænus* Matthew.

- Matthew, W. D. 1901 B, 370, 375.  
 Broom, R. 1909 C, 135.  
 Gregory, W. K. 1910 A, 233, 290.  
     1912 C, 194.  
     1922 A, 159, pl. v.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 110.  
     1909 D, 539.  
     1924 C, 74.  
     1928 A, 71.  
 Osborn, H. F. 1907 G, 119, 121, fig. 73.  
 Palmer, T. S. 1904 A, 575, 874.  
 Scharff, R. F. 1911 A, 143.  
 Schlosser, M. 1911 A, 166.  
 Zittel and Schlosser 1911 A, 367.  
     1923 A, 446.

**Proscalops miocænus** Matthew.

- Matthew, W. D. 1901 B, 357, 375, text-figs. 1, 2.  
     1909 C, 107.  
     1909 D, 537, pl. xlix, fig. 5.  
 Zittel and Schlosser 1911 A, 368, fig. 528.  
     1923 A, 446, fig. 565.  
 Upper Oligocene (Brule); Colorado.

**Proscalops secundus** Matthew.

- Matthew, W. D. 1901 B, 375, text-figs. 1, 2.  
 Gregory, W. K. 1916 A, 244, pl. i.  
 Matthew, W. D. 1909 D, 538, pl. li, figs. 3, 4.  
     1928 A, 71.  
 Miocene (Rosebud); South Dakota.

DOMNINA Cope. Type *D. gradata* Cope.

- Hay, O. P. 1902 A, 741.  
 Haug, E. 1911 A, 1528.  
 Osborn, H. F. 1910 B, 221, 521.  
 Palmer, T. S. 1904 A, 242, 871.  
 Palacký, J. 1902 D, 2.  
 Seeley, H. G. 1886 A, 514.  
 Zittel and Schlosser 1923 A, 446.

**Domnina crassigenis** Cope.

- Hay, O. P. 1902 A, 741.  
 Matthew, W. D. 1901 B, 357.  
     1909 C, 105.  
 Oligocene (Middle); Colorado.

**Domnina gradata** Cope.

- Hay, O. P. 1902 A, 741.  
 Matthew, W. D. 1909 C, 105.  
 Oligocene (Middle); Colorado.

TALPA Linnæus. Type *T. europæa* Linnæus.

- Linnæus, C. 1758 A, 52.  
 Abel, O. 1908 G (43) ("maulwurf").  
     1912 F, 703.  
 Adams, L. E. 1903 A, 1.  
 Altmann, F. 1925 A, 108, 111, fig. 25.  
 Ameghino, F. 1902 D, 423.  
     1905 B, 193.  
     1905 C, 454, fig. 98.  
     1906 C, 49, fig. 6.

- Anderson, R. J. 1909 A, 745.  
 Anthony, R. 1912 A ("taupe").  
     1913 A, 261.  
 Bardeleben, K. 1885 B, 86.  
     1889 A, 107.  
     1889 B, 260.  
 Bardenfleth, K. S. 1913 A, 71.  
 Baur, G. 1886 O, 174 ("mole").  
 Beddard, F. E. 1902 A, 517.

- Beecker, A. 1903 A, 610 ("maulwurf").  
 Bensley, B. A. 1902 A, 8.  
 Bertelli, D. 1909 A, 180.  
 Beyer, H. 1908 A, 95, fig. 22.  
 Blendinger, W. 1904 A, 470, figs. 21-23.  
 Böker, H. 1927 A, 38.  
 Brandt and Woldrich 1887 A, 21.  
 Braus, H. 1906 A, 263.  
 Bronn, H. G. 1848 B, 1215.  
 1849 B, 723.  
 Broom, R. 1910 B, 765.  
 1926 A, 263.  
 Burne, R. H. 1891 A, 159.  
 Carlsson, A. 1922 A.  
 Carus and Engelmann 1861 A, 1810.  
 Clark and Sonntag 1926 A, 461.  
 Cunningham, J. T. 1897 A, 506.  
 Cuvier, F. 1808 A, 38, pl. iii, fig. 4 ("taupe").  
 Cuvier, G. 1805 A.  
 Dieterich, K. 1841 A, 75.  
 Dobson, G. E. 1883 A, 137, 159.  
 Doran, A. H. G. 1878 A, 436, pl. lxxi.  
 Edwards, A. M. 1884 A, 1141.  
 Fawcett, E. 1911 A, 402, fig. 25 ("mole").  
 1917 A, 311-327, fig. 1.  
 1918 A, 212, 247, pls. ix, x, xv, xxii.  
 Fischer, E. 1901 A, 2.  
 1901 B, 467-546, pls. xxvii-xxxiii.  
 1903 A, 387 ("maulwurf").  
 Fischer, J. B. 1829 A, 245.  
 Frassetto, F. 1915 A.  
 Frets, G. P. 1912 A, 423, figs. 18-23, 62-64.  
 Frey, H. 1911 A, 395.  
 Fuchs, H. 1906 A, 12.  
 1908 C, 221, fig. 19.  
 1909 D, 20, 72, fig. 8b.  
 1911 D, 97, figs. 5-12.  
 1912 D, 141.  
 1926 B, 2.  
 Gaupp, E. 1902 A, 192, figs. 9, 10.  
 1906 A, 33.  
 1906 B, 821.  
 1908 B, 511.  
 1908 C, 672.  
 1910 C, 336.  
 Gervais, P. 1852 A, 15.  
 1859 A, 57.  
 Gidley, J. W. 1906 F, 93.  
 Giebel, C. G. 1855 A, 15.  
 1883 A.  
 Gill, T. 1886 B, 152, fig. 83.  
 Gregory, W. K. 1913 E, 5, fig. 2.  
 Haase and Schwarck 1870 A, 93, fig. 27.  
 Henckel, K. O. 1927 A, 375.  
 Hertz, M. 1925 A, 565.  
 Hommes, J. H. 1924 A, 21, figs. 17, 22-25, 29-37, 52-54.  
 Inouye, M. 1912 A, 504 ("maulwurf").  
 Jacobi, A. 1921 A, 202, 204.  
 Kampfen, P. N. 1905 A.  
 1922 A, 55, fig. 1.  
 Kingsley, J. S. 1925 A, 294, fig. 317.  
 Köstlin, O. 1844 A.  
 Kraglievich, L. 1926 C, 61.  
 Kravetz, L. P. 1905 A, 5.  
 Kükenthal, W. 1913 A, 644.  
 Leche, W. 1887 A.  
 Leche, W. 1900 A, 1009, 1015.  
 1905 A, 578.  
 1912 A, 83.  
 1921 A, 70.  
 Leunis and Ludwig 1883 A, 211.  
 Matthew, W. D. 1909 C, 118.  
 1924 C, 71, 74.  
 Mead, C. S. 1909 A, 172.  
 Meckel, J. F. 1825 A.  
 Meek, A. 1908 A, 1, fig. 3 ("mole").  
 Miller, G. S. 1912 A, 3.  
 Mivart, St. G. 1878 B, 233 ("mole").  
 Mysberg, W. A. 1917 A, 648, fig. 2.  
 Nauck, E. T. 1926 B, 67.  
 Nehring, A. 1880 A.  
 Noordenbos, W. 1905 A, 221.  
 1905 B, 363 ("maulwurf").  
 Oken, L. 1823 A, 307, 314.  
 Osborn, H. F. 1907 G, 209.  
 Owen, R. 1845 B, 414, pl. x, fig. 3.  
 1862 B, 152.  
 1888 A, 910, fig. 241.  
 Palmer, T. S. 1904 A, 659, 874.  
 Pander and Alton 1831 A, 26, pl. iv.  
 Parker, W. K. 1888 A, 159, pl. xvi, figs. 1-7; pls. xxiii-xxviii.  
 Paulli, S. 1900 B, 486.  
 Peter, K. 1924 B, 467, figs. 2, 8, 20 ("maulwurf").  
 Pfeiffer, H. 1854 A, 13.  
 Pinkus, F. 1904 A, 144 ("maulwurf").  
 Rehs, J. 1914 A, 103.  
 Reynolds, S. H. 1897 A, 547 ("mole").  
 Römer, F. 1907 A, 71.  
 Scharff, R. F. 1895 A, 471.  
 1907 A, 58.  
 1911 A, 142.  
 Schlosser, M. 1887 B, 126, 128, 131.  
 1899 J, 355.  
 1901 F, 301.  
 1905 A, 327.  
 1924 A, 4.  
 Schorr, G. 1908 A, 93, figs.  
 Seeley, H. G. 1872 A, 277 ("mole").  
 1876 C, 157 ("mole").  
 Shimer, H. W. 1903 A, 824.  
 Sieber, H. 1916 A, 38-112, pls. iii-vi; 20 text-figs.  
 Taschenberg, O. 1899 A, 4690.  
 Terra, P. 1911 A, 271, fig. 97.  
 Tims, H. W. M. 1903 A, 137.  
 Tornier, G. 1891 A, 119.  
 Tourneux, F., and J. P. 1912 A, 74, figs. 9, 10 ("taupe").  
 Trouessart, E. L. 1904 A, 143.  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A, ix, 190.  
 Watson, D. M. S. 1917 A, 984.  
 Weber, M. 1904 A, 377, 378.  
 Weber and Abel 1928 A, 95, 127, figs. 59, 60.  
 Weber and Burlet 1927 A, 129, figs. 99, 100.  
 Wilder, B. 1872 B, 320.  
 Wilkie, H. C. 1926 A, 820.  
 Winge, H. 1917 A, 127.  
 1923 A, 153, 212, 217, pl. iii, fig. 2.  
 Woodward, A. S. 1893 F, 736.  
 Wortman, J. L. 1920 A, 34, fig. 13.

Wortman, J. S. 1921 A, 180.

Zittel and Schlosser 1911 A, 367, fig. 527.  
1923 A, 668.

**Talpa incerta** Matthew.

Matthew, W. D. 1924 C, 66, 74 (This genus?).  
Upper Miocene (Lower Snake Creek); Nebraska.

**PARASCALOPS** True. Type *P. breweri* True.

True, F. W. 1894, Diag. N. A. Mamm., Apr. 26, 2.

Miller, G. S. 1924 C, 13.

**Parascalops breweri** True.

True, F. W. 1894, Diag. N. A. Mamm., Apr. 26, 2.

Miller, G. S. 1924 C, 13.

**SCALOPUS** Geoffroy St. Hilaire.

Geoffroy St. Hilaire, E. F. 1803, Cat. Mamm. Mus. Hist. Nat., 77.

Unless otherwise indicated the authors, as quoted, employ for this genus the name *Scalops*.

Hay, O. P. 1902 A, 738.

Allen, J. A. 1892 A.

Arlt, T. 1907 D, 255.

Baker, F. C. 1920 A, 208, 214, 397.

Bardeleben, K. 1885 B, 86.

Beddard, F. E. 1902 A, 518.

Cope, E. D. 1880 U, 158.

Cuvier, F. 1808 A, 43, pl. iii ("scalops").

Cuvier, G. 1805 A.

1825 A, 54, pl. xxii ("scalops").

Dixey, F. A. 1881 A, 66 ("mole").

Dobson, G. E. 1883 A, 135, 159.

Doran, A. H. G. 1878 A, 436.

Elliot, D. G. 1901 A, 388.

Fischer, J. B. 1829 A, 249.

Gegenbaur, C. 1885 C, 556, fig. 8 ("mole").

Gervais, P. 1853 B, 40 ("taupe").

Giebel, C. G. 1855 A, 16.

1883 A.

Gill, T. 1886 B, 152.

Gottlieb, H. 1914 A, 186.

Jackson, H. H. T. 1915 A, 27 (Scalopus).

Leche, W. 1900 A, 996, 1009, 1014, fig. 87 (Scalops).

Leunis and Ludwig 1883 A, 211.

Matthew, W. D. 1915 K, 402 (Scalopus).

1924 C, 74 (Scalops).

Merriam, C. H. 1892 A, 61.

Müller, G. S. 1912 B, 7 (Scalopus).

1924 C, 13.

Mivart, St. G. 1868 A, 152.

Osborn, H. F. 1909 D, 90.

1910 B, 469, 521.

Owen, R. 1845 B, 413.

1868 A, 303.

Palacký, J. 1903 C, 344, 348.

Palmer, T. S. 1904 A, 620, 874 (Scalopus).

Pander and Alton 1831 A, 17.

Scharff, R. F. 1895 A, 467.

1911 A, 142.

Schlosser, M. 1887 B, 126, 127.

1901 F, 301.

**Talpa platybrachys** Douglass.

Douglass, E. 1903 A, 153, 171, fig. 13 (This genus?).

Matthew, W. D. 1909 C, 114.

1924 C, 73 ("Talpa").

Middle Miocene (Deep River); Montana.

Peterson, O. A. 1926 A, 294, figs. 9, 10.

True, F. W. 1894, Proc. U. S. Nat. Mus., xvii, 242.

1895, Science (n.s.), i, 101.

Recent; New Brunswick to Ontario, south in mountains to N. Carolina: Pleistocene; Pennsylvania.

Type *Sorex aquaticus* Linnæus.

Scott, W. B. 1913 A, 163.

Shimer, H. W. 1903 A, 324.

Slonaker, J. R. 1920 A, 335.

Tornier, G. 1891 A, 186.

Trouessart, E. L. 1904 A, 150.

Wallace, A. R. 1876 A, ii, 190.

Weber and Abel 1928 A, 121.

Wilder, B. 1872 B, 320.

Winge, H. 1917 A, 128.

1923 A, 153, 212, 217.

**Scalopus aquaticus** (Linnæus).

Unless otherwise indicated the authors, as quoted, employ the generic name *Scalops*.

Linnæus, C. 1758 A, 53 (Sorex).

Hay, O. P. 1902 A, 738.

Bangs, O. 1898 A, 210.

Brown, B. 1908 A, 173, pl. xv.

Coues, E. 1877 C, 638.

Elliot, D. G. 1901 A, 388.

Foot, J. S. 1916 A, 92, pl. ix (Scalopus).

Giebel, C. G. 1883 A, pls. ix, lviii, lxiv.

Hay, O. P. 1914 A, 32 (Scalopus).

1923 A, 310.

1924 D, 252.

Jackson, H. H. T. 1915 A, 32, pl. i, figs. 1, 2;

pl. ii, fig. 1; pl. iii, figs. 1, 1a; pl. vi, fig. 3; text-figs. 1, 3-6.

Leche, W. 1907 A, 54.

Leidy, J. 1889 H, 5.

Matthew, W. D. 1924 C, 66, 73 (Scalops. This species?).

Miller, G. S. 1912 B, 7 (Scalopus).

1924 C, 13 (Scalopus).

Owen, R. 1845 B, 413, pl. cx, figs. 2, 3.

Slonaker, J. R. 1920 A, 335, pls. i-iv.

Rhoads, S. N. 1903 A, 227.

Recent; eastern United States: Recent or Pleistocene, Pennsylvania: Pleistocene; Arkansas: Lower Pliocene (Upper Snake Creek); Nebraska.

**Scalopus aquaticus australis** Chapman.

Chapman, F. 1893, Bull. Amer. Mus. Nat. Hist., v, 339.

Baker, F. C. 1920 A, 374.

Hay, O. P. 1917 E, 45.

Hay, O. P. 1923 A, 382.  
 Miller, G. S. 1912 B, 8.  
 Sellards, E. H. 1913 E, 17 (S. sp. indet.).  
 1916 C, 151 (Scalops); 158 (Scalopus sp.).  
 Pleistocene; Florida.

**Scalopus sp. indet.**

Hay, O. P. 1902 A, 738.  
 1923 A, 312, 313. Pleistocene; Pennsylvania.  
 1924 D, 304. Pleistocene; Nebraska.

Hay, O. P. 1927 D, 274. Pleistocene; Florida.  
 Matthew, W. D. 1918 A, 228. Pleistocene (Af-  
 tonian); Nebraska.  
 1923 A, 12 (Scalops). Lower Pliocene  
 (Upper Snake Creek); Nebraska.  
 1924 C, 73 (Scalops). Pleistocene (Af-  
 tonian); Nebraska.  
 Rhoads, S. N. 1903 A, 228. Pleistocene (Port  
 Kennedy); Pennsylvania.  
 Simpson, G. G. 1928 H, 2. Pleistocene (Early);  
 Florida.

**SCAPANUS Pomel. Type *Scalops townsendii* Bachman.**

Pomel, A. 1848 C, 247.  
 Dobson, G. E. 1883 A, 133.  
 Elliot, D. G. 1901 A, 391.  
 Jackson, H. H. T. 1915 A, 54.  
 Kingsley, J. S. 1925 A, 206, 274, figs. 216, 299.  
 Matthew, W. D. 1924 C, 74.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 9.  
 1924 C, 10.  
 Palacký, J. 1903 C, 349.  
 Schlosser, M. 1887 B, 126, 127.

**Scapanus latimanus Bachman.**

Bachman, J. 1842, Boston Jour. Nat. Hist., iv,  
 34 (Scalops).  
 Elliot, D. G. 1901 A, 391, fig. 79 (S. townsendi).  
 Hay, O. P. 1927 D, 215.  
 Jackson, H. H. T. 1915 A, 64-75, pls. iv-vi.  
 Merriam and Stock 1925 A, 10.

Miller, G. S. 1912 B, 9.  
 1924 C, 11.  
 Miller, L. H. 1912 A, 70 (S. californicus?).  
 Sinclair, W. J. 1903 A, 711 (Scalopus town-  
 sendi?).  
 1904 A, 17 (Scapanus californicus?).  
 Stock, C. 1925 A, 113.  
 Recent; California: Pleistocene (Potter  
 Creek cave); California.  
**Scapanus sp. indet.**  
 Gidley, J. W. 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1927 D, 223. Pleistocene; Cali-  
 fornia.  
 Merriam, J. C. 1911 B, 235, fig. 4 (This genus?).  
 Pliocene (Thousand Creek); Nevada.  
 1917 A, 429 (This genus?). Pliocene (Thou-  
 sand Creek); Nevada).  
 Stock, C. 1925 A, 113. Pleistocene (Caves);  
 California.

**ANOMODON Le Conte. Type *A. snyderi* Le Conte.**

Hay, O. P. 1902 A, 741.  
 Cope, E. D. 1880 U, 158.  
 Palmer, T. S. 1904 A, 106, 870.  
**Anomodon snyderi Le Conte.**  
 Hay, O. P. 1902 A, 741.  
 Gervais, P. 1859 A, 365.

Hay, O. P. 1914 A, 38.  
 1923 A, 479.  
 Palacký, J. 1903 C, 344, 345.  
 Ruschenberger and Tryon 1879 A, 89.  
 Whitney, J. D. 1862 A, 136 (Anamodon).  
 Pleistocene; Illinois.

**GEOLABIS Cope. Type *G. rhynchæus* Cope.**

Hay, O. P. 1902 A, 739.  
 Palmer, T. S. 1904 A, 293, 871.  
 Seeley, H. G. 1886 A, 514.

**Geolabis rhynchæus Cope.**

Hay, O. P. 1902 A, 739.  
 Matthew, W. D. 1899 C, 105.  
 Osborn, H. F. 1910 B, 521 ("Georhynchus."  
 This genus?).  
 Middle Oligocene (Cedar Creek); Colorado.

**ENTOMODON Marsh. Type *E. comptus* Marsh.**

Hay, O. P. 1902 A, 740.  
 Heilprin, A. 1887 A, 348.  
 Palmer, T. S. 1904 A, 261, 898.

**Entomodon comptus Marsh.**

Hay, O. P. 1902 A, 740.  
 Osborn, H. F. 1902 C, 173, 189.  
 Thorpe, M. R. 1923 A, 25.  
 Trouessart, E. L. 1904 A, 42 (Sarcolemur); 157  
 (Entomodon).  
 Middle Eocene (Bridger); Wyoming.

**SORICIDÆ Gray.**

Gray, J. E. 1821 A, 300.  
 Hay, O. P. 1902 A, 738.  
 Abel, O. 1913 B, 710.  
 1914 A, 50.  
 Arnböck-Christie-Linde, A. 1907 A, 468.

Arnböck-Christie-Linde 1912 A, 601.  
 1912 B, 20 ("soríciden").  
 Ameghino, F. 1902 B, 11.  
 1902 D, 423 ("sorícidae").  
 Arldt, T. 1907 D, 682.



- Arlt, T. 1912 A, 704.  
 Beddard, F. E. 1902 A, 518.  
 Brandt and Woldrich 1887 A, 19 (Soricina).  
 Carter, J. T. 1922 A, 603 (Soricinæ).  
 Carus, V. 1875 A, 90 (Soricidea).  
 Chandler, A. C. 1914 B, 134.  
 Coues, E. 1877 C, 631, 634.  
 Cuvier, F. 1808 A, 40 ("musaraignes").  
 1825 A, 53 ("musaraignes").  
 Depéret, C. 1906 A, 620 ("soricidés").  
 1906 B, 1123 ("soricidés").  
 Dobson, G. E. 1883 A, 2.  
 1891 A, 349.  
 Elliot, D. G. 1901 A, 866.  
 Gegenbaur, C. 1865 C, 552.  
 Gervais, P. 1859 A, 54 ("soricidés").  
 Giebel, C. G. 1883 A ("spitzmäuse").  
 Gill, T. 1886 B, 146.  
 Gray, J. E. 1837 B, 123 (Sorices).  
 Gregory, W. K. 1910 A, 263, 265.  
 Hinton, M. A. C. 1911 A, 529 (Soricinæ).  
 Hoernes, R. 1886 A, 701.  
 Howes and Harrison 1893 A, 790.  
 Leche, W. 1887 A.  
 1900 A, 1009, 1016.  
 1905 A, 578.  
 1907 A, 50, 120, 146.  
 Leunis and Ludwig 1883 A, 203 (Soricidea).  
 Lohley, J. L. 1908 A, 200, 204.  
 Mansion, A. 1904 A, 169 ("soricidés").  
 Matthew, W. D. 1905 D, 48.  
 1909 C, 105, 110.  
 1910 A, 36.  
 1915 A, 225, fig. 12.

- Matthew, W. D. 1915 K, 449, fig. 17 ("shrews").  
 1921 D, 214.  
 1923 B, 975 ("shrews").  
 Meckel, J. F. 1825 A ("spitzmäuse").  
 Miller, G. S. 1912 A, 28.  
 1912 B, 12.  
 1924 C, 17.  
 Osborn, H. F. 1909 D, 52.  
 Owen, R. 1845 B, 416.  
 1868 A, 909.  
 Palacký, J. 1903 C, 343 ("soriciden").  
 Palmer, T. S. 1904 A, 770, 872.  
 Pictet, F. J. 1853 A, 173 ("soricien").  
 Rehs, J. 1914 A, 103.  
 Reynolds, S. H. 1897 A, 499.  
 Schlosser, M. 1887 B, 89, 91, 121.  
 Schwarz, E. 1924 A, 420 ("shrews").  
 Seton, E. T. 1909 A, 1091.  
 Taschenberg, O. 1899 A, 4681.  
 Terra, P. 1911 A, 267 ("soriciden").  
 Van den Broeck, A. J. P. 1912 A, 784.  
 Vicq-d'Azyr, F. 1792 A, cii (Soricii).  
 1819 A, 33 (Soricidi).  
 Wallace, A. R. 1876 A, i, 118; ii, 191.  
 1894 A, 435.  
 Weber, M. 1904 A, 377, 379 (Soricinæ).  
 Weber and Abel 1928 A, 115, 120, 127.  
 Weber and Burlet 1927 A.  
 Winge, H. 1917 A, 130, 136.  
 1923 A, 125, 155, 164, 183, 203 (Soricidæ,  
 Plesiosoricini, Soricini).  
 Woodward, A. S. 1898 B, 403.  
 Zittel and Schlosser 1911 A, 268.  
 1923 A, 446.

#### PROTOSOREX Scott. Type *P. crassus* Scott.

- Hay, O. P. 1902 A, 738.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 110.  
 Palmer, T. S. 1904 A, 585, 873.  
 Winge, H. 1917 A, 136.  
 1923 A, 160, 182.  
 Zittel and Schlosser 1911 A, 368.  
 1923 A, 446.

#### *Protosorex crassus* Scott.

- Hay, O. P. 1902 A, 738.  
 Cook, H. J. 1912 D, 36.  
 Matthew, W. D. 1901 B, 376.  
 1909 C, 105.  
 O'Hara, C. C. 1910 A, 85, 125.  
 1920 A, 151.  
 Palacký, J. 1903 C, 343.  
 Middle Oligocene (Brule); South Dakota  
 and Nebraska.

#### MICROSOREX Baird. Type *Sorex hoyi* Baird.

- Baird, S. F. 1877, in Coues, E. 1877 C, 643,  
 646.  
 Brown, B. 1908 A, 173.  
 Elliot, D. G. 1901 A, 377.  
 Merriam, C. H. 1895 C, 89 (Subgenus of  
*Sorex*).  
 Miller, G. S. 1895 A, 42.  
 1912 B, 22.  
 Osborn, H. F. 1909 D, 90.

- Palmer, T. S. 1904 A, 423, 872.  
 Trouessart, E. L. 1904 A, 135.

#### *Microsorex minutus* Brown, B.

- Brown, B. 1908 A, 173, pl. xiv.  
 Hay, O. P. 1914 A, 32.  
 1924 D, 252.  
 Pleistocene (Middle); Arkansas.

#### SOREX Linnæus. Type *S. araneus* Linnæus.

- Linnæus, C. 1758 A, 53.  
 Årnäck-Christie-Linde, A. 1907 A, 464.  
 1912 A, 602, pl. xviii, fig. 1; pl. xix; text-  
 figs. 1-6.  
 1912 B, 201.  
 Allen, J. A. 1892 A.  
 1903 A.

- Anthony, R. 1913 A, 261.  
 Beddard, F. E. 1902 A, 518.  
 Bluntschli, H. 1912 B, 390.  
 Brandt and Woldrich 1887 A, 19.  
 Bronn, H. G. 1848 B, 1157.  
 1849 A, 724.  
 Broom, R. 1909 C, 135.

- Brooin, R. 1915 A, 349, 351.  
1926 A, 263.  
Carus and Engelmann 1861 A, 1806.  
Coues, E. 1877 C, 643.  
Cuvier, F. 1808 A, 43.  
1825 A, 50, pl. xx ("musaraignes").  
Cuvier, G. 1805 A, *passim*.  
Dieterich, K. 1841 A, 75.  
Dobson, G. E. 1891 A, 349.  
Doran, A. H. G. 1878 A, 433, pl. lxii.  
Eggeling, H. 1904 A, 95.  
Elliot, D. G. 1901 A, 366.  
Foote, J. S. 1916 A, 92, pl. ix.  
Frassetto, F. 1915 A.  
Frey, H. 1911 A, 397.  
Fuchs, H. 1909 B, 142.  
Gaupp, E. 1913 A, 125.  
Gegenbaur, C. 1864 C, 191.  
1865 C, 553, fig. 5.  
Geintz, E. 1903 A.  
1904 A.  
Gervais, P. 1852 A, 12.  
1859 A, 55.  
Giebel, C. G. 1855 A, 17.  
1883 A, pls. ix, li, lxxx.  
Gill, T. 1886 B, 148.  
Gray, J. E. 1837 B, 123.  
Hertz, M. 1925 A, 556.  
Hinton, M. A. C. 1911 A, 529, 530.  
Hollister, N. 1911 B, 377.  
Hommes, J. H. 1924 A, 39.  
Jacobi, A. 1921 A, 202.  
Jeboucq, H. 1884 A, 73.  
Leche, W. 1887 A.  
1905 A, 578.  
1912 A, 83.  
Leunis and Ludwig 1883 A, 209.  
Lubosch, W. 1911 B, 744, 746.  
Lull, R. S. 1922 C, 608.  
Mansion, A. 1904 A, 169.  
Matthew, W. D. 1915 K, 402.  
Meckel, J. F. 1825 A.  
Merriam, C. H. 1892 A, 62.  
1895 C, 57.  
Miller, G. S. 1895 A, 35, 42.  
1912 A, 29.  
1912 B, 12.  
1924 C, 17.  
Mivart, St. G. 1868 A.  
Nehring, A. 1880 A.  
Oken, L. 1823 A, 309.  
Osborn, H. F. 1909 D, 90.  
1910 B, 259, 521.  
Owen, R. 1845 B, 417, pl. ex, fig. 4; pl. cxi, fig. 2.  
1866 B, 277, fig. 155.  
Palacký, J. 1902 B, 142.  
1903 C, 343, 346.  
Palmer, T. S. 1904 A, 638, 873.  
Pander and Alton 1831 A, 17.  
Parker, W. K. 1886 A, 197, pl. xvi, figs. 10-12: pls. xxix-xxx.  
Paulli, S. 1900 B, 486.  
Pictet, F. J. 1858 A, 173, pl. 1, figs. 8, 9.  
Retsius, A. 1837 A, 489.  
Scharff, R. F. 1895 A, 445.  
Schlosser, M. 1899 J, 355.  
1905 A, 327.

- Seton, E. T. 1909 A, 1091.  
Stromer, E. 1924 A, 248.  
Tims, H. W. M. 1902 A, 335.  
Tornier, G. 1891 A, 119.  
Trouessart, E. L. 1904 A, 130.  
Vicq-d'Azyr, F. 1819 A, 33.  
Wagner, R. 1843 A.  
Weber, M. 1904 A, 379.  
Weber and Abel 1928 A, 120, 127.  
Weber and Burlet 1927 A.  
Winge, H. 1917 A, 141.  
1923 A, 38, 162, 217, 218.  
Woodward, A. S. 1895 F, 736.  
Zittel and Schlosser 1911 A, 368.  
1923 A, 446, fig. 566.  
Zuckermandl, E. 1908 A, 523.
- Sorex frankstounensis** Peterson.  
*Peterson, O. A.* 1926 A, 292, fig. 8.  
Pleistocene; Pennsylvania.
- Sorex fumeus** G. S. Miller.  
*Miller, G. S.* 1895 A, 50, pl. v, fig. 5; pl. vi, fig. 5.  
*Baird, S. F.* 1857 A, 22 (*S. forsteri*); 24 (*S. richardsoni*).  
*Brown, B.* 1908 A, 172 (*This species?*).  
*Elliot, D. G.* 1901 A, 369.  
*Hay, O. P.* 1914 A, 31.  
1924 D, 252.  
*Hollister, N.* 1911 B, 380.  
*Merriam, C. H.* 1895 C, 65, pl. ix, fig. 2.  
*Miller, G. S.* 1912 B, 13, 14.  
*Seton, E. T.* 1909 A, 1106, text-fig. 252 (*S. richardsoni*).  
Recent; Eastern Canada, southward in Alleghenies to North Carolina and Tennessee: Pleistocene (Middle); Arkansas.
- Sorex obscurus** C. H. Merriam.  
*Merriam, C. H.* 1895 C, 72, pl. viii, fig. 1.  
*Brown, B.* 1908 A, 172, pl. xiv.  
*Elliot, D. G.* 1901 A, 371.  
*Hay, O. P.* 1914 A, 31.  
1924 D, 252.  
*Merriam, C. H.* 1891, N. A. Fauna, No. 5, 34, pl. iv, fig. 3 (*S. vagrans similis*).  
*Miller, G. S.* 1912 B, 15.  
1924 C, 17.  
Recent; In mountain regions of British Columbia to Colorado and California: Pleistocene (Middle); Arkansas.
- Sorex personatus** I. Geoffroy St. Hilaire.  
*Geoffroy St. Hilaire, I.* 1827, Mém. Mus. Nat., Paris, xv, 122.  
*Dobson, G. E.* 1883 A (1890), 1, pl. xxiii, fig. 10; pl. xxviii, fig. 1.  
1891 A, 349.  
*Elliot, D. G.* 1901 A, 366.  
*Hay, O. P.* 1914 A, 31.  
1924 D, 252.  
*Merriam, C. H.* 1895 C, 60, pl. vii, fig. 5; pl. ix, fig. 7.  
*Miller, G. S.* 1895 A, 53, pl. iv, figs. 1, 5, 6, 7, 8; pl. vi, figs. 7, 8.  
1924 C, 17.  
*Peterson, O. A.* 1926 A, 292.

Seton, E. T. 1909 A, 1091, text-fig. 248, map 57.  
Recent; Eastern United States.  
Typical form not known fossil.

**CRYPTOTIS** Pomel. Type *Sorex cinereus* Bachman = *S. parvus* Say.

Pomel, A. 1848, Archiv. Sci. Phys. et Nat.  
Genève, ix, 249.  
Merriam, C. H. 1895 B, 16 (Subgenus).  
Miller, G. S. 1912 B, 24.  
1924 C, 30.

**Cryptotis floridana** (Merriam).

Merriam, C. H. 1895 B, 19, pl. i, fig. 7 (Blarina).  
Elliot, D. G. 1901 A, 385 (Blarina).

**BLARINA** Gray. Type *Sorex talpoides* Gapper = *S. brevicaudus* Say.

Hay, O. P. 1902 A, 738.  
Arnbäck-Christie-Linde, A. 1912 B, 282.  
Coues, E. 1877 C, 631, 647, 648.  
Dobson, G. E. 1891 A, 349.  
Elliot, D. G. 1901 A, 381.  
Gill, T. 1886 B, 148.  
Heilprin, A. 1887 A, 346.  
Leche, W. 1912 A, 83.  
Matthew, W. D. 1909 C, 90.  
Merriam, C. H. 1892 A, 61.  
Miller, G. S. 1912 B, 23.  
1924 C, 35.  
1927 A, 9.  
Osborn, H. F. 1909 D, 1, 90.  
1910 B, 469, 521.  
Seton, E. T. 1909 A, 1116.  
Trouessart, E. L. 1904 A, 136.  
Weber, M. 1904 A, 679.

**Blarina brevicauda** (Say).

Say, T. 1823, Long's Exped. Rocky Mts., i, 164 (Sorex).  
Baird, S. F. 1857 A, 42, pl. xxx, fig. 5.  
Elliot, D. G. 1901 A, 382, fig. 74.  
Gidley, J. W. 1913 B, 96 (This species?).  
Hay, O. P. 1923 A, 350.  
Merriam, C. H. 1895 B, 10, pl. i, figs. 2-4; pl. ii, figs. 1-4.  
Miller, G. S. 1912 B, 23.  
1924 C, 35.  
Peterson, O. A. 1926 A, 293.  
Seton, E. T. 1909 A, 1116, text-fig. 253-260.  
Recent; western Nebraska and Manitoba to Atlantic; Pleistocene; Maryland.

**Sorex personatus fossidens** B. Brown.

Brown, B. 1908 A, 171, pl. xiv.  
Hay, O. P. 1914 A, 31.  
1924 D, 252.  
Hollister, N. 1911 B, 377 (S. personatus).  
Pleistocene (Middle); Arkansas.

Hay, O. P. 1923 A, 382.

Miller, G. S. 1912 B, 25.

1924 C, 31.

Sellards, E. H. 1916 C, 139, 151, 158.

1916 D, 616.

1916 E, 16.

Recent; Pennsular Florida: Pleistocene; Florida.

**Blarina brevicauda ozarkensis** B. Brown.

Brown, B. 1908 A, 170, pl. xv, fig.

Hay, O. P. 1914 A, 31.

Pleistocene (Middle); Arkansas.

**Blarina brevicauda peninsulæ** Merriam, C. H.

Merriam, C. H. 1895 B, 14 (B. carolinensis pen.).

Elliot, D. G. 1901 A, 383.

Hay, O. P. 1923 A, 382.

Sellards, E. H. 1916 C, 151 (B. brev. pen.?); 139, 158 (B. sp.).

1916 E, 16 (B. sp.).

Miller, G. S. 1912 B, 24.

1924 C, 35.

Recent; Florida: Pleistocene; Florida.

**Blarina simplicidens** Cope.

Hay, O. P. 1902 A, 738.

1923 A, 312.

Baker, F. C. 1920 A, 208, 214, 397.

Brown, B. 1908 A, 171.

Peterson, O. A. 1926 A, 293.

Rhoads, S. N. 1903 A, 227.

Early Pleistocene (Port Kennedy); Pennsylvania.

**Blarina** sp. indet.

Cope, E. D. 1869 E, 175. Pleistocene (Caves); Virginia.

Hay, O. P. 1923 A, 322, 353. Pleistocene; Pennsylvania, Virginia.

**Suborder HYOPSODONTA** Osborn.

Osborn, H. F. 1910 B, 522.

**Superfamily HYOPSODONTOIDÆ**, new name.

**HYOPSODONTIDÆ** Lydekker.

Lydekker, R. 1887 in Nicholson and Lydekker  
1887 A, 1465.

Hay, O. P. 1902 A, 788 (Limnotheriids).

Abel, O. 1908 C, (36).

1913 B, 710.

Abel, O. 1914 A, 51, 254.

1922 C, 290 ("hyopsodontiden").

1926 B, 396, 411.

Abel and Cook 1925 A, 33, 34.

Ameghino, F. 1906 A, 291.

- Bluntschli, H. 1911 A, 121.  
 1912 B, 354 ("hyopsodontiden").  
 Chapman, H. C. 1904 A, 149, 155 (Hyopsodinae).  
 Gregory, W. K. 1915 A, 420.  
 1920 A, 246.  
 1922 A, 118, 280.  
 Hubrecht, A. A. W. 1908 A, 159 (Hyopsodidae).  
 Loomis, F. B. 1905 A, 416 (Hyopsodidae).  
 Lydekker, R. 1910 F, 657.  
 Marsh, O. C. 1872 I, 205 (Limnotheriidae).  
 Matthew, W. D. 1905 C, 298 (Hyopsodontidae);  
 299 (Hyopsodidae).  
 1909 C, 92, 93, 96, 99, 101.  
 1909 D, 299, 507, 508, 513.  
 1914 B, 387.  
 1915 E, 311, 312.  
 1915 K, 442 (Limnotheriidae).  
 1921 D, 214.

- Nicholson and Lydekker 1889 A, 1465.  
 Osborn, H. F. 1901 D, 623.  
 1902 C, 176, 179.  
 1909 D, 46, 52, 59.  
 1910 B, 125, 522.  
 Palmer, T. S. 1904 A, 747, 897.  
 Pia, J. 1916 A, 129 ("hyopsodontinen").  
 Schlosser, M. 1887 B, 21, 43, 54 (Hyopsodidae).  
 1905 A, 327 ("hyopsodiden").  
 1907 C, 222.  
 Trouessart, E. L. 1904 A, 41 (Hyopsodinae).  
 Wallace, A. R. 1876 A, 1, 133 (Limnotheriidae).  
 Weber, M. 1904 A, 761 (Hyopsodidae); 763  
 (Hyopsodontidae).  
 Weber and Abel 1928 A, 124, 426, 628.  
 Wortman, J. L. 1903 A, xv, 400 (Hyopsodidae).  
 Zittel and Schlosser 1911 A, 369.  
 1923 A, 447, 666, 667, 669.

### HYOPSODUS Leidy. Type *H. paulus* Leidy.

- Hay, O. P. 1902 A, 790 (Hyopsodus); 789  
 (Lemuravus).  
 Abel, O. 1922 C, 290.  
 Abel and Cook 1925 A, 83.  
 Bluntschli, H. 1912 B, 370.  
 Bolk, L. 1914 A, 132, fig. 40.  
 Chardin, T. 1922 A, 45, 82.  
 Cope, E. D. 1880 U, 149.  
 Delafontaine, M. 1875 A, 171 (Hyopsodus,  
 Lemuravus).  
 Depéret, C. 1905 C, 704.  
 Dollo and Chardin 1924 A, 16.  
 Gidley, J. W. 1923 A, 18.  
 Granger, W. 1909 A, 22.  
 1914 A, 203.  
 Gregory, W. K. 1910 A, 360.  
 1912 C, 194.  
 1917 D, 632.  
 1920 A, 175, fig. 131.  
 1921 A.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 348, 403 (Hyopsodus); 408  
 (Lemuravus).  
 Hennig, E. 1921 A, 221.  
 Loomis, F. B. 1905 A, 418, fig. 1.  
 1905 C, 296.  
 Matthew, W. D. 1909 C, 101, 516.  
 1909 D, 513, 521.  
 1915 E, 314.  
 1915 G, 383.  
 1915 I, 152.  
 1915 K, 472, 421.  
 1918 H, 567.  
 1924 E, 749.  
 1928 B, 962, 968.  
 Osborn, H. F. 1901 D, 623 (Hyopsodus).  
 1902 C, 180, 186.  
 1902 D, 266, fig. 5.  
 1905 I, 99.  
 1905 L, 568.  
 1907 G, 128, figs. 77-80, 127, 128, 214.  
 1909 D, 127.  
 1910 B, 125, 133, 165, 522.  
 1912 G, 236, fig. 3.  
 1925 C, 750.  
 Palmer, T. S. 1904 A, 389, 898 (Hyopsodus);  
 868, 898 (Lemuravus).

- Perrier, E. 1920 A, 373.  
 Pia, J. 1916 A, 129 (Syn. of Lemuravus).  
 Schlosser, M. 1902 D, 302.  
 1902 J, 132, 230.  
 1903 A, 289.  
 Stehlin, H. G. 1906 A, 634.  
 1916 B, 1434, 1434.  
 Trouessart, E. L. 1904 A, 41.  
 Troxell, E. L. 1926 A, 423.  
 Wallace, A. R. 1876 A, 1, 133.  
 Weber, M. 1904 A, 763.  
 Weber and Abel 1928 A, 629, 674.  
 Winge, H. 1917 A, 174.  
 Wortman, J. L. 1903 A, xv, 431.  
 Zittel and Schlosser 1911 A, 370.  
 1923 A, 448, 665.

### *Hyopsodus despiciens* Matthew.

- Matthew, W. D. 1909 D, 520, text-figs. 103-105.  
 1915 E, 317.  
 Zittel and Schlosser 1911 A, 369, fig. 533 (H.  
 decipiens).  
 1923 A, 448, fig. 570 (H. decipiens).  
 Middle Eocene (Bridger); Wyoming.

### *Hyopsodus lepidus* Matthew.

- Matthew, W. D. 1909 D, 521, pl. xlviii, figs. 4, 6.  
 1915 E, 317.  
 Middle Eocene (Bridger); Wyoming.

### *Hyopsodus markmani* Abel and Cook.

- Abel and Cook 1925 A, 84, figs. 1-4.  
 Abel, O. 1926 B, 396, 411.  
 1926 H, (160).  
 1928 B, 21.  
 Weber and Abel 1928 A, 628.  
 Early Eocene; Colorado.

### *Hyopsodus marshi* Osborn.

- Osborn, H. F. 1902 C, 175, 187, fig. 13.  
 Hennig, E. 1922 A, 221, fig. 3.  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 519, pl. xlviii, fig. 11.  
 1915 E, 317.  
 Trouessart, E. L. 1904 A, 42.  
 Middle Eocene (Bridger); Wyoming.

**Hyopsodus mentalis** (Cope).

Hay, O. P. 1902 A, 793 (Sarcolemur); 790 (H. lemoianianus).

Loomis, F. B. 1905 A, 420, 424, fig. 3 (H. lemoianianus).

1907 B, 357 (H. lemoianianus).

Matthew, W. D. 1909 C, 93 (H. lemoianianus).

1915 E, 317, 319, fig. 5 (H. lemoianianus a syn.).

Osborn, H. F. 1902 C, 174, 175 (To Pelycodus?).

Trouessart, E. L. 1904 A, 40 (Pelycodus); 42 (H. lemoianianus).

Lower Eocene (Wasatch); New Mexico, Wyoming.

**Hyopsodus mentalis lysitensis** Matthew.

Matthew, W. D. 1915 E, 320, 326.

Osborn, H. F. 1902 C, 175, 183, figs. 7, 8 (H. lemoianianus).

Lower Eocene (Wind River); Wyoming.

**Hyopsodus minor** Loomis.

Loomis, F. B. 1905 A, 422, 424, fig. 6.

Matthew, W. D. 1909 C, 93.

1915 E, 324 (H. wortmani? minor).

Lower Eocene (Wind River); Wyoming.

**Hyopsodus minusculus** Leidy.

Hay, O. P. 1902 A, 790.

Matthew, W. D. 1909 C, 96.

1909 D, 519, pl. xlviii, fig. 8; pl. xlix, fig. 3.

1915 E, 317.

Osborn, H. F. 1902 C, 173, 186.

Middle Eocene (Bridger); Wyoming.

**Hyopsodus mitticulus** Cope.

Hay, O. P. 1902 A, 790.

Loomis, F. B. 1905 A, 419, 420, 424.

Matthew, W. D. 1909 C, 93.

1915 E, 317, 318, fig. 4.

Osborn, H. F. 1902 C, 174, 183, fig. 6.

Reeside, J. B. 1924 A, 46.

Trouessart, E. L. 1904 A, 41.

Lower Eocene (Wasatch); New Mexico: (Grey Bull); Wyoming.

**Hyopsodus paulus** Leidy.

Hay, O. P. 1902 A, 791 (H. paulus, H. vicarius); 789 (Lemuravus distans).

Abel, O. 1913 B, 711, fig. 11.

1914 A, 51, fig. 24.

1922 C, 290, fig. 244.

Abel and Cook 1925 A, 33, 35.

Ameghino, F. 1906 A, 291, fig. 74.

Baird, S. F. 1876 A, 336 (Lemuravus distans).

Bluntshli, H. 1912 B, 368, fig. 10.

Cope, E. D. 1872 NN, 2.

Loomis, F. B. 1905 A, 419.

Matthew, W. D. 1909 C, 96.

1909 D, 517, pl. xlvii, fig. 3; pl. xlviii, figs. 2, 3, 5, 7.

1915 E, 317.

Merrill, G. P. 1907 A, 41.

Osborn, H. F. 1902 C, 172, 182, 185, fig. 5 (H. paulus); 173, 187, fig. 12 (H. vicarius); 174, 187 (H. distans).

Seeley, H. G. 1886 A, 416, fig. (H. vicarius).

Stehlin, H. G. 1906 A, 634, fig. 79.

Trouessart, E. L. 1904 A, 42 (H. paulus, H. distans).

Weber, M. 1904 A, 763, fig. 546.

Weber and Abel 1923 A, 623, fig. 424.

Zittel and Schlosser 1911 A, 369, fig. 532.

1923 A, 448, fig. 569.

Middle Eocene (Bridger); Wyoming.

**Hyopsodus powellianus** Cope.

Hay, O. P. 1902 A, 791.

Loomis, F. B. 1905 A, 421, 424, fig. 4.

1907 B, 357.

Matthew, W. D. 1909 C, 93.

1915 E, 317, 320, figs. 6, 7.

Osborn, H. F. 1902 C, 175, 184, fig. 9.

Sinclair and Granger 1911 A, 108.

Trouessart, E. L. 1904 A, 42.

Lower Eocene (Wasatch); Wyoming.

**Hyopsodus powellianus browni** Loomis.

Loomis, F. B. 1905 A, 422-424, fig. 7 (H. browni); 425 (H. jacksoni, H. lawsoni).

Matthew, W. D. 1909 C, 93 (H. jacksoni, H. browni).

1915 E, 322 (H. jacksoni and H. lawsoni, syns.).

Lower Eocene (Wind River); Wyoming.

**Hyopsodus simplex** Loomis.

Loomis, F. B. 1905 A, 419, 424, fig. 2.

Abel and Cook 1925 A, 35.

Loomis, F. B. 1907 B, 357.

Matthew, W. D. 1909 C, 93.

1915 E, 316, 317, fig. 3.

Lower Eocene (Wasatch); Wyoming.

**Hyopsodus uintensis** Osborn.

Osborn, H. F. 1902 C, 175, 176, 188, figs. 3, 14, 15.

Matthew, W. D. 1909 C, 99.

Trouessart, E. L. 1904 A, 42.

Upper Eocene (Uinta); Utah.

**Hyopsodus walcottianus** Matthew.

Matthew, W. D. 1915 E, 317, 322, figs. 8-10.

Gregory, W. K. 1920 A, 244.

Weber and Abel 1923 A, 629, fig. 425.

Lower Eocene (Wind River); Wyoming.

**Hyopsodus wortmani** Osborn.

Osborn, H. F. 1902 C, 175, 185, fig. 11.

Loomis, F. B. 1905 A, 421, 424, fig. 5.

Matthew, W. D. 1909 C, 93.

1915 E, 317, 324.

Trouessart, E. L. 1904 A, 42 (H. wortmanni).

Lower Eocene (Wind River); Wyoming.

**Hyopsodus sp. indet.**

Granger and Simpson 1928 A, 1 (Diaodexus).

Wasatch (Sand Coulee); Wyoming.

Matthew, W. D. 1909 C, 93, 96. Eocene (Wind River); New Mexico: (Bridger); Wyoming.

Osborn, H. F. 1909 D, 49. Eocene (Upper Huerfano); Colorado.

Sinclair and Granger 1911 A, 91.

HAPLOMYLUS Matthew. Type *Microsyops speirianus* Cope.

Matthew, W. D. 1915 E, 313.

Gregory, W. K. 1916 A, 244, pl. i, N.

Zittel and Schlosser 1923 A, 569.

**Haplomylus speirianus** (Cope).

Cope, E. D. 1880 O, 908 (Hyopsodus).

Hay, O. P. 1902 A, 791 (Microsyops).

Gregory, W. K. 1922 A, 120, fig. 55.

Matthew, W. D. 1909 C, 93 (Anaptomorphus).

1915 E, 313, figs. 1, 2.

Osborn, H. F. 1902 C, 174, 210, fig. 37 ("Microsyops"; Anaptomorphus?).

Trouessart, E. L. 1904 A, 40 (Anaptomorphus); 291 (Microsyops).

Lower Eocene (Wind River); Wyoming.

## Suborder PROGLIRES Osborn.

Osborn, H. F. 1902 C, 203.

Abel, O. 1914 A, 51.

Hubrecht, A. A. W. 1908 A, 161.

Lydekker, R. 1903 D, 125.

Matthew, W. D. 1909 C, 92.

1909 D, 546, 549.

1912 B, 186.

Osborn, H. F. 1905 I, 101.

1907 G, 13, 144, 145.

1907 H, 613.

1910 B, 522.

Schlosser, M. 1911 A, 71.

Wortman, J. L. 1903 A, xv, 402.

Zittel and Schlosser 1911 A, 370.

1923 A, 448.

## Superfamily MIXODECTOIDÆ, new name.

## PLESIADAPIDÆ Trouessart.

Trouessart, E. L. 1897 A, 75.

Arlt, T. 1912 A, 704 (Apatemydidæ).

Gidley, J. W. 1923 A, 11.

Gregory, W. K. 1912 C, 194 (Apatemydidæ).

1913 A, 117 (Apatemydidæ).

1921 A, 70, 235.

1922 A, 116, 119, 279.

1927 I, 557, 559 ("plesiadapids").

Matthew, W. D. 1909 C, 96, 101 (Apatemydidæ).

1909 D, 298, 543 (Apatemydidæ).

1914 B, 387 (Apatemydidæ).

1915 F, 477 (Apatemydidæ).

1915 K, 444 (Apatemydidæ).

1916 I, 109 (Apatemydidæ).

1918 H, 509.

1921 A, 4.

Matthew, W. D. 1921 D, 214.

1923 B, 957, 965 (Plesiadapidae); 975 (Apatemydidæ).

Ossenkopp, G. J. 1925 A, 473, 477.

Osborn, H. F. 1910 B, 522 (Apatemydidæ).

Simpson, G. G. 1928 A, 5.

Stehlin, H. G. 1916 B, 1388 (Apatemydidæ).

Troxell, E. L. 1923 E, 503 (Apatemydidæ).

Trouessart, E. L. 1904 A, 289.

Weber and Abel 1928 A, 125, 739, 740.

Winge, H. 1917 A, 175 (Apatemydidæ); 176 (Apatomydæ).

1923 A, 190 (Apatomydæ).

Zittel and Schlosser 1911 A, 371.

1923 A, 642.

Schlosser arranges this family in the Lemuriformes.

APATEMYS Marsh. Type *A. bellus* Marsh.

Hay, O. P. 1902 A, 725.

Black, D. 1925 A, table.

Chardin, T. 1922 A, 24, 96.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 101.

1909 D, 544.

1917 C, 833.

1921 H, 511.

Osborn, H. F. 1910 B, 522.

Ossenkopp, G. J. 1925 A, 474.

Palmer, T. S. 1904 A, 111, 849.

Stehlin, H. G. 1916 B, 1388.

Weber and Abel 1928 A, 125.

Zittel and Schlosser 1923 A, 643.

**Apatemys bellulus** Marsh.

Hay, O. P. 1902 A, 725.

Matthew, W. D. 1909 C, 96.

1909 D, 544, pl. iii, figs. 3, 4.

Ossenkopp, G. J. 1925 A, 474.

Trouessart, E. L. 1904 A, 478.

Troxell, E. L. 1923 E, 504, figs. 3, 4.

Middle Eocene (Bridger); Wyoming.

**Apatemys bellus** Marsh.

Hay, O. P. 1902 A, 725.

Chardin, T. 1922 A, 94.

Matthew, W. D. 1909 C, 96.

1909 D, 545, pl. ii, figs. 1, 2.

Ossenkopp, G. J. 1925 A, 474.

Trouessart, E. L. 1904 A, 478.

Troxell, E. L. 1923 E, 503, figs. 1, 2.

Middle Eocene (Bridger); Wyoming.

**Apatemys rodens** Troxell.

Troxell, E. L. 1923 E, 504, figs. 5, 6.

Middle Eocene (Bridger); Wyoming.

PRONOTHODECTES Gidley. Type *P. matthewi* Gidley.

Gidley, J. W. 1923 A, 12.

Ossenkopp, G. J. 1925 A, 476.

Simpson, G. G. 1927 B, 5, 10.

Weber and Abel 1928 A, 740.

**Pronothodectes matthewi** Gidley.

Gidley, J. W. 1923 A, 12, pl. iii, fig. 2.

Ossenkopp, G. J. 1925 A, 476.

Paleocene (Fort Union); Montana.

PHENACOLEMUR Matthew. Type *P. præcox* Matthew.

Matthew, W. D. 1915 F, 479.  
 Black, D. 1925 A, table.  
 Carter, J. T. 1922 A, 604.  
 Chardin, T. 1922 A, 82, 95.  
 Gidley, J. W. 1923 A, 8.  
 Matthew, W. D. 1917 C, 833, 837.  
 1918 H, 569.  
 Osenkopp, G. J. 1925 A, 474.  
 Stehlin, H. G. 1916 B, 1388, 1506.  
 Weber and Abel 1928 A, 740.  
 Zittel and Schlosser 1923 A, 642.

**Phenacolemur citatus** Matthew.

Matthew, W. D. 1915 F, 481, fig. 51.  
 1918 H, 569.  
 Osenkopp, G. J. 1925 A, 474.  
 Lower Eocene (Wasatch); Wyoming.

**Phenacolemur præcox** Matthew.

Matthew, W. D. 1915 F, 479, figs. 49, 50.  
 Osenkopp, G. J. 1925 A, 474.  
 Lower Eocene (Wasatch); Wyoming.

LABIDOLEMUR Matthew and Granger. Type *L. soricoides* Matthew and Granger.

Matthew and Granger 1921 A, 4.  
 Black, D. 1925 A, table.  
 Osenkopp, G. J. 1925 A, 475.  
 Weber and Abel 1928 A, 740.  
 Zittel and Schlosser 1923 A, 642.

**Labidolemur soricoides** Matthew and Granger.

Matthew and Granger 1921 A, 4.

Osenkopp, G. J. 1925 A, 475.  
 Reeside, J. B. 1924 A, 47.  
 Simpson, G. G. 1928 A, 15.  
 Paleocene (Tiffany); Colorado.

**Labidolemur sp. indet.**

Simpson, G. G. 1928 A, 15, fig. 14. Paleocene  
 (Fort Union); Montana.

UINTASOREX Matthew. Type *U. parvulus* Matthew.

Matthew, W. D. 1909 D, 545.  
 Black, D. 1925 A, table.  
 Chardin, T. 1922 A, 96.  
 Matthew, W. D. 1917 C, 833.  
 Osborn, H. F. 1910 B, 522.  
 Osenkopp, G. J. 1925 A, 474.  
 Troxell, E. L. 1923 E, 503.

Stehlin, H. G. 1916 B, 1388.  
 Zittel and Schlosser 1923 A, 643.

**Uintasorex parvulus** Matthew.

Matthew, W. D. 1909 D, 546, pl. lii, fig. 6.  
 Osenkopp, G. J. 1925 A, 474.  
 Middle Eocene (Bridger); Wyoming.

PLESIADAPIS Gervais. Type *P. tricuspidens* Gervais.

Gervais, P. 1877, Jour. de Zool., Paris, vi, 76,  
 figs. 1, 2.  
 Abel, O. 1914 A, 256.  
 1919 A, 875.  
 Chardin, P. T. 1927 A, 27.  
 Flower and Lydekker 1891 A, 698, fig. 334.  
 Jaekel, O. 1911 A, 215.  
 Nicholson and Lydekker 1889 A, 1467.  
 Osenkopp, G. J. 1925 A, 475, 488, fig. 3.  
 Palmer, T. S. 1904 A, 547, 901.

Weber, M. 1904 A, 508, 511, 762.  
 Weber and Abel 1928 A, xxi, 740.  
 Zittel, K. A. 1890 A, 700, fig. 579.  
 Zittel and Schlosser 1911 A, 371.  
 1923 A, 642.

**Plesiadapis sp. indet.**

Simpson, G. G. 1928 A, 7 (This genus?).  
 Paleocene (Fort Union); Montana.

NOTHODECTES Matthew. Type *N. dubius* Matthew.

Matthew, W. D. 1915 F, 482.  
 Black, D. 1925 A, table.  
 Carter, J. T. 1922 A, 604.  
 Chardin, T. 1922 A, 96.  
 Gidley, J. W. 1917 B, 59.  
 1923 A, 9, 11, 15, 17.  
 Granger, W. 1917 A, 827.  
 Gregory, W. K. 1921 A, 77, pl. xxvii.  
 1922 A, 116, 513, fig. 54.  
 Matthew, W. D. 1918 H, 568, 569.  
 1921 A, 5.  
 1928 B, 957 (Syn. of Plesiadapis).  
 Osenkopp, G. J. 1925 A, 475 (Syn. of Plesiadapis).  
 Simpson, G. G. 1928 A, 7.  
 Stehlin, H. G. 1916 B, 1388, 1506.  
 Weber and Abel 1928 A, 740.  
 Zittel and Schlosser 1923 A, 642, 666.

**Nothodectes dubius** Matthew.

Matthew, W. D. 1915 F, 482, fig. 52.  
 1917 C, 831.  
 Osenkopp, G. J. 1925 A, 476 (Plesiadapis).  
 Simpson, G. G. 1927 B, 4.  
 Lower Eocene (Grey Bull); Wyoming.

**Nothodectes gidleyi** Matthew.

Matthew, W. D. 1917 C, 823.  
 Chardin, P. T. 1920 A, 1161.  
 1922 A, 20, 100.  
 Gidley, J. W. 1924 B, 47 (This species?).  
 Gregory, W. K. 1921 A, 70.  
 1922 A, 119, fig. 54.  
 Matthew, W. D. 1921 H, 509.  
 Osenkopp, G. J. 1925 A, 476 (Plesiadapis).  
 Reeside, J. B. 1924 A, 47.

Simpson, G. G. 1927 B, 4, fig. 4 (This species?).

Paleocene (Tiffany beds); Colorado.

*Nothodectes* sp. indet.

Gidley, J. W. 1918 B, 59. Lower Eocene (Wasatch); Colorado.

Reeside, J. B. 1924 A, 46. Lower Eocene (Wasatch); Colorado.

**STEHLINIUS** Matthew. Type *S. uintensis* Matthew.

Matthew, W. D. 1921 A, 1.

Black, D. 1925 A, table.

Chardin, T. 1922 A, 94, 96.

Weber and Abel 1928 A, 125.

Zittel and Schlosser 1923 A, 643.

*Stehlinius uintensis* Matthew.

Matthew, W. D. 1921 A, 2, figs. 1, 2.

Chardin, T. 1922 A, 94 (*S. uintahensis*).

Weber and Abel 1928 A, 124, fig. 75.

Upper Eocene (Uinta); Utah.

**TROGOLEMUR** Matthew. Type *T. myodes* Matthew.

Matthew, W. D. 1909 D, 546.

Chardin, T. 1922 A, 96.

Matthew, W. D. 1915 F, 478.

1917 C, 833.

Ossenkopp, G. J. 1925 A, 474.

Stehlin, H. G. 1916 B, 1505.

Troxell, E. L. 1923 E, 503.

Zittel and Schlosser 1911 A, 549.

1923 A, 642.

*Trogolemur myodes* Matthew.

Matthew, W. D. 1909 D, 546, pl. lii, fig. 5.

Ossenkopp, G. J. 1925 A, 474.

Stehlin, H. G. 1916 B, 1387 (*T. myoides*).

Middle Eocene (Lower Bridger); Wyoming.

**IGNACIUS** Matthew and Granger. Type *I. frugivorus* Matthew and Granger.

Matthew and Granger 1921 A, 5.

Ossenkopp, G. J. 1925 A, 475.

Weber and Abel 1928 A, 740.

Zittel and Schlosser 1923 A, 642.

This genus is referred with doubt to the Plesiadapidae.

*Ignacius frugivorus* Matthew and Granger.

Matthew and Granger 1921 A, 5.

Ossenkopp, G. J. 1925 A, 475.

Reeside, J. B. 1924 A, 47.

Paleocene (Tiffany); Colorado.

### MIXODECTIDÆ Cope.

Cope, E. D. 1833 I, 80.

Hay, O. P. 1902 A, 786.

Abel, O. 1908 C, (36) (*Oldobotidæ*, *Mixodectini*).

1913 B, 711.

1914 A, 51, 254.

1919 A, 727.

Arlt, T. 1907 A, 237 ("mixodectiden").

1912 A, 704.

Earle, C. 1897 B, 310.

Gidley, J. W. 1923 A, 21.

Gregory, W. K. 1910 A, 331, 465.

1912 C, 194.

1913 A, 117.

Matthew, W. D. 1909 C, 92, 93, 95, 101.

1909 D, 298, 546.

1914 B, 337.

1915 A, 215.

1915 F, 467 (*Mixodectidæ*, *Mixodectinæ*).

1915 K, 444.

1917 C, 837.

Matthew, W. D. 1918 H, 566, 568.

1921 D, 212.

Osborn, H. F. 1901 D, 623.

1902 C, 203.

1902 D, 307.

1905 I, 101.

1910 B, 109, 111, 522.

Ossenkopp, G. J. 1925 A, 470, 477.

Schlosser, M. 1898 B, 361 (*Anaptomorphidæ*, *Mixodectidæ*).

1905 A, 325 ("mixodectiden").

1907 C, 222 (*Oldobotidæ*, *Mixodectinæ*).

1911 A, 70 ("mixodectiden").

Stehlin, H. G. 1916 B, 1320, 1502 ("mixodectiden").

Trouessart, E. L. 1904 A, 290.

Weber, M. 1904 A, 509.

Weber and Abel 1928 A, 124, 295, 718.

Wings, H. 1917 A, 175.

Zittel and Schlosser 1911 A, 370.

1923 A, 448, 665-667.

**MIXODECTES** Cope. Type *M. pungens* Cope.

Hay, O. P. 1902 A, 786.

Ameghino, F. 1902 B, 11.

1906 A, 284.

Chardin, T. 1922 A, 95, 96.

Earle, C. 1897 A, 689.

Granger, W. 1917 A, 325.

Haug, E. 1911 A, 1528.

Hellprin, A. 1887 A, 403.

Hubrecht, A. A. W. 1908 A, 161.

Lydekker, R. 1903 D, 125.

Matthew, W. D. 1909 C, 101 (*Mixodectes*, *Olbodotes*).

1909 D, 546.

1910 E, 702 (*Mixodectes*, *Olbodotes*).

1915 F, 451, 467 (*Olbodotes* a syn.).

1918 H, 568.

1921 A, 5.

1924 E, 749.



- Osborn, H. F. 1901 D, 623.  
 1902 C, 205 (Mixodectes); 203, 204 (Olbodotes, type *O. copei* Osborn).  
 1907 G, 89, figs. 43, 104 (Olbodotes); 145 (Mixodectes).  
 1909 D, 35.  
 1910 B, 120, 522.  
 Ossenkopp, G. J. 1925 A, 470.  
 Palmer, T. S. 1904 A, 428, 851 (Mixodectes); 472, 851 (Olbodotes).  
 Schlosser, M. 1900 B, 301.  
 1905 A, 326, 331 (Mixodectes); 331 (Olbodotes).  
 1908 B, 361.  
 1910 A, 507 (Olbodotes).  
 1911 A, 147 (Olbodotes).  
 Seeley, H. G. 1886 A, 518 (Oligobunis).  
 Stehlin, H. G. 1916 B, 1503 (Mixodectes); 1319, 1503 (Olbodotes).  
 Trouessart, E. L. 1904 A, 290.  
 Weber, M. 1904 A, 508, 511, 762.  
 Winge, H. 1917 A, 176 (Mixodectes, Olbodotes).  
 1923 A, 135, 191 (Mixodectes, Olbodotes).  
 Wortman, J. L. 1903 A, xv, 401, 402 (Mixodectes); 435 (Mixodectes, Olbodotes); xvi, 353 (Mixodectes, Olbodotes); 364 (Mixodectes).  
 Zittel and Schlosser 1911 A, 370 (Mixodectes, Olbodotes).  
 1923 A, 449 (Mixodectes, Olbodotes).
- Mixodectes copei (Osborn).**  
*Osborn, H. F.* 1902 C, 175, 205, fig. 29 (Olbodotes).  
*Gardner, J. H.* 1910 A, 733, fig. 9 (Olbodotes).  
*Ossenkopp, G. J.* 1925 A, 470.  
*Schlosser, M.* 1911 A, 71 (Olbodotes).

#### INDRODON Cope. Type *I. malaris* Cope.

- Hay, O. P.* 1902 A, 792.  
*Ameghino, F.* 1906 A, 284.  
*Beddard, F. E.* 1902 A, 552.  
*Brown, A. E.* 1901 A, 123.  
*Dall, W. H.* 1898 A, 347.  
*Earle, C.* 1897 A, 681.  
*Gregory, W. K.* 1922 A, 538.  
 1927 I, 558.  
*Loomis, F. B.* 1922 A, 62.  
*Matthew, W. D.* 1901 A, 6.  
 1909 C, 101.  
*Osborn, H. F.* 1902 C, 208, fig. 34.  
 1907 G, 159, fig. 131.  
 1909 D, 35.  
 1910 B, 522.  
*Palmer, T. S.* 1904 A, 350, 851.  
*Rosenberg, E.* 1895 A, 295.  
*Schlosser, M.* 1898 B, 363.  
 1900 B, 307.  
 1911 A, 72.

*Trouessart, E. L.* 1904 A, 290 (Olbotes).  
 Paleocene (Torrejon); New Mexico.

#### Mixodectes crassiusculus Cope.

- Hay, O. P.* 1902 A, 786.  
*Gardner, J. H.* 1910 A, 730.  
*Matthew, W. D.* 1909 C, 92.  
 1914 B, 385.  
*Osborn, H. F.* 1902 C, 175, 207, fig. 32.  
*Ossenkopp, G. J.* 1925 A, 470.  
*Reeside, J. B.* 1924 A, 41.  
*Seeley, H. G.* 1886 A, 518 (*M. crassivultus*, *Oligobunis*).  
*Trouessart, E. L.* 1904 A, 290.  
 Paleocene (Torrejon); New Mexico.

#### Mixodectes pungens Cope.

- Hay, O. P.* 1902 A, 787.  
*Abel, O.* 1913 B, 711, fig. 12.  
 1914 A, 52, fig. 25.  
*Gardner, J. H.* 1910 A, 730.  
*Matthew, W. D.* 1909 C, 92.  
 1914 B, 385.  
*Osborn, H. F.* 1902 C, 175, 204, 206, figs. 28, 30, 31.  
*Ossenkopp, G. J.* 1925 A, 470.  
*Reeside, J. B.* 1924 A, 41.  
*Trouessart, E. L.* 1904 A, 290.  
*Weber, M.* 1904 A, 509, fig. 383.  
*Weber and Abel* 1928 A, 295, fig. 134.  
*Wortman, J. L.* 1903 A, xvi, 364.  
 Paleocene (Torrejon); New Mexico.

#### Mixodectes sp. indet.

- Douglass, E.* 1908 D, 19, pl. II, figs. 9, 10.  
 Paleocene (Fort Union); Montana.  
*Gregory, W. K.* 1922 A, 117.

- Scott, W. B.* 1913 A, 580.  
*Stehlin, H. G.* 1916 B, 1319, 1503.  
*Zittel and Schlosser* 1911 A, 370.  
 1923 A, 449.

#### Indrodon malaris Cope.

- Hay, O. P.* 1902 A, 792.  
*Beddard, F. E.* 1902 A, 552.  
*Gardner, J. H.* 1910 A, 730.  
*Gregory, W. K.* 1922 A, 117, fig. 50.  
*Matthew, W. D.* 1909 C, 92.  
 1909 D, 512.  
 1914 B, 385.  
*Osborn, H. F.* 1902 C, 170, 208, fig. 33.  
*Ossenkopp, G. J.* 1925 A, 470.  
*Reeside, J. B.* 1924 A, 41.  
*Rosenberg, E.* 1895 A, 294.  
*Schlosser, M.* 1908 B, 363.  
*Trouessart, E. L.* 1904 A, 291.  
 Paleocene (Torrejon); New Mexico.

#### MICROSYPSPIDÆ Osborn.

- Osborn, H. F.* 1892 in Osborn and Wortman, 1892 A, 101.  
*Abel, O.* 1908 C, (36).  
*Ardt, T.* 1912 A, 704.  
*Gregory, W. K.* 1916 B, 261.
- Matthew, W. D.* 1906 B, 361 (Microsyopidæ).  
 1909 C, 93, 95, 100 (Microsyopidæ).  
 1916 I, 109 (Microsyopidæ).  
 1917 C, 837 (Microsyopidæ).  
 1918 H, 566, 568.

- Matthew, W. D. 1921 D, 214 (Microsyopidae).  
 Osborn, H. F. 1909 D, 46, 52.  
 1910 B, 127, 623 (Microsyopidae); 134  
 ("microsyopids").  
 Ossenkopp, G. J. 1925 A, 470, 471.  
 Schlosser, M. 1905 A, 331.

- Schlosser, M. 1907 C, 222 (Microsyopidae).  
 1911 A, 62 ("microsyopiden").  
 Stehlin, H. G. 1912 A, 1286 ("microsyopiden").  
 1916 B, 1502 ("microsyopiden").  
 Weber and Abel 1928 A, 125, 718 (Microsyop-  
 idae).  
 Wortman, J. L. 1903 A, xvi, 347, 352, 364, 368.

### CYNODONTOMYS Cope. Type *C. latidens* Cope.

- Hay, O. P. 1902 A, 788.  
 Ameghino, F. 1902 B, 11.  
 Chardin, T. 1922 A, 24, 96.  
 Granger, W. 1914 A, 203.  
 Gregory, W. K. 1917 D, 630.  
 Haug, E. 1911 A, 1528.  
 Hubrecht, A. A. W. 1908 A, 161.  
 Matthew, W. D. 1909 C, 100.  
 1915 F, 466, 467, 470.  
 Osborn, H. F. 1901 D, 623.  
 1902 C, 205, 208.  
 1910 B, 127, 134, 522.  
 Ossenkopp, G. J. 1925 A, 471.  
 Palmer, T. S. 1904 A, 211, 851.  
 Schlosser, M. 1905 A, 328, 331.  
 1911 A, 72.  
 Stehlin, H. G. 1916 B, 1503.  
 Weber, M. 1904 A, 509.  
 Wortman, J. L. 1903 A, xv, 401; xvi, 353.  
 Zittel and Schlosser 1911 A, 370.  
 1923 A, 449.

### *Cynodontomys angulatus* (Cope).

- Hay, O. P. 1902 A, 744 (Chriacus).  
 Loomis, F. B. 1906 A, 282 (Pelycodus).  
 Matthew, W. D. 1909 C, 93.  
 1915 F, 473.  
 Osborn, H. F. 1902 A, 202 (Pelycodus).  
 Ossenkopp, G. J. 1925 A, 471 (Syn. of *C.*  
*latidens*).  
 Reeside, J. B. 1924 A, 46.  
 Trouessart, E. L. 1904 A, 40 (Anaptomorphus?);  
 159 (Chriacus).  
 Lower Eocene (Wasatch); New Mexico.

### *Cynodontomys angustidens* Matthew.

- Matthew, W. D. 1915 F, 477, figs. 41, 47, 48.  
 Ossenkopp, G. J. 1925 A, 471.  
 Lower Eocene (Wasatch); Wyoming.

### *Cynodontomys latidens* Cope.

- Hay, O. P. 1902 A, 788.  
 Loomis, F. B. 1906 A, 283, 285, fig. 7 (Nothar-  
 ctus palmeri); 284, 285, fig. 8 (Notharctus  
 cingulatus).  
 Matthew, W. D. 1909 C, 92 (Notharctus cin-  
 gulatus, N. palmeri); 93 (Cynodontomys lati-  
 dens).  
 1915 F, 442, 473, figs. 41, 44-46 (Nothar-  
 ctus cingulatus, N. palmeri, syns.).  
 Osborn, H. F. 1902 C, 175, 208, 209, fig. 35  
 (To Microsyops?).  
 Ossenkopp, G. J. 1925 A, 471.  
 Trouessart, E. L. 1904 A, 291 (Microsyops,  
 Cynodontomys).  
 Lower Eocene (Wind River and Wasatch);  
 Wyoming: (San Juan); New Mexico.

### *Cynodontomys scottianus* Cope.

- Hay, O. P. 1902 A, 791 (Microsyops).  
 Matthew, W. D. 1909 C, 93 (Microsyops).  
 1915 F, 471, figs. 41-43.  
 Osborn, H. F. 1902 C, 175, 209, fig. 36 (Mic-  
 rosyops).  
 Ossenkopp, G. J. 1925 A, 471.  
 Trouessart, E. L. 1904 A, 291 (Microsyops).  
 Lower Eocene (Wind River); Wyoming.

### *Cynodontomys* sp. indet.

- Matthew, W. D. 1909 C, 93. Lower Eocene  
 (Wind River); Wyoming.

### MICROSOPS Leidy. Type *M. gracilis* Leidy.

- Hay, O. P. 1902 A, 791 (Microsyops); 793  
 (Bathrodon); 794 (Mesacodon, Palaeacodon).  
 Ameghino, F. 1906 A, 422.  
 Chardin, T. 1922 A, 24.  
 Delafontaine, M. 1875 A, 171 (Microsyops,  
 Palaeacodon).  
 Granger and Gregory 1917 A, 857.  
 Gregory, W. K. 1921 A, 58.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 348, 403 (Microsyops);  
 348 (Palaeacodon).  
 Hubrecht, A. A. W. 1908 A, 161.  
 Matthew, W. D. 1909 C, 100.  
 1909 D, 548.  
 1915 F, 451, 466, 467, 468.  
 1918 H, 568.  
 1921 A, 5.  
 Osborn, H. F. 1898 V, 206.  
 1901 D, 623 (Microsyops).

- Osborn, H. F. 1902 C, 177, 205, 209, figs. 4, 38,  
 39.  
 1907 G, 157, fig. 127.  
 1909 D, 49.  
 1910 B, 130, 134, 161, 522.  
 1912 G, 236, fig. 3.  
 Ossenkopp, G. J. 1925 A, 471, 488, 494.  
 Palmer, T. S. 1904 A, 134, 851 (Bathrodon),  
 424, 851 (Microsyops); 412, 851 (Mesacodon);  
 497, 851 (Palaeacodon).  
 Schlosser, M. 1902 J, 132, 230.  
 1905 A, 326, 328, 331.  
 1911 A, 72.  
 Stehlin, H. G. 1916 B, 1503.  
 Trouessart, E. L. 1904 A, 291.  
 Wallace, A. R. 1876 A, x, 133 (Microsyops,  
 Mesacodon).  
 Weber, M. 1904 A, 509 (Microsyops); 783  
 (Palaeacodon).

Wortman, J. L. 1903 A, xv, 401; xvi, 352.  
Zittel and Schlosser 1911 A, 370.  
1923 A, 449, 569 (Syn. of *Haplomylus*).

***Microsyops annectens* (Marsh).**

Hay, O. P. 1902 A, 793 (Bathrodon).  
Matthew, W. D. 1909 C, 95.  
Osborn, H. F. 1902 C, 173, 212, 213, fig. 40.  
Ossenkopp, G. J. 1925 A, 472.  
Schlosser, M. 1905 A, 332.  
Wortman, J. L. 1903 A, xvi, 360, fig. 116.  
Middle Eocene (Bridger); Wyoming.

***Microsyops elegans* (Marsh).**

Hay, O. P. 1902 A, 791 (*M. elegans*, *M. gracilis*); 794 (*Mesacodon speciosus*).  
Ameghino, F. 1906 A, 422, fig. 316.  
Matthew, W. D. 1909 C, 95.  
1909 D, 298.  
1915 F, 468, figs. 38-40.

Osborn, H. F. 1902 C, 173, 212 (*M. speciosus*);  
172, 198 (*Notharctus*); 172, 210 (*M. gracilis*).  
Ossenkopp, G. J. 1925 A, 471.  
Schlosser, M. 1905 A, 331.  
Trouessart, E. L. 1904 A, 41 (*Notharctus*);  
291 (*M. gracilis*, *M. speciosus*).  
Wortman, J. L. 1903 A, xvi, 353-355, figs. 110-  
112 (*Mesacodon speciosus* a syn.).  
Zittel and Schlosser 1911 A, 370, fig. 54.  
1923 A, 449, fig. 571 (*M. gracilis*).  
Middle Eocene (Bridger); Wyoming.

***Microsyops schlosseri* Wortman.**

Wortman, J. L. 1903 A, xvi, 361, fig. 117.

Matthew, W. D. 1909 C, 95.  
Ossenkopp, G. J. 1925 A, 472.  
Schlosser, M. 1905 A, 332.  
Middle Eocene (Bridger); Wyoming.

***Microsyops typus* (Marsh).**

Hay, O. P. 1902 A, 793 (Bathrodon).  
Matthew, W. D. 1909 C, 95.  
1909 D, 303.  
Osborn, H. F. 1902 C, 173, 212.  
Ossenkopp, G. J. 1925 A, 472 (*M. gracilis*).  
Schlosser, M. 1905 A, 331 (*M. gracilis*).  
Trouessart, E. L. 1904 A, 291.  
Wortman, J. L. 1903 A, xvi, 358, figs. 113, 114  
(*M. gracilis*, not of Leidy).  
Zittel and Schlosser 1911 A, 370, fig. 54 (*M. gracilis*).  
Middle Eocene (Bridger); Wyoming.

***Microsyops verus* (Leidy).**

Hay, O. P. 1902 A, 794 (*Palmacodon*).  
Matthew, W. D. 1909 D, 298 (Syn. of *M. elegans*).  
Osborn, H. F. 1902 C, 172, 210.  
Ossenkopp, G. J. 1925 A, 471 (Syn. of *M. elegans*).  
Trouessart, E. L. 1904 A, 291.  
Middle Eocene (Bridger); Wyoming.

***Microsyops* sp. indet.**

Matthew, W. D. 1909 C, 95. Middle Eocene  
(Bridger); Wyoming, Colorado.  
Sinclair and Granger 1911 A, 91.

## Suborder MENOTYPHLA Haeckel.

Haeckel, E. 1866, Gen. Morph.  
Broom, R. 1915 A, 347.  
Carlsson, A. 1922 A, 231.  
Carter, J. T. 1922 A, 601, 603.  
Clark and Sonntag 1926 A, 454.  
Gill, T. 1886 B, 136, 146 (*Dilambdodonta*).  
Gregory, W. K. 1910 A, 268-285, 465.  
1921 A, 70.  
1922 A, 116, 152, 279.  
Haeckel, E. 1868 A, 484.  
Matthew, W. D. 1921 D, 214.

Matthew, W. D. 1928 B, 957, 965, 975.  
Matthew and Granger 1925 A, 7.  
Osborn, H. F. 1910 B, 522.  
Ossenkopp, G. J. 1925 A, 478.  
Simpson, G. G. 1928 A, 5.  
Todd, T. W. 1922 A, 269.  
Weber and Abel 1928 A, 97, 114.  
Weber and Burlet 1927 A, xiii.  
Winge, H. 1923 A, 183, 184.  
Zittel and Schlosser 1911 A, 365.  
1923 A, 444.

## APHELISCIDÆ Matthew.

Matthew, W. D. 1918 H, 592.  
The ordinal position of this family is uncertain.

### APHELISCUS Cope. Type *D. insidiosus* Cope.

Hay, O. P. 1902 A, 792.  
Cope, E. D. 1880 U, 149, 153 (Prototomus).  
Matthew, W. D. 1905 B, 71 (Prototomus).  
1915 D, 71 (Prototomus).  
1918 H, 567, 592.  
Palmer, T. S. 1904 A, 111, 901 (Apheliscus);  
586, 811 (Prototomus).  
Trouessart, E. L. 1904 A, 291.  
Wallace, A. R. 1876 A, i, 134 (Prototomus).

Zittel and Schlosser 1923 A, 639 (Prototomus;  
syn. of *Pelycodus*).

### ***Apheliscus insidiosus* Cope.**

Hay, O. P. 1902 A, 792.  
Lemoine, V. 1885 C, 207.  
Matthew, W. D. 1918 H, 592, 596, figs. 20-24.  
Lower Eocene (Gray Bull); New Mexico.  
Wyoming.

## ADAPISORICIDÆ Schlosser.

Schlosser, M. 1887 B, 138.

Abel, O. 1914 A, 51, 54.

1919 A, 727.

Flower and Lydekker 1891 A, 634.

Nicholson and Lydekker 1889 A, 1459 (Adiposoricidæ).

Palmer, T. S. 1904 A, 869.

Simpson, G. G. 1928 A, 5.

Weber, M. 1904 A, 381 (Adapisorex).

Zittel, K. A. 1890 A, 774.

Zittel and Schlosser 1911 A, 369.

1923 A, 447 (Adapisorex).

LEIPSANOLESTES Simpson. Type *L. siegfriedti* Simpson.

Simpson, G. G. 1928 A, 6.

**Leipsanolestes siegfriedti** Simpson.

Simpson, G. G. 1928 A, 6, figs. 3, 3a.

Paleocene (Fort Union); Montana.

## TUPAIIDÆ Mivart.

Mivart, St. G. 1868 A, 145.

Beddard, F. E. 1902 A, 511.

Carlsson, A. 1922 A, 227-270.

Carus, V. 1875 A, 89 (Tupajæ).

Clark, W. E. L. 1924 A, 559, figs. 1-6 (Tupaia).

Dobson, G. E. 1883 A, 2 (Tupaioidea).

Doran, A. H. G. 1878 A, 444.

Elliot, D. G. 1921 A, 185 (Tupaia).

Flower and Lydekker 1891 A, 617.

Gill, T. 1872 B, 19 (Tupajidæ).

1875 A, 107, 109.

1886 B, 141.

Gregory, W. K. 1910 A, 269.

1912 C, 194.

1913 A, 117.

1913 C, 247.

1922 A, 547.

1926 B, 415.

Hertz, M. 1925 A, fig. 44 (Tupaia).

Kandern, W. 1910 A (Tupajidæ).

Kingsley, J. S. 1925 A, 182, fig. 194 (Tupaia).

Matthew, W. D. 1909 D, 507.

Ossenkopp, G. J. 1925 A, 478.

Owen, R. 1888 A, 307 ("tupais").

Palmer, T. S. 1904 A, 875.

Roger, O. 1896 A, 25 (Tupajidæ).

Schlosser, M. 1887 B, 89, 114 (Tupajidæ).

Todd, T. W. 1922 A, 269.

Trouessart, E. L. 1904 A, 121.

Weber, M. 1904 A, 365, 376 (Tupajidæ).

Weber and Abel 1928 A, 94, 97, 115, 116, 125.

Woodward, M. F. 1896 A, 558 (Tupaia).

Zittel, K. A. 1893 B, 566 (Tupajidæ).

Zittel and Schlosser 1911 A, 366 (Tupajidæ).

1923 A, 447 (Tupajidæ).

ENTOMOLESTES Matthew. Type *E. grangeri* Matthew.

Matthew, W. D. 1909 D, 541.

Chardin, T. 1922 A, 18, 48.

Gregory, W. K. 1912 C, 194.

1913 A, 117.

1913 C, 249.

Matthew, W. D. 1915 A, 226.

1915 K, 442.

1918 H, 597.

Osborn, H. F. 1910 B, 522.

Ossenkopp, G. J. 1925 A, 478.

Simpson, G. G. 1928 A, 5.

Weber and Abel 1928 A, 125.

Zittel and Schlosser 1911 A, 368.

1923 A, 447.

**Entomolestes grangeri** Matthew.

Matthew, W. D. 1909 D, 542, pl. 1, fig. 2.

Gregory, W. K. 1910 E, 919.

1911 D, 419.

1912 C, 194.

1913 C, 249.

1922 A, 118, fig. 52.

Ossenkopp, G. J. 1925 A, 478.

Middle Eocene (Bridger); Wyoming.

**Entomolestes nitens** Matthew.

Matthew, W. D. 1918 H, 597, figs. 25, 26.

Ossenkopp, G. J. 1925 A, 479.

Lower Eocene (Wasatch); Wyoming.

## PLAGIOMENIDÆ Matthew.

Matthew, W. D. 1918 H, 599.

A family of uncertain position.

PLAGIOMENE Matthew. Type *P. multicuspis* Matthew.

Matthew, W. D. 1918 H, 601.

**Plagiomene multicuspis** Matthew.

Matthew, W. D. 1918 H, 601, figs. 27-32.

Lower Eocene (Wasatch); Wyoming.

CORIPHAGUS Douglass. Type *C. montanus* Douglass.

Douglass, E. 1908 D, 17.

Zittel and Schlosser 1928 A, 522.

**Coriphagus montanus** Douglass.

Douglass, E. 1908 D, 17, pl. ii, figs. 3, 4.

Lull, R. S. 1915 D, 326.

Matthew, W. D. 1914 B, 390.

Paleocene (Fort Union); Montana, Wyoming.

MEGOPTERNA Douglass. Type *M. minuta* Douglass.

Douglass, E. 1908 D, 18.

**Megopterna minuta** Douglass.

Douglass, E. 1908 D, 18, pl. i, figs. 5, 6.

Lull, R. S. 1915 D, 326.

Matthew, W. D. 1914 B, 390 (Megapterna).

Paleocene (Fort Union); Montana, Wyoming.

## Order CHIROPTERA Blumenbach.

Blumenbach, J. F. 1779, Handbuch Naturgeschichte, ed. 1, 58, 74.

Hay, O. P. 1902 A, 741.

Abel, O. 1908 F, (234) ("chiropteren").

1909 D, (222) ("fledermäuse").

1910 B, (186).

1912 F, 302, 665.

1913 B, 711.

1914 A, 54.

1919 A, 729.

1920 A, 420.

1921 A, 274 ("fledermäuse").

Adloff, P. 1910 B, 230.

Arnbeck-Christie-Linde, A. 1909 A, 572.

Agassiz, L. 1844 C, 255 ("chiroptères").

Allen, H. 1864 A.

Ameghino, F. 1889 A, 1009.

Anderson, R. J. 1912 D, 252 (Chiroptera).

Anthony, R. 1910 A, 783 ("chiroptères").

1912 A ("chiroptères").

Arlt, T. 1907 D, 645.

1912 A, 686.

Bardleben, K. 1885 B, 85 ("fledermäuse").

Bardenheft, K. S. 1913 A, 71.

Bayer, F. 1897 A, 149.

Beddard, F. E. 1902 A, 521.

Behlen, H. 1906 A, 197 ("fledermäuse").

Bertelli, D. 1909 A, 181 ("chiroptères").

Beyer, H. 1908 A, 78, 81 ("fledermäuse").

Buzot, — 1912 A, 131 ("chiroptères").

Black, N. 1900 A, 17 (Chiroptera).

Blainville, H. M. D. 1838 A, 357 ("chiroptères").

Bluntschli, H. 1912 B, 390 ("chiropteren").

Bolk, L. 1921 B, 189 (Chiroptera).

Bonaparte, C. L. 1832 A, 284 (Chiroptera).

1833 A, 1043 ("chiroptères").

Bonsdorff, E. J. 1871 A, 318.

Branca, W. 1908 B, 14 ("fledermäuse").

1915 A, 50.

Brandt and Woldrich 1887 A, 15.

Broom, R. 1897 B, 252.

1902 D, 550.

1911 C, 319.

1914 F, 296.

1915 A, 162.

Carus, V. 1875 A, 77.

Carus and Engelmann 1861 A, 1300, 1687.

Case, E. C. 1899 B, 182.

Chandler, A. C. 1914 B, 134 (Chiroptera).

Chapman, H. C. 1904 A, 149.

Claus, C. 1895 A, 349 ("fledermäuse").

Cockrell, Miller and Prinz 1914 A, 349.

Cope, E. D. 1885 BB, 72.

1891 N, 67, 72, 90.

Cuvier, F. 1808 A, 30, 34, pl. iii ("chiroptères").

Cuvier, G. 1805 A ("chiroptères").

Dependoff, T. 1907 C, 108 ("chiropteren").

Depéret, C. 1908 A, 306.

Dieterich, K. 1841 A, 73 ("handflügler").

Dobson, G. E. 1882 A, 200.

Döderlein, L. 1900 B, 55 ("chiropteren").

Doran, A. H. G. 1878 A, 445.

Eggeling, H. 1904 A, 98 ("chiropteren").

Eimer, G. H. T. 1901 A, 258 ("fledermäuse").

Elliot, D. G. 1901 A, 396.

Fischer, J. B. 1829 A, 80.

Foote, J. S. 1916 A, 75 ("bats").

Frey, H. 1911 A, 398 ("chiropteren").

Gaupp, E. 1906 B, 850.

1912 B, 219 ("chiropteren").

1913 A, 125 ("chiropteren").

Gegenbaur, C. 1864 C, 188 ("chiroptern").

1879 A, 522 ("chiropteren").

1888 A, 396 ("fledermäuse").

Gervais, P. 1853 B, 37 ("chiroptères").

Ghigi, A. 1900 B, 99 ("chiroptères").

Giebel, C. G. 1855 A, 8.

1883 A ("chiropteren").

Gill, T. 1886 B, 159.

Gottlieb, H. 1914 A, 186.

Gray, J. E. 1821 A, 299 (Chiroptera).

Gregory, W. K. 1920 A, 200, 248.

Haeckel, E. 1868 A, 485.

1873 A, 544.

Hensel, R. 1879 A, 545 ("chiropteren").

Hilzheimer, M. 1913 A, 569.

Hoernes, R. 1886 A, 702.

Hogben, L. T. 1919 A, 76.

Humphry, G. M. 1876 A, 668.

Huxley, T. H. 1859 D, 435 (Chiroptera).

1863 E, 553 (Chiroptera).

1870 F, 527, 537.

Jaekel, O. 1911 A, 211 (Chiropteri).

Kampfen, P. N. 1905 A, 454.

Kingsley, J. S. 1925 A, 206, 295.

Koch, C. 1863 A, 261-593.

Köstlin, O. 1844 A ("chiropteren").

Kükenthal, W. 1913 A, 678.

Latase, F. 1887 A, 266 ("chiroptères").

Leboucq, H. 1884 A, 71 ("chiroptères").

Leche, W. 1887 A.

1893 B, 121.

1900 A, 991, 1016.

1921 A, 35.

LeDamany, P. 1903 A, 273 ("chiroptères").

1903 D, 349 ("chauve souris").

1903 E, 365 ("chiroptères").

1903 G, 321 ("chauve souris").

1906 A, 66 ("chiroptères").

Leunis and Ludwig 1883 A, 169.

Lobley, J. L. 1908 A, 194, 200 (Chiroptera).

Lubosch, W. 1911 B, 744 ("chiropteren").

1914 A, 425 ("fledermäuse").

Lull, R. S. 1906 B, 560.

Major, C. J. F. 1880 A, 40.

1899 B, 62.

Martins, C. 1837 A ("chiroptères").

- Martins, C. 1872 A, 308 ("chéiroptères").  
 Matthew, W. D. 1909 D, 537, 542.  
     1915 A, 227.  
     1916 A, 480.  
     1917 B, 569.  
     1928 B, 957, 966.  
 Mead, C. S. 1906 A, 480 (Cheiroptera).  
 Meckel, J. F. 1825 A ("cheiropteren").  
 Miller, G. S. 1912 A, 134.  
     1912 B, 29.  
     1924 C, 37.  
 Mitchell, P. C. 1905 A, 492.  
 Mysberg, W. A. 1917 A, 651.  
 Nopcsa, F. 1907 A, 226.  
 Oken, L. 1823 A, 315 ("federmäuse").  
 Osborn, H. F. 1902 E, 356, fig. 1 (Cheiroptera).  
     1905 I, 99 (Cheiroptera).  
     1905 N, 242 (Cheiroptera).  
     1907 G, 12, 119, 121, 129 (Cheiroptera).  
     1909 D, 45, 56 (Cheiroptera).  
     1910 B, 259, 261, 523 (Cheiroptera).  
     1925 B, 18 (Cheiroptera).  
 Owen, R. 1857 E.  
     1858 A, 23 (Cheiroptera).  
     1868 A, 872.  
 Palacký, J. 1902 D, 1.  
 Pander and Alton 1831 A, 1 ("chiropteren").  
 Parker and Haswell 1897 A, 518.  
 Paulli, S. 1900 B, 488, 533.  
 Pettigrew, J. B. 1872 A, 336 ("bats").  
 Pictet, F. J. 1853 A, 163 ("chéiroptères").  
 Plieninger, F. 1906 A, 408 ("chiropteren").  
 Puccioni, N. 1908 A, 41 (Cheiroptera).  
 Pycraft, W. P. 1902 B, 315, fig. 2.  
 Regalia, E. 1880 A, 519 ("chéiroptères").  
 Rehs, J. 1914 A, 2, 110.  
 Retterer and Vallois 1912 D, 450 ("chéiroptères").  
     1912 E, 596 ("chéiroptères").  
 Retzius, A. 1849 A, 614.  
 Revilliod, P. 1915 A, 223 ("chiroptères").  
     1916 A, 156 ("chiroptères").  
     1917 A.  
 Reynolds, S. H. 1897 A, 536.  
 Rümer, F. 1907 A, 69 ("chiropteren").  
 Schlosser, M. 1910 A, 501 ("chiropteren").  
 Schmidt, O. 1886 A, 291 (Cheiroptera).  
 Slater, P. L. 1875 A, 207.  
 Scott, W. B. 1917 A, 127, 144 ("bats").  
 Seeley, H. G. 1872 A, 277 ("bats").  
     1878 A, 225 (Cheiroptera).  
 Spillman, F. 1925 A, 187 ("chiropteren").  
 Steinmann, G. 1907 A, 470.  
     1912 B, 718 ("federmäuse").  
 Stromer, E. 1902 B, 554, 560 ("chiropteren").  
     1912 A, 178, 243.  
 Taschenberg, O. 1899 A, 4442.  
 Terra, P. 1911 A, 272.  
 Thacker, A. G. 1914 A, 283 ("bats").  
 Thomas, O. 1908 A, 346.  
 Tins, H. W. M. 1903 A, 145 (Cheiroptera).  
 Torne, O. 1913 A, 431 ("chiropteren").  
 Trouessart, E. L. 1878 A, 1 ("chiroptères").  
     1904 A, 48.  
     1906 A, 66 ("chauves souris").  
 Vallois, H. V. 1921 B, 975 ("chéiroptères").  
 Van Benmelen, J. F. 1928 A, 283 ("chauves-souris").  
 Van Beneden, P. J. 1853 A, 340 ("chéiroptères").  
 Vicq-d'Azyr, F. 1819 A, 1 (Pteropodii).  
 Vogt, C. 1879 A, 246 ("chauves souris").  
 Wiman, C. 1925 B, 16.  
 Wagner, R. 1843 A, 12.  
 Wallace, A. R. 1876 A, i, 492; ii, 567.  
     1894 A, 435 ("bats").  
 Walmsley, T. 1918 A, 328 (Cheiroptera).  
 Weber, M. 1904 A, 382.  
 Weber and Abel 1928 A, 129, 147.  
 Weber and Burlet 1927 A.  
 Weidenreich, F. 1925 A, 39 ("chiropteren").  
 Wilckens, O. 1911 A, 711 ("federmäuse").  
 Wilder, B. 1872 B, 315, 316, 320 (Cheiroptera).  
 Winge, H. 1923 A, 218.  
 Woodward, H. 1904 B, 168.  
 Wortman, J. L. 1902 A, xiii, 45.  
     1920 A, 15 (Cheiroptera).  
 Young, G. W. 1915 A, 259.  
 Zaaier, T. 1894 A, 339.  
 Zittel and Schlosser 1911 A, 373.  
     1923 A, 451.

### Suborder ANIMALIVORA Gill.

- Gill, T. 1872 B, 16.  
 Unless otherwise indicated the authors, as quoted, employ the name Microchiroptera.  
 Abel, O. 1914 A, 54.  
 Arldt, T. 1907 D, 144.  
 Beddard, F. E. 1902 A, 526.  
 Bizot, — 1912 A, 131 ("microchéiroptères").  
 Branca, W. 1915 A, 67.  
 Cope, E. D. 1891 N, 72, 90 (Animalivora).  
 Flower, W. H. 1883 D, 410.  
 Gill, T. 1886 B, 161, 168.  
 Gregory, W. K. 1910 A, 318, 465 (Animalivora).  
 Miller, G. S. 1907 A, 15, 78.  
     1912 A, 134.  
     1912 B, 29.  
 Reynolds, S. H. 1897 A, 371.  
 Trouessart, E. L. 1904 A, 67.  
 Weber and Abel 1928 A, 135, 149 (table), 151.  
 Weber and Burlet 1927 A, xiv.  
 Zittel and Schlosser 1911 A, 374 ("microchiropteren").  
     1923 A, 452.

### Superfamily VESPERTILIONOIDÆ, new form.

- Weber and Abel 1928 A, 149 (table), 155 (Ves-  
 pertilionoidæ). | Weber and Burlet 1927 A, xiv (Vesper-  
 tilionoidæ).

### VESPERTILIONIDÆ Gray.

- Gray, J. E. 1821 A, 299.  
 Hay, O. P. 1902 A, 742.  
 Årnblück-Christie-Linde, A. 1909 A, 572.  
 Allen, H. 1884 A, 11.

- Anderson, R. J. 1912 E, 907.  
 Arldt, T. 1907 C, 677.  
     1907 D, 688.  
     1912 A, 704.  
 Beddard, F. E. 1902 A, 528.  
 Bizot, — 1912 A, 132 ("vesperontionidés").  
 Chandler, A. C. 1914 B, 134.  
 Cope, E. D. 1880 U, 154.  
 Cuvier, F. 1808 A, 36 ("vespertilions").  
 Dobson, G. E. 1882 A, 201.  
 Doran, A. H. G. 1878 A, 448.  
 Elliot, D. G. 1901 A, 396.  
 Gervais, P. 1852 A, 7 ("vespertilions").  
     1859 A, 13 ("vespertilionides").  
 Gill, T. 1886 B, 165.  
 Gray, J. E. 1825 B, 338.  
 Hasse and Schwarck 1870 A, 89, fig. 24  
     ("fledermäuse").  
 Hay, O. P. 1923 A, 312.  
 Leunis and Ludwig 1883 A, 176 (Vesper-  
     tilionina).
- Lobley, J. L. 1908 A, 200, 204.  
 Miller, G. S. 1907 A, 79, 195, 281.  
     1912 A, 165.  
     1924 C, 67.  
 Palacký, J. 1902 D, 2 ("vespertilioniden").  
 Palmer, T. S. 1904 A, 776, 806.  
 Rehs, J. 1914 A, 110.  
 Revilliod, P. 1916 A, 158.  
 Seton, E. T. 1909 A, 1147.  
 Terra, P. 1911 A, 273.  
 Torne, O. 1913 A, 431 ("vespertilioniden").  
 Trouessart, E. L. 1878 A, 7.  
     1904 A, 74.  
 Wallace, A. R. 1876 A, 11, 183.  
     1894 A, 435.  
 Weber, M. 1904 A, 400, 403.  
 Weber and Abel 1928 A, 136, 140, 149 (table),  
     155.  
 Winge, H. 1923 A, 236, 256, 273, 274.  
 Zittel and Schlosser 1923 A, 452.

## VESPERTILIONINÆ.

- Årnäck-Christie-Linde, A. 1909 A, 572.  
 Arldt, T. 1912 A, 748 (Vespertilionæ).  
 Lesson, R. P. 1842, Nouv. Tab. Règne Anim.,  
     Mamm., 21 (Vespertilionæ).  
 Miller, G. S. 1907 A, 197, 281.  
     1912 A, 165.
- Miller, G. S. 1912 B, 54.  
     1924 C, 67.  
 Weber, M. 1904 A, 401, 404.  
 Winge, H. 1923 A, 236, 274 (Vespertilionini);  
     256 (Vespertiliones).

MYOTIS Kaup. Type *Vespertilio myotis* Borkh.

- Kaup, J. J. 1829, Skizz. Entw.-Gesch. u. natürl.  
     Syst. europ. Thierw., 1, 106.  
 Allen, H. 1884 A, 46 (Vespertilio; not of  
     Linnaeus).  
     1893 A, 193 (Vespertilio).  
 Dobson, G. E. 1878 A, 284 (Vespertilio, not  
     of Linnaeus).  
 Elliot, D. G. 1901 A, 400.  
 Gervais, P. 1859 A, 15.  
 Miller, G. S. 1897 A, 15, 54, 55.  
     1912 B, 54.  
     1924 C, 67.  
 Osborn, H. F. 1909 D, 90.  
 Palmer, T. S. 1904 A, 442, 807.  
 Seton, E. T. 1909 A, 1147.  
 Torne, O. 1913 A, 431 (Vespertilio).  
 Trouessart, E. L. 1904 A, 90.  
 Weber and Abel 1928 A, 137, 156, figs. 82-84.
- Myotis subulatus Say.**  
 Say, T. 1823, Long's Exped. Rocky Mts., 11,  
     65 (Vespertilio).  
 Allen, H. 1884 A, 51 (Vespertilio).
- Allen, H. 1893 A, 80 (Vespertilio).  
 Brown, B. 1908 A, 175, pl. xv (Myotis. This  
     species?).  
 Elliot, D. G. 1901 A, 405.  
 Hay, O. P. 1914 A, 32 (This species?).  
     1923 A, 310, 398.  
 Mercer, H. C. 1897 A, 58, 60 (Vespertilio  
     gryphus).  
 Miller, G. S. 1897 A, 75.  
     1912 B, 58.  
     1924 C, 72.  
 Rhoads, S. N. 1903 A, 227.  
 Seton, E. T. 1909 A, 1163, text-fig. 264, map 64.  
 Trouessart, E. L. 1904 A, 93.  
     Recent; North America east of Rocky  
     Mountains: Pleistocene; Pennsylvania, Ark-  
     ansas, Tennessee.
- Myotis sp. indet.**  
 Gidley, J. W. 1913 B, 96. Pleistocene; Mary-  
     land.  
 Hay, O. P. 1923 A, 491. Pleistocene; Mary-  
     land, Pennsylvania.

PIPISTRELLUS Kaup. Type *Vespertilio pipistrellus* Schreber.

- Hay, O. P. 1902 A, 742.  
 Årnäck-Christie-Linde, A. 1909 A, 573 (Pipis-  
     trelus); 574 (Vesperugo).  
 Allen, J. A. 1892 A, 209, 215, 216, 226 (Ves-  
     perugo).  
 Blainville, H. M. D. 1838 A, 362 (Vespertilio).  
 Eggeling, H. 1904 A, 98 (Scotophilus).  
 Gill, T. 1886 B, 166 (Vesperugo).  
 Leche, W. 1893 B, 122 (Vesperugo).  
     1900 A, 1019 (Vesperugo).  
 Miller, G. S. 1907 A, 204.
- Miller, G. S. 1912 A, 202.  
     1924 C, 74.  
 Palacký, J. 1902 D, 3 (Vesperugo).  
 Palmer, T. S. 1904 A, 705, 808 (Vesperugo).  
 Regalia, E. 1880 A, 520 (Vesperugo).  
 Retterer and Vallois 1912 D, 451 (Vesperugo).  
     1912 E, 597 ("pipistrelle").  
 Taschenberg, O. 1899 A, 4703 (Vesperugo).  
 Torne, O. 1913 A, 432, figs. 1-5 (Vesperugo).  
 Trouessart, E. L. 1904 A, 80.  
 Weber and Abel 1928 A, 148.

Zuckerhandl, E. 1908 A, 499, 512, 536 (Vesperugo).

**Pipistrellus anemophilus (Cope).**

Hay, O. P. 1902 A, 742.

**Eptesicus Rafinesque. Type *E. melanops* Rafinesque = *E. fuscus*.**

Rafinesque, C. S. 1820, Ann. Nature, 2.

Unless otherwise indicated the authors, as quoted, employ the generic name *Vespertilio*. In many cases it is used in a wide sense; sometimes perhaps it does not include *Eptesicus*.

Hay, O. P. 1902 A, 742.

Arnbäck-Christie-Linde, A. 1909 A, 573, 574.

Allen, H. 1864 A, 72 (*Eptesicus*).

Allen, J. A. 1892 A.

Ameghino, F. 1889 A, 1027.

Ardt, T. 1907 D, 120, 154.

Baker, F. C. 1920 A, 208, 214, 297.

Beddard, F. E. 1902 A, 529.

Bertell, D. 1909 A, 181.

Blainville, H. M. D. 1838 A, 362.

Bronn, H. G. 1848 B, 1365.

1849 A, 725.

Cuvier, G. 1805 A.

Eggeling, H. 1904 A, 98.

Elmer, G. H. T. 1901 A, 22.

Elliot, D. G. 1901 A, 410.

Fischer, E. 1903 A, 710.

Fischer, J. B. 1829 A, 100 (*Vespertilio*).

Foot, J. S. 1916 A, 80, pl. viii.

Gervais, P. 1852 A, 8.

Gidley, J. W. 1906 F, 94.

Giebel, C. G. 1855 A, 12.

Gill, T. 1886 B, 166.

1907 A, 492.

Grinnell, H. W. 1918 A, 314.

Heilprin, A. 1887 A, 349, 351, 354.

Leboucq, H. 1884 A, 71.

Leche, W. 1900 A, 1018, fig. 102.

Leunis and Ludwig 1883 A, 179.

Leydig, F. 1859 A, 679, 684.

Lubosch, W. 1911 B, 744, 746.

Meckel, J. F. 1825 A.

Merriam, C. H. 1892 A, 62.

Miller, G. S. 1907 A, 207, 268 (*Eptesicus*); 209,

281 (*Vespertilio*).

1912 A, 224 (*Eptesicus*); 238 (*Vespertilio*).

1912 B, 61 (*Eptesicus*).

1924 C, 76.

Nehring, H. 1880 A.

Osborn, H. F. 1909 D, 80.

1910 B, 259, 469, 525.

**ANTROZOUS H. Allen. Type *Vespertilio pallidus* Le Conte.**

Allen, H. 1862, Proc. Acad. Nat. Sci. Phila., 248.

1864 A, 66.

1893 A, 64.

Dobson, G. E. 1878 A, 170.

Elliot, D. G. 1901 A, 396.

Gill, T. 1886 B, 166.

Grinnell, H. W. 1918 A, 347.

Merriam, C. H. 1892 A, 61.

Miller, G. S. 1897 A, 42.

1924 C, 84.

Trouessart, E. L. 1904 A, 74.

Winge, H. 1893 A, 37.

Matthew, W. D. 1917 B, 569 (*Vesperugo*).

Palacký, J. 1902 D, 2 (*Vesperugo anemophilus*).

Seeley, H. G. 1886 A, 465 (*Vesperugo*).

Winge, H. 1923 A, 270 (*Vesperugo*).

Eocene (Wind River); Wyoming.

***Eptesicus melanops* Rafinesque = *E. fuscus*.**

Owen, R. 1845 B, 425, pl. cxii, figs. 1-4.

1866 B, 387.

Palmer, T. S. 1904 A, 268, 807 (*Eptesicus*); 705, 808 (*Vespertilio*).

Rehs, J. 1914 A, 110.

Taschenberg, O. 1899 A, 702 (*Vespertilio*).

Törne, O. 1913 A, 432 (*Vesperugo*).

Trouessart, E. L. 1878 A, 7.

1904 A, 77.

Wagner, R. 1843 A.

Weber, M. 1904 A, 404, 406.

Weber and Abel 1928 A, 133, 156, fig. 81.

Winge, H. 1893 A, 36.

1893 B, 84.

1923 A, 237, 274.

Zittel and Schlosser 1923 A, 452, fig. 574 (*Vespertilio*).

***Eptesicus fuscus* (Beauvois).**

Beauvois, — 1796, Cat. Peale's Mus., Phila., 14 (*Vespertila*).

Hay, O. P. 1902 A, 742 (*Vespertilio*).

Allen, H. 1864 A, 72 (*E. melanops*).

Elliot, D. G. 1901 A, 410 (*Vespertilio*).

Grinnell, H. W. 1918 A, 314, pl. xviii, fig. 13; pl. xxiii, fig. 52; pl. xxiv, fig. 60; text-fig. Q.

Hay, O. P. 1923 A, 398 (*Adelonycteris*).

Mercer, H. C. 1894 A, 98 ("dusky bat").

1897 A, 59, fig. 17 (*Adelonycteris*).

Miller, G. S. 1897 A, 96, figs. 25, 26 (*Vespertilio*).

1912 B, 62.

1924 C, 76.

Rhoads, S. N. 1903 A, 227.

Schlosser, M. 1899 O, 151 (*Adelonycteris*).

Recent; larger part of North America: Pleistocene; Tennessee.

***Eptesicus fuscus grandis* (B. Brown).**

Brown, B. 1908 A, 174, pl. xv (*Vespertilio*).

Gidley, J. W. 1906 F, 107, pl. iv, fig. 7 (*Vespertilio*).

1913 B, 96 (*Vespertilio grandis*).

Hay, O. P. 1914 A, 32.

1923 A, 310.

Seton, E. T. 1909 A, 1177, map 66.

Pleistocene: Arkansas, Maryland.

***Vespertilio pallidus* Le Conte.**

Winge, H. 1923 A, 238, 274.

***Antrozous pallidus pacificus* Merriam.**

Merriam, C. H. 1897, Proc. Biol. Soc. Wash., xi, 180.

Grinnell, H. W. 1918 A, 352 (*A. pacificus*).

Hay, O. P. 1927 D, 215.

Miller, G. S. 1912 B, 68.

1924 C, 84.

Miller and Stock 1925 A, 10.

Recent; southwestern United States: Pleistocene (Potter Creek cave); California.



*Superfamily PHYLLOSTOMOIDEÆ, new form.*

Weber and Abel 1928 A, 149 (table), 153 (Phyllostomatoidea).

## PHYLLOSTOMIDÆ Waterhouse.

Waterhouse, G. R. 1838 (*ide* Palmer).  
Cuvier, F. 1808 A, 34 ("phyllostomes").  
Gill, T. 1886 B, 172.  
Leche, W. 1895 A, 75 (Phyllostoma).

Palmer, T. S. 1904 A, 801 (Phyllostomatidæ).  
Weber and Abel 1928 A, 134, 140, 149 (table)  
153 (Phyllostomatidæ).

ZANYCTERIS Matthew. Type *Z. paleocenus* Matthew.

Matthew, W. D. 1917 B, 569.  
1928 B, 957.  
Reeside, J. B. 1924 A, 47.  
Winge, H. 1923 A, 270.

**Zanycteris paleocenus** Matthew.

Matthew, W. D. 1917 B, 569.  
1917 C, 831.  
Reeside, J. B. 1924 A, 47.  
Weber and Abel 1928 A, 159 (Palæonycteris).  
Eocene or Paleocene (Ignacio); Colorado.

## Order CARNIVORA.

Hay, O. P. 1902 A, 743 (Feræ).  
Abel, O. 1901 B, 313 ("raubthiere").  
1906 A, 56 ("carnivoren").  
1912 D, 599 ("carnivoren").  
1912 F, 378, 684.  
1913 B, 711.  
1914 A, 57.  
1919 A, 729.  
1920 A, 420.  
1921 A, 138 ("carnivoren").  
1922 C, 280 ("raubtiere").  
Adloff, P. 1903 A, 382 ("carnivoren").  
1910 B, 232 ("carnivoren").  
Ameghino, F. 1889 A, 1008.  
1905 C, 439.  
1906 A, 285, 356, 395.  
1912 B, 171 ("carnivores").  
Anderson, R. J. 1912 D, 252.  
Anthony, R. 1905 A, 353 ("carnassiers").  
1912 A ("carnassiers").  
Arlt, T. 1907 B, 449 ("carnivoren").  
1907 D, 643.  
Baird, S. F. 1876 A, 305.  
Bardeleben, K. 1885 B, 85 ("raubthiere").  
1885 C, 151 ("carnivoren").  
1889 A, 107 ("carnivoren").  
1889 B, 259.  
1904 A, 111 ("karnivoren").  
Bardenfleth, K. S. 1913 A, 99.  
Bateson, W. 1892 A, 104.  
Beddard, F. E. 1902 A, 386.  
Behlen, H. 1906 A, 198 ("fleischfresser").  
1907 A ("carnivoren").  
Bertelli, D. 1909 A, 175.  
Beyer, H. 1908 A ("raubtiere").  
1909 A, 29 ("raubtiere").  
Birula, A. A. 1913 A, 219.  
Black, N. 1900 A, 19.  
Bluntschli, H. 1913 A, 42 ("carnivoren").  
Boas, J. E. V. 1909 A, 525 ("raubtiere").  
1914 B, 577 ("carnivoren").  
Bonaparte, C. L. 1832 A, 285 (Feræ); 286 (Carnivora).  
1833 A, 1043.  
Branca, W. 1907 A, 10 ("carnivoren").  
Brandt and Woldrich 1887 A, 22.  
Broom, R. 1897 B, 252.

Broom, R. 1926 A, 263.  
Carruccio, A. 1913 B, 177 (Carnivori).  
Carus, V. 1875 A, 118.  
Carus and Engelmann 1861 A, 1299, 1687.  
Case, E. C. 1899 B, 177.  
Caush, D. E. 1904 A, 157.  
Chandler, A. C. 1914 B, 134.  
Clark and Sonntag 1926 A, 461, 481.  
Cleland, J. 1863 B, 300.  
Cope, E. D. 1875 Y, 444.  
1885 BB, 73.  
1891 N, 67, 75, 90.  
Cuvier, F. 1807 A, 114 ("carnassiers").  
1808 D, 27 ("carnassiers").  
1825 A, 77 ("carnivores").  
Cuvier, G. 1805 A ("carnivores").  
Dana, J. D. 1863 C, 333 ("carnivores").  
Dependorf, T. 1907 C, 108 ("carnivoren").  
Dollo, L. 1889 G, 675 ("carnivores").  
Doran, A. H. G. 1878 A, 371, 390.  
Eggeling, H. 1904 A, 97 ("carnivoren").  
Eimer, G. H. T. 1901 A, 257 ("carnivoren").  
Eisler, P. 1895 A, 54 ("karnivoren").  
Ellenberger and Baum 1903 A ("fleischfresser").  
Elliot, D. G. 1901 A, 293.  
Erdl, M. 1843 A, 507 ("raubthiere").  
Fawcett, E. 1917 A, 326.  
Fleischmann, A. 1904 A, 495 ("carnivoren").  
Flower, W. H. 1870 A, 244.  
Frassetto, F. 1903 A, 177.  
1915 A, 21, 62 ("carnivori").  
Frey, H. 1911 A, 410 ("carnivoren").  
Fuchs, H. 1906 A, 12 ("karnivoren").  
1907 A, 152 ("raubtiere").  
1914 A, 31 ("karnivoren").  
Ganzer, H. 1908 A, 159.  
Gaudry, A. 1891 C, 52.  
1906 A, 12 ("carnivores").  
Gaupp, E. 1905 D, 1039 ("karnivoren").  
1906 B, 850.  
1910 D, 92 ("carnivoren").  
1911 D, 621 ("carnivoren").  
1912 B, 219 ("carnivoren").  
1913 A, 112.  
Gegenbaur, C. 1888 A, 396 ("carnivoren").  
Gervais, P. 1852 A, 103 ("carnivores").  
1853 B, 42 ("carnivores").

- Gervais, P. 1859 A, 202 ("carnivores").  
 Ghigi, A. 1900 B, 99 ("carnivori").  
 Gidley, J. W. 1915 B, 334 ("carnivores").  
 1923 C, 241 ("carnivores").  
 Giebel, C. G. 1855 A, 19 (carnivoræ).  
 1883 A ("raubthiere").  
 Gottlieb, H. 1914 A, 188.  
 Grant, M. 1904 B, 191 ("carnivores").  
 Gray, J. E. 1821 A. 309 (Carnivore).  
 Gregory, W. K. 1910 A, 96, 294, 298, 305.  
 1916 A, 248 ("carnivores").  
 1917 D, 626.  
 1920 A, 238.  
 Gregory and Camp 1918 A.  
 Haeckel, E. 1868 A, 469, 480 (Carnaria, Carnivora).  
 1873 A, 544 (Carnaria).  
 Hasse and Schwarck 1870 A, 95.  
 Hay, O. P. 1912 D, 769.  
 1914 A, 474 (Fæm).  
 Heilprin, A. 1887 A, 383.  
 Hensel, R. 1879 A, 530 ("carnivoren").  
 Hertz, M. 1925 A, 553.  
 Hilzheimer, M. 1913 A, 565 ("raubtiere").  
 Hoernes, R. 1886 A, 692.  
 Hoover, R. 1911 A, 92 ("carnivoren").  
 Hogben, L. T. 1919 A, 71, 74.  
 Howes, G. B. 1893 A, 592.  
 Hrdlička, A. 1920 A, 463 ("carnivores").  
 1921 A, 166.  
 Huene, F. 1912 F, 522 ("carnivoren").  
 Huxley, T. II. 1856 A, 46.  
 1856 B, 191.  
 1863 E, 554.  
 1863 F, 529.  
 1870 F, 528, 531, 537.  
 1880 E, 459 ("carnivores").  
 Ihering, H. 1910 A, 113 ("raubtiere").  
 Jaeger, G. F. 1842 A, 435 ("fleischfresser").  
 Jaekel, O. 1911 A, 227 (Carnivori).  
 Kampfen, P. N. 1905 A, 500.  
 Kingsley, J. S. 1925 A, 210, 295.  
 Klein, E. E. 1868 A ("carnivoren").  
 Küstlin, O. 1844 A ("carnivoren").  
 Kükenthal, W. 1913 A, 680.  
 Laloy, L. 1907 A, 587 ("carnivores").  
 Lankoster, E. R. 1908 A, 324.  
 Lataste, F. 1887 A, 266 ("carnivores").  
 Lavocat, A. 1885 A, 50 ("carnassiers").  
 Leboucq, H. 1884 A, 72 ("carnassiers").  
 Leche, W. 1887 A ("carnivoren").  
 1902 A, 43.  
 Le Damany, P. 1903 G, 322 ("carnivores").  
 1906 B, 164 ("carnivores").  
 Ledouble, A. F. 1903 A, 646 ("carnassiers").  
 1906 A, 549, 553, 589 ("carnassiers").  
 Leunis and Ludwig 1883 A, 181.  
 Loble, J. L. 1908 A, 194.  
 Lönberg, E. 1916 A, 3.  
 Loomis, F. B. 1910 C, 283.  
 Lubosch, W. 1907 A, 618 ("carnivoren").  
 Lull, R. S. 1904 C, 2.  
 1917 B, 295, 308, 322, 338, 560.  
 1918 C, 136 ("carnivores").  
 Lydekker, R. 1884 A, 178.  
 1896 D, 1-312.  
 1899 B, 922.  
 1904 C, 61.  
 Lydekker, R. 1907 C, 453.  
 1910 F, 655.  
 1914 A, 630.  
 Mackie, S. J. 1863 D, 332.  
 Magitot, A. 1875 A, 78 ("carnivores").  
 Major, C. J. F. 1880 A, 38.  
 1899 A, 508.  
 1899 B, 62.  
 Mantell, G. A. 1844 A, 853.  
 Martins, C. 1857 A, 81 ("carnivores").  
 Matthew, W. D. 1904 D, 815.  
 1906 C, 232.  
 1907 B, 532 ("carnivores").  
 1909 C, 123.  
 1909 D, 299, 313-315, 328-330, 551.  
 1910 G, 159.  
 1912 A, 156, 159.  
 1912 B, 182.  
 1915 A, 217.  
 1915 D, 4 (Fæm).  
 1915 K, 439, 444.  
 1916 C, 522.  
 1917 A, 574.  
 1921 D, 212, 214.  
 1925 E, 751.  
 1928 B, 948, 966, 970, 980.  
 Mead, C. S. 1906 A, 430.  
 Meckel, J. F. 1825 A ("fleischfresser").  
 Meunier, S. 1903 A, 776 ("carnivores").  
 Miller, G. S. 1912 B, 73.  
 Mitchell, P. C. 1905 A, 493.  
 Moodie, R. L. 1922 C, 351.  
 Mysberg, W. A. 1917 A, 655.  
 Neuville, H. 1915 A, 6 ("carnivores").  
 O'Harra, C. C. 1910 A, 76.  
 1920 A, 77.  
 Oken, L. 1823 A, 284-300 ("raubthiere").  
 Osborn, H. F. 1899 J, 415.  
 1902 E, 356, fig. 1.  
 1905 H, 207, figs. 2, 6.  
 1905 I, 99.  
 1906 C, 840, 842.  
 1907 G, 12, 131.  
 1909 D, 123.  
 1910 B, 609.  
 1915 D, 284 ("carnivores").  
 1917 B, 259, 309.  
 1925 B, 18.  
 1925 C, 751, 752.  
 Owen, R. 1845 E, 116 ("carnivores").  
 1857 E.  
 1858 A, 31.  
 1868 A, 870.  
 Pander and Alton 1822 A, 7 ("raubthiere").  
 Paramore, R. H. 1910 A, 1463.  
 Parker and Haswell 1897 A, 455, 475, 512.  
 Perna, G. 1906 A, 122 ("raubtiere").  
 Pictet, F. J. 1853 A, 133 ("carnivores").  
 Pohl, L. 1911 A, 115 ("carnivoren").  
 Pohle, H. 1920 A, 48 ("raubtiere").  
 1924 A, 25.  
 Puccioni, N. 1908 A, 41 (Carnivori).  
 Rehs, J. 1914 A, 2, 56.  
 Retterer, E. 1884 A, 478, 507 ("carnassiers").  
 Retzius, A. 1849 A, 614 (Fæm).  
 Reynolds, S. H. 1897 A, 497, 535, fig. 84.  
 Rutland, J. 1901 A, 21033 (Fæm).  
 Ryder, J. 1887 B.

- Schlosser, M. 1898 B, 360.  
 1899 I, 350 ("carnivoren").  
 1900 C, 134 ("raubthiere").  
 1902 H, 141.  
 1902 J, 258 ("carnivoren").  
 1903 I, 176.  
 1904 B, 446.  
 1911 A.
- Schmidt, O. 1886 A, 259.  
 Schwalbe, G. 1904 A, 207, 210 ("carnivoren").  
 Schwarz, E. 1924 A, 419.  
 Slater, P. L. 1875 A, 209.  
 Scott, W. B. 1896 C, 308.  
 1896 D, 57.  
 1913 A, 222, 238, 516, 574, 677.  
 1916 A, 116, 117.  
 1917 A, 174.  
 1928 B, 257.
- Seeley, H. G. 1876 C, 176.  
 1878 A, 225.  
 1886 A, 418.
- Serres, M. 1852 A, 145 ("carnassiers").  
 1852 B, 198 ("carnassiers").
- Smith, G. E. 1907 A, 163 ("carnivores").  
 Spurrell, H. G. F. 1906 A, 123.  
 Stehlin, H. G. 1916 B, 1587 ("carnivoren").  
 Steinmann, G. 1907 A, 470.  
 1909 A ("raubtiere").  
 1912 A, 46 ("carnivoren").  
 1912 B, 718 ("raubtiere").
- Strecker, C. 1887 A, 316 ("raubthiere").
- Stromer, E. 1902 A.  
 1902 B, 561 ("carnivoren").  
 1908 B, 157.  
 1912 A, 179, 243.
- Taschenberg, O. 1899 A, 4440.
- Terra, P. 1911 A, 277.
- Thacker, A. G. 1922 A, 600, 603.
- Thomas, O. 1887 A, 311.
- Tims, H. W. M. 1902 A, 321.  
 1905 B, 1785.
- Tomes, C. S. 1906 A, 46, 50.
- Tornier, G. 1891 A, 143.
- Tredgold, A. F. 1897 A, 295.
- Trouessart, E. L. 1904 A, 158.
- Turner, H. N. 1847 A, 110.
- Underhill, B. M. 1910 A, 76.
- Vallois, H. V. 1921 B, 975 ("carnivores").
- Van Bemmelen, J. F. 1918 A, 575 ("carnivores").
- Van den Broeck, A. J. P. 1912 A, 782.
- Vicq-d'Azyr, F. 1819 A, 75 (Carnivori).
- Wagner, R. 1843 A, 12.
- Wallace, A. R. 1876 A, 491; II, 565.  
 1894 A, 435.
- Wallisch, W. 1906 A, 307, 308.  
 1922 A, 540 ("raubtiere").
- Walmsley, T. 1918 A, 327.
- Weber, M. 1886 A, 240.  
 1904 A, 515.
- Weber and Abel 1928 A, 299, 316.
- Weber and Burlet 1927 A.
- Wiegman, F. R. 1838 B, 257 (Ferae).
- Wilder, B. G. 1872 B, 319.  
 1874 A, 302.
- Williston, S. W. 1912 E, 261.
- Winge, H. 1896 A, 123, 126.  
 1924 A, 173.
- Woodward, A. S. 1898 D, 330.  
 1910 B, 470.  
 1923 C, 21.
- Woodward, H. 1904 B, 163.
- Worthmann, F. 1922 A, 307 ("raubtiere").
- Wortman, J. L. 1901 B, XI, 333.  
 1902 A, XIII, 45, 127.  
 1903 A, 430.  
 1906 A, 90.  
 1920 A, 17.  
 1921 A, 181.
- Wyman, J. 1867 B, 274.
- Zaaijer, T. 1894 A, 339.
- Zietschmann, O. 1917 A, 434 ("carnivoren").
- Zittel, K. A. 1897 A, 133 ("raubthiere").
- Zittel and Schlosser 1911 A, 374.  
 1923 A, 453, 482.

## Suborder CREODONTA Cope.

- Cope, E. D. 1875 Y, 446.
- Hay, O. P. 1902 A, 743.
- Abel, O. 1905 A, 21.  
 1905 C, 375 ("creodontier").  
 1905 E, 84 ("creodontier").  
 1907 E, (249) ("creodontier").  
 1912 D, 599.  
 1913 B, 712, 713.  
 1913 C, 200, 221 (Creodontia).  
 1914 A, 60.
- Ameghino, F. 1889 B, 280.  
 1893 B, 440, 446 (Creodontia).  
 1901 A, 351 ("créodontes").  
 1902 B, 12 ("créodontes").  
 1905 A, 8.  
 1905 C, 351, 439.  
 1906 A, 356, 391.  
 1906 E, 237.
- Andrews, C. W. 1906 A, xxii.  
 1908 C ("creodonts").
- Arlt, T. 1907 D, 648 (Creodontia).  
 1912 A, 686.
- Baird, S. F. 1876 A, 305 (Bunotheriidae).
- Bardenheft, K. S. 1913 A, 84.
- Beddard, F. E. 1902 A, 455.
- Behlen, H. 1907 A.
- Boas, J. E. V. 1914 B, 577, 579, 582 ("creodonten").
- Branca, W. 1907 A, 9.
- Carlson, A. 1921 A, 71.
- Case, E. C. 1899 B, 178.
- Chardin, T. 1922 A, 30 ("créodontes").
- Clark and Sonntag 1926 A.
- Cope, E. D. 1885 BB, 72.  
 1885 EE, 610.  
 1891 N, 72, 75.
- Depéret, C. 1904 B, 43 ("créodontes").  
 1905 C, 703 ("créodontes").  
 1907 B ("créodontes").  
 1912 A, 706 ("créodontes").
- Dietrich, W. O. 1913 A, 49 ("creodontier").
- Drevermann, F. 1913 C, 199.
- Fraas, E. 1904 A, 14, 24 ("creodontier").  
 1905 A, lxiii ("creodontier").

- Fraas, E. 1905 B, 386 ("creodontier").  
 Gadow, H. 1913 A, 127.  
 Gawrilenko, A. 1924 A, 222 (Creodontia).  
 Gregory, W. K. 1910 A, 516.  
 1912 F, 290 ("creodonts").  
 1920 A, 145, 238.  
 1921 A, 68 ("creodonts").  
 Gregory and Simpson 1920 A, 3 ("creodonts").  
 Heilprin, A. 1887 A, 393.  
 Hilzheimer, M. 1913 A, 565.  
 Hoernes, R. 1912 A, 661.  
 Hogben, L. T. 1919 A, 74.  
 Huene, F. 1927 D, 146 ("creodontier").  
 Kampfen, P. N. 1905 A, 500.  
 Keuchenius, P. E. 1913 A, 448.  
 Kingsley, J. S. 1925 A, 211.  
 Koken, E. 1893 B, 486.  
 Leche, W. 1902 A, 43.  
 1907 A, 41.  
 1915 A, 346.  
 Lemoine, V. 1889 A, 280.  
 Lönnberg, E. 1910 B, 238.  
 1911 A, 59.  
 Lydekker, R. 1899 B, 927 (Creodontia).  
 1902 B, 373 ("creodonts").  
 1903 D, 101 (Creodontia).  
 1904 C, 62 ("creodonts").  
 1907 C, 451 ("creodonts").  
 1907 D, 498 ("creodonts").  
 1910 F, 655 ("creodonts").  
 Major, C. J. F. 1899 B, 68.  
 Martin, R. 1906 A, 405.  
 Matthew, W. D. 1901 A (with groups *Creodonta primitiva*, *C. adaptiva*, and *C. inadaptiva*).  
 1904 D, 815.  
 1905 B, 69.  
 1905 D, 24.  
 1906 C, 216.  
 1907 B, 533, 534.  
 1909 C, 123.  
 1909 D, 315, 318, 320, 327, 328, 330-332, 335, 414, 501.  
 1910 G, 152 ("creodonts").  
 1912 B, 184.  
 1915 A, 217.  
 1915 D, 4.  
 1915 K, 445.  
 1928 B, 948, 970, 983.  
 O'Hara, C. C. 1910 A, 77.  
 1920 A, 78.  
 Osborn, H. F. 1889 J, 415.  
 1898 U, 686.  
 1902 E, 356, fig. 1.  
 1905 H, 218, fig. 2.  
 1905 I, 91.  
 1905 N, 242.  
 1906 C, 842.  
 1907 G, 12, 132-139.  
 1909 D, 123.  
 Osborn, H. F. 1910 B, 611.  
 1925 B, 18.  
 Peterson, O. A. 1912 B, 164 (Creodontia).  
 Pohle, H. 1924 A, 25.  
 Pompeckj, J. F. 1922 A, 81 ("creodontier").  
 Reynolds, S. H. 1897 A, 368, 439, 479, 512, 520.  
 Scharff, R. F. 1911 A, 373.  
 Schlosser, M. 1897 B, 20 ("creodonten").  
 1898 B, 360, 361, 364.  
 1898 J, 520.  
 1899 I, 353.  
 1900 B, 302.  
 1902 I, 738.  
 1902 J, 233, 257.  
 1903 I, 31 ("creodonten").  
 1904 B, 447.  
 1904 C, 96 ("creodonten").  
 1905 A, 329.  
 1910 A, 501.  
 1911 A.  
 1921 A, 107 (Creodontia).  
 Schmidt, O. 1886 A, 282.  
 Schwarz, E. 1912 B, 4 ("creodonten").  
 1924 A, 419, 421.  
 Scott, W. B. 1896 C, 308.  
 1913 A, 679.  
 Seeley, H. G. 1886 A, 417.  
 Shufeldt, R. W. 1889 D, 24.  
 Simpson, G. G. 1928 J, 8 ("creodonts").  
 Sinclair, W. J. 1906 B, 335-337.  
 Steinmann, G. 1907 A, 470 (Creodontia).  
 1908 A, 233 ("creodonten").  
 1912 B, 719, 727 (Creodontia).  
 Stromer, E. 1902 B, 239, 554, 560 ("creodonten").  
 1903 B, 39.  
 1903 D, 99.  
 1906 A, 213 (Creodontia).  
 1908 B, 157, 168.  
 1912 A, 182 (Creodontia).  
 1916 A, 407.  
 Thacker, A. G. 1922 A, 600, 603.  
 Tomes, C. S. 1906 A, 45, 52 ("creodonts").  
 Trouessart, E. L. 1904 A, 158.  
 Underhill, B. M. 1910 A, 84.  
 Weber, M. 1904 A, 538.  
 Weber and Abel 1928 A, 89, 90, 300, 311, 335, 336, 339.  
 Winge, H. 1896 A, 126 (Carnivora primitiva).  
 1924 A, 176, 178 (Carnivora primitiva).  
 Woodward, A. S. 1897 C, 380.  
 1898 D, 330, 336.  
 1923 C, 24.  
 Wortman, J. L. 1901 B, xi, 384, 387, 388; xii, 281.  
 Zittel, K. A. 1895 A, 310 (Creodontia).  
 1897 A, 138.  
 Zittel and Schlosser 1911 A, 375 (Creodontia).  
 1923 A, 454, 482, 666, 667 (Creodontia).

*Superfamily ARCTOCYONOIDÆ, new name.*

- Chardin, T. 1922 A, 87 (Procreodi).  
 Gregory, W. K. 1920 A, 238 (Procreodi).  
 Matthew, W. D. 1915 D, 5 (Procreodi).  
 Weber and Abel 1928 A, 337 (Procreodi).

*OXYCLANIDÆ Scott.*

- Hay, O. P. 1902 A, 744.  
 Abel, O. 1919 A, 733.  
 Arldt, T. 1907 D, 246, 262.  
 1912 A, 702.

- Beddard, F. E. 1902 A, 552 (Chriacidae).  
 Behlen, H. 1907 A ("oxyclaeniden").  
 Chardin, T. 1922 A, 30, 88 ("oxyclénidés").  
 1927 A, 18 ("oxyclénidés").  
 Depéret, C. 1908 A, 111.  
 1912 A, 706.  
 Gregory, W. K. 1920 A, 238.  
 1922 A, 105.  
 Gregory and Simpson 1920 A, 1.  
 Leche, W. 1915 A, 356.  
 Matthew, W. D. 1901 A, 5, 7, 19, 21.  
 1905 D, 28.  
 1909 C, 91, 101.  
 1909 D, 327, 333.  
 1912 B, 184.  
 1914 B, 387.  
 1915 D, 5.  
 1915 K, 445.

- Matthew, W. D. 1918 H, 567.  
 1921 D, 212, 214.  
 1928 B, 971.  
 Osborn, H. F. 1909 D, 33, 34, 35.  
 1910 B, 111, 526.  
 Schlosser, M. 1898 B, 361.  
 1900 B, 302.  
 1901 K, 467 (Chriacidae).  
 1902 D, 301 (Chriacidae).  
 1904 B, 152.  
 1921 A, 108, 135 ("oxycleniden").  
 Scott, W. B. 1913 A, 554, 561, 562, 574.  
 Trouessart, E. L. 1904 A, 158.  
 Weber and Abel 1928 A, 90, 336, 337.  
 Wortman, J. L. 1901 B, XII, 283, 285.  
 1902 A, XIII, 434.  
 Zittel and Schlosser 1911 A, 376.  
 1923 A, 455, 482, 665.

OXYCLAENUS Cope. Type *Mioclaenus cuspidatus* Cope.

- Hay, O. P. 1902 A, 744.  
 Ameghino, F. 1901 A, 351.  
 1906 A, 283.  
 Chardin, T. 1922 A, 48.  
 Gaudry, A. 1901 B, 524.  
 Haug, E. 1911 A, 1527.  
 Matthew, W. D. 1909 C, 101.  
 1909 D, 327.  
 1918 H, 586.  
 1928 B, 954.  
 Palmer, T. S. 1904 A, 491, 811.  
 Schlosser, M. 1900 B, 302.  
 Scott, W. B. 1913 A, 522.  
 Trouessart, E. L. 1904 A, 158.  
 Wortman, J. L. 1901 B, XII, 285.  
 Zittel and Schlosser 1911 A, 376.  
 1923 A, 455.

**Oxyclaenus cuspidatus** Cope.

- Hay, O. P. 1902 A, 744.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Trouessart, E. L. 1904 A, 158.  
 Paleocene (Puerco); New Mexico.

**Oxyclaenus simplex** Cope.

- Hay, O. P. 1902 A, 744.  
 Chardin, T. 1922 A, 88.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1900 B, 302 (Chriacus).  
 1908 B, 364 (Protochriacus).  
 Trouessart, E. L. 1904 A, 158.  
 Paleocene (Puerco); New Mexico.

LOXOLOPHUS Cope. Type *L. adapius* Cope = *Chriacus hyattianus* Cope.

- Hay, O. P. 1902 A, 745.  
 Ameghino, F. 1901 A, 351 (Protochriacus).  
 1906 A, 283 (Protochriacus).  
 Beddard, F. E. 1902 A, 553 (Protochriacus).  
 Haug, E. 1911 A, 1527.  
 Leche, W. 1915 A, 356 (Protochriacus).  
 Matthew, W. D. 1909 C, 91 (Loxolophus); 101 (Protochriacus).  
 1924 E, 749.  
 Palmer, T. S. 1904 A, 386, 811 (Loxolophus); 581, 811 (Protochriacus).  
 Schlosser, M. 1898 B, 361 (Loxolophus); 361, 364 (Protochriacus).  
 Trouessart, E. L. 1904 A, 159 (Protochriacus).  
 Wortman, J. L. 1901 B, XII, 285 (Protochriacus).  
 Zittel and Schlosser 1923 A, 455 (Syn. of Protochriacus).

**Loxolophus attenuatus** (Osborn and Earle).

- Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.

- Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1908 B, 364 (Protochriacus).  
 Trouessart, E. L. 1904 A, 159 (Protochriacus).  
 Paleocene (Puerco); New Mexico.

**Loxolophus hyattianus** (Cope).

- Hay, O. P. 1902 A, 745.  
 Douglass, E. 1908 D, 20 (Protochriacus. This species?).  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1900 B, 302 (Protochriacus).  
 Trouessart, E. L. 1904 A, 159 (Protochriacus).  
 Paleocene (Puerco); New Mexico.

**Loxolophus priscus** (Cope).

- Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1900 B, 302 (Protochriacus).  
 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.

Schlosser, M. 1908 B, 364 (Protochriacus).  
 Trouessart, E. L. 1904 A, 159 (Protochriacus).  
 Paleocene (Puerco); New Mexico.

**Loxolophus** sp. indet.

Lull, R. S. 1915 D, 326 (Protochriacus sp.).  
 Paleocene (Fort Union); Montana.

**CARCINODON** Scott. Type *Mioclanus filholianus* Cope.

Hay, O. P. 1902 A, 762.  
 Matthew, W. D. 1909 C, 101.  
 Palmer, T. S. 1904 A, 159, 812.  
 Schlosser, M. 1900 B, 303.  
 Zittel and Schlosser 1923 A, 455.

**Carcinodon filholianus** (Cope).

Hay, O. P. 1902 A, 762.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Osborn, H. F. 1902 C, 171.  
 Reeside, J. B. 1924 A, 38.  
 Trouessart, E. L. 1904 A, 48.  
 Paleocene (Puerco); New Mexico.

**PARADOXODON** Scott. Type *Chriacus rütimeyeranus* Cope.

Hay, O. P. 1902 A, 762.  
 Matthew, W. D. 1909 C, 101.

**Paradoxodon rütimeyeranus** (Cope).

Hay, O. P. 1902 A, 762.

Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Paleocene (Puerco); New Mexico.

**CHRIACUS** Cope. Type *Pelycodus pelvidens* Cope.

Hay, O. P. 1902 A, 744.  
 Ameghino, F. 1901 A, 351.  
 1906 A, 283.  
 Beddard, F. E. 1902 A, 552.  
 Chardin, T. 1922 A, 48, 100.  
 Dall, W. H. 1898 A, 347.  
 Depéret, C. 1908 A, 111.  
 1912 A, 706.  
 Granger, W. 1917 A, 829.  
 Haug, E. 1911 A, 1528.  
 Leche, W. 1915 A, 356.  
 Matthew, W. D. 1901 A, 5, 6.  
 1909 C, 101.  
 1909 D, 327.  
 1915 D, 4, 5.  
 1915 K, 420 (*Pelycodus*).  
 1918 H, 588.  
 1924 E, 749.  
 1928 B, 954.

Osborn, H. F. 1907 G, 132, figs. 84, 200.  
 1910 B, 111, 526.  
 Palmer, T. S. 1904 A, 187, 810.  
 Schlosser, M. 1898 B, 361, 364.  
 1900 B, 302.  
 1901 K, 468.  
 1902 D, 301.  
 Wortman, J. L. 1901 B, xii, 285.  
 Zittel and Schlosser 1923 A, 455.

**Chriacus baldwini** Cope.

Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.

Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 302.  
 Trouessart, E. L. 1904 A, 159.  
 Paleocene (Torrejon); New Mexico.

**Chriacus gallinæ** Matthew.

Matthew, W. D. 1915 D, 6, figs. 1, 2.

Gregory, W. K. 1920 A, 238.  
 Lower Eocene (Wasatch); New Mexico.

**Chriacus pelvidens** Cope.

Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729, fig. 9.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 302.  
 Trouessart, E. L. 1904 A, 159.  
 Paleocene (Torrejon); New Mexico.

**Chriacus schlosserianus** Cope.

Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 302.  
 Trouessart, E. L. 1904 A, 158 (*Epichriacus*).  
 Paleocene (Torrejon); New Mexico.

**Chriacus stenops** Cope.

Hay, O. P. 1902 A, 745.  
 Paleocene (Torrejon); New Mexico.

**Chriacus truncatus** Cope.

Hay, O. P. 1902 A, 745.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Trouessart, E. L. 1904 A, 158.  
 Paleocene (Torrejon); New Mexico.

**Chriacus** sp. indet.

Douglass, E. 1908 D, 20 (This genus?).  
 Granger and Simpson 1928 A, 1 (*Pelycodus*).  
 Wasatch (Sand Coulee); Wyoming: Paleocene (Fort Union); Montana.

TRICENTES Cope. Type *T. crassicolliidens* Cope.

- Hay, O. P. 1902 A, 746.  
 Ameghino, F. 1901 A, 351.  
     1906 A, 283.  
 Granger, W. 1917 A.  
 Gregory, W. K. 1916 A, 244, pls. i, j.  
     1922 A, 159, pl. v.  
 Haug, E. 1911 A, 1528.  
 Leche, W. 1915 A, 356.  
 Matthew, W. D. 1905 D, 28, fig. 9.  
     1909 C, 101.  
     1909 D, 327.  
     1918 H, 567.  
     1928 B, 955, fig. 5.  
 Osborn, H. F. 1907 G, 132, figs. 84, 200.  
     1910 B, 111, 526.  
 Palmer, T. S. 1904 A, 688, 811.  
 Schlosser, M. 1898 B, 361, 364.  
     1900 B, 302.  
 Trouessart, E. L. 1904 A, 160.  
 Weber, M. 1904 A, 693 (*Euprotogonia*).  
 Wortman, J. L. 1901 B, xii, 285.  
 Zittel and Schlosser 1911 A, 376, fig. 539.  
     1923 A, 455.

**Tricentes crassicolliidens** Cope.

- Hay, O. P. 1902 A, 746.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
     1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Trouessart, E. L. 1904 A, 160.  
     Paleocene (Torrejon); New Mexico.

**Tricentes subtrigonus** Cope.

- Hay, O. P. 1902 A, 746.  
 Gardner, J. H. 1910 A, 729, fig. 9.  
 Matthew, W. D. 1909 C, 91.  
     1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Trouessart, E. L. 1904 A, 160.  
 Zittel and Schlosser 1911 A, 376, fig. 539.  
     1923 A, 455, fig. 576.  
     Paleocene (Torrejon); New Mexico.

**Tricentes sp. indet.**

- Douglass, E. 1908 D, 20, pl. ii, figs. 5-8 (This  
     Paleocene (Fort Union); Montana.

THRYPTACODON Matthew. Type *T. antiquus* Matthew.

- Matthew, W. D. 1915 D, 4, 7.  
 Chardin, T. 1922 A, 48.  
 Gregory, W. K. 1921 A, 234.  
 Zittel and Schlosser 1923 A, 455.

**Thryptacodon antiquus** Matthew.

- Matthew, W. D. 1915 D, 8, figs. 4-6.  
     Lower Eocene (Wasatch); Wyoming.

**Thryptacodon olseni** Matthew.

- Matthew, W. D. 1915 D, 7, 9, figs. 3, 7-9.  
     Lower Eocene (Wasatch); Wyoming.

**Thryptacodon pseudarctos** Simpson.

- Simpson, G. G. 1928 A, 10, fig. 6.  
     Paleocene (Fort Union); Montana.

DELTATHERIUM Cope. Type *D. fundaminis* Cope.

- Hay, O. P. 1902 A, 751.  
 Bardenheeth, K. S. 1913 A, 101.  
 Granger, W. 1917 A.  
 Gregory, W. K. 1920 A, 146, fig. 75.  
     1922 A, 100.  
 Gregory and Noble 1924 A, 455.  
 Matthew, W. D. 1901 A, 6.  
     1906 C, 216, text-fig. 6.  
     1909 C, 101.  
     1909 D, 327, 464.  
     1918 H, 586.  
     1924 E, 749.  
     1928 B, 954.  
 Osborn, H. F. 1907 G, 133, figs. 85, 96, 196, 200.  
     1910 B, 111, 526.  
 Palmer, T. S. 1904 A, 221, 810.  
 Schlosser, M. 1898 J, 522.  
 Scott, W. B. 1913 A, 554.  
 Trouessart, E. L. 1904 A, 159.  
 Weber and Abel 1928 A, 123.  
 Winge, H. 1924 A, 216, 221, 242, 246.  
 Wood, H. E. 1927 A, 297.  
 Wortman, J. L. 1901 A.  
     1901 B, xii, 285.  
 Zittel and Schlosser 1923 A, 455.

**Deltatherium fundaminis** Cope.

- Hay, O. P. 1902 A, 751.  
 Abel, O. 1914 A, 60, fig. 30.  
 Cope, E. D. 1891 N, 74, fig. 46.  
 Gardner, J. H. 1910 A, 729.  
 Granger, W. 1917 A, 823.  
 Gregory, W. K. 1920 A, 146, fig. 75.  
 Leche, W. 1915 A, 356.  
 Matthew, W. D. 1909 C, 91.  
     1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Trouessart, E. L. 1904 A, 159.  
     Paleocene (Torrejon); New Mexico.

**Deltatherium? interruptum** Cope.

- Hay, O. P. 1902 A, 751.  
 Trouessart, E. L. 1904 A, 159.  
     Paleocene (Puerco); New Mexico.

**Deltatherium sp. indet.**

- Douglass, E. 1908 D, 21, pl. ii, figs. 1, 2 (This  
     genus?). Paleocene (Fort Union); Montana.

PROTOGONODON Scott. Type *Mioclaenus pentacus* Cope.

- Hay, O. P. 1902 A, 603.  
 Bensley, B. A. 1901 C, 252.  
 Granger, W. 1915 A, 329.

- Granger, W. 1917 A.  
 Haug, E. 1911 A, 1527.  
 Matthew, W. D. 1909 C, 102.

- Matthew, W. D. 1928 B, 754.  
 Osborn, H. F. 1907 G, 169, figs. 136, 148, 201.  
 Palmer, T. S. 1904 A, 582, 933.  
 Schlosser, M. 1898 B, 370.  
 1900 B, 305, 306.  
 Scott, W. B. 1913 A, 457.  
 Weber and Abel 1928 A, 629.  
 Zittel and Schlosser 1911 A, 439.  
 1923 A, 523.

A genus of uncertain relationships.

**Protagonodon pentacus (Cope).**

- Hay, O. P. 1902 A, 603.  
 Gardner, J. H. 1910 A, 730 (This genus?).

**MIXOCLÆNUS** Matthew and Granger. Type *M. encinensis* Matthew and Granger.

*Matthew and Granger* 1921 A, 7.

- Matthew, W. D. 1909 C, 92 (This genus?).  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 371.  
 1921 A, 119.  
 Paleocene (Puerco); New Mexico.

**Protagonodon stenognathus** Matthew.

- Hay, O. P. 1902 A, 603.  
 Gardner, J. H. 1910 A, 730 (This genus?).  
 Matthew, W. D. 1909 C, 92 (This genus?).  
 Schlosser, M. 1900 B, 305.  
 Paleocene (Puerco); New Mexico.

**ELPIDOPHORUS** Simpson. Type *E. elegans* Simpson.

*Simpson, G. G.* 1927 B, 5.

This genus is referred to the *Oxyclænidae* with doubt.

**Elpidophorus elegans** Simpson.

*Simpson, G. G.* 1927 B, 5, figs. 5, 6.  
 Paleocene? (Paskapoo); Alberta.

**ARCTOCYONIDÆ.**

- Hay, O. P. 1902 A, 746.  
 Abel, O. 1913 B, 714, 729.  
 1914 A, 68.  
 Ameghino, F. 1889 A, 894.  
 Arldt, T. 1907 D, 639.  
 1912 A, 702.  
 1912 D, 600 ("arctocyoniden").  
 Bardenheft, K. S. 1913 A, 84.  
 Behlen, H. 1907 A, 274, 275 ("arctocyoniden").  
 Chardin, T. 1922 A, 30 ("arctocyonidés").  
 1905 C, 703 ("arctocyonidés").  
 Depéret, C. 1908 A, 111.  
 Gregory, W. K. 1920 A, 238.  
 Hilzheimer, M. 1913 A, 586.  
 Matthew, W. D. 1901 A, 1, 5, 7, 12, 17.  
 1902 C, 284.  
 1905 D, 28.  
 1906 B, 357.  
 1909 C, 91, 93, 100.  
 1909 D, 321, 329, 330, 395, 405.

- Matthew, W. D. 1914 B, 387.  
 1915 K, 445.  
 1921 D, 212, 214.  
 1928 B, 962, 971, 974, fig. 13.  
 Osborn, H. F. 1909 D, 122.  
 1910 B, 111, 126, 132, 133, 138, 526.  
 Schlosser, M. 1898 B, 361, 364.  
 1900 B, 303.  
 1902 J, 150 ("arctocyoniden").  
 1904 B, 452.  
 1921 A, 107 ("arctocyoniden").  
 Scott, W. B. 1913 A, 285, 554, 561, 575.  
 Trouessart, E. L. 1904 A, 160.  
 Weber and Abel 1928 A, 336, 337.  
 Winge, H. 1896 A, 126.  
 1924 A, 177, 182, 242 (Arctocyonidæ).  
 Wortman, J. L. 1901 B, xi, 338; xii, 288, 285.  
 Zittel and Schlosser 1911 A, 382.  
 1923 A, 456, 482, 665.

**ARCTOCYON** Blainville. Type *A. primævus* Blainville.

- Hay, O. P. 1902 A, 746.  
 Abel, O. 1914 A, 62.  
 Ameghino, F. 1905 C, 404.  
 Bronn, H. G. 1848 A, 102.  
 1849 A, 721.  
 Chardin, T. 1922 A, 25, pls. vii, viii; text-figs. 12, 14.  
 Cope, E. D. 1880 U, 149.  
 Depéret, C. 1912 A, 706.  
 Gaudry, A. 1901 A, 504.  
 1901 B, 95, fig. 2, 524.  
 Gervais, P. 1859 A, 220.  
 Gregory, W. K. 1910 A, 310, 437.  
 Huxley, T. H. 1880 D, 450.  
 Lemoine, V. 1889 A, 235.  
 Lockwood, S. 1884 A, 407.

- Mackie, S. J. 1863 D, 335.  
 Matthew, W. D. 1901 A, 13.  
 1909 D, 327.  
 1915 K, 415.  
 1928 B, 962.  
 Osborn, H. F. 1907 G, 133.  
 1910 B, 103, 104, 173, 526, fig. 71.  
 Palmer, T. S. 1904 A, 117, 809.  
 Pictet, F. J. 1853 A, 746.  
 Schlosser, M. 1898 B, 364.  
 1921 A, 107, 112, 133.  
 Schmidt, O. 1886 A, 282.  
 Seeley, H. G. 1878 A, 222.  
 Stromer, E. 1902 B, 554, 561.  
 Weber and Abel 1928 A, xxi, 337.  
 Winge, H. 1924 A, 177, 182, 242.



Wortman, J. L. 1901 B, XII, 285.  
1903 A, xv, 431.

Zittel and Schlosser 1911 A, 382.  
1923 A, 456, figs. 577, 578.

**CLÆNODON** Scott. Type *Mioclænus ferox* Cope.

Hay, O. P. 1902 A, 747.  
Abel, O. 1913 B, 714.  
Ameghino, F. 1901 A, 351.  
1906 A, 283.  
Chardin, T. 1922 A, 29, 48, fig. 14.  
Clark and Sonntag 1926 A, 460, 479.  
Depéret, C. 1908 A, 111.  
1912 A, 706.  
Gaudry, A. 1901 A, 504.  
1901 B, 98, 524.  
Gidley, J. W. 1915 B, 334.  
1919 A, 274, 278.  
1919 B, 541, 544.  
Granger, W. 1917 A, 824.  
Gregory, W. K. 1910 A, 446, 455.  
1921 A, 77.  
Haug, E. 1911 A, 1527.  
Matthew, W. D. 1901 A, 12.  
1904 D, 814.  
1909 C, 100.  
1909 D, 337, 405.  
1924 E, 749.  
1928 B, 954.  
Osborn, H. F. 1907 G, 199, fig. 200.  
1910 B, 111, 527.  
1912 G, 233, figs. 1, 3.  
Palmer, T. S. 1904 A, 191, 809.  
Schlosser, M. 1898 B, 361, 364.  
1900 B, 303.  
1921 A, 115.  
Scott, W. B. 1913 A, 561.  
Trouessart, E. L. 1904 A, 161.  
Weber and Abel 1928 A, 337.  
Winge, H. 1924 A, 177, 182, 242, 246.  
Wortman, J. L. 1901 B, XI, 338, XII, 238, 284, 285.  
Zittel and Schlosser 1911 A, 382.  
1923 A, 456.

**Clænodon corrugatus** (Cope).

Hay, O. P. 1902 A, 747.  
Chardin, T. 1922 A, 26, fig. 11.  
Gardner, J. H. 1910 A, 729.

Gidley, J. W. 1919 B, 541, pl. xxviii, fig. 2;  
text-figs. 1-4.  
Matthew, W. D. 1901 A, 14, fig. 6.  
1909 C, 91.  
1914 B, 384.  
Reeside, J. B. 1924 A, 41.  
Trouessart, E. L. 1904 A, 161.  
Paleocene (Torrejon); New Mexico.

**Clænodon ferox** (Cope).

Hay, O. P. 1902 A, 747.  
Ameghino, F. 1905 C, 350, 403, fig. 49.  
Gardner, J. H. 1910 A, 729.  
Gidley, J. W. 1919 B, 541, 544.  
Lull, R. S. 1915 D, 326.  
Matthew, W. D. 1901 A, 12, 15, fig. 7.  
1909 C, 91.  
1914 B, 384.  
Reeside, J. B. 1924 A, 41.  
Schlosser, M. 1898 B, 364.  
1921 A, 115.  
Stanton, T. W. 1909 A, 284.  
Trouessart, E. L. 1904 A, 161.  
Wortman, J. L. 1901 B, XII, 283.  
Paleocene (Torrejon); New Mexico: (Fort Union); Montana.

**Clænodon protogonioides** (Cope).

Hay, O. P. 1902 A, 747.  
Gardner, J. H. 1910 A, 729 (This species?).  
Gidley, J. W. 1919 B, 541.  
Matthew, W. D. 1901 A, 13.  
1909 C, 91.  
Osborn, H. F. 1909 D, 34.  
Reeside, J. B. 1924 A, 38, 41 (This genus and species?).  
Schlosser, M. 1921 A, 119.  
Trouessart, E. L. 1904 A, 161.  
Paleocene (Puerco, Torrejon); New Mexico.

**Clænodon** sp. indet.

Bowen, C. F. 1918 A, 231. (This genus?). Eocene (Wasatch or Fort Union); Wyoming.

**ANACODON** Cope. Type *A. ursidens* Cope.

Hay, O. P. 1902 A, 747.  
Chardin, T. 1922 A, 28.  
Gaudry, A. 1901 B, 98.  
Haug, E. 1911 A, 1528.  
Matthew, W. D. 1901 A, 13, 17.  
1909 C, 100.  
1909 D, 327.  
1915 D, 13.  
Osborn, H. F. 1907 G, 133, fig. 86.  
1909 D, 38, 45.  
1910 B, 126, 527.  
Palmer, T. S. 1904 A, 99, 809.  
Schlosser, M. 1921 A, 115.  
Scott, W. B. 1913 A, 277, 561.  
Winge, H. 1924 A, 177, 182.  
Wortman, J. L. 1901 B, XII, 285.  
1903 A, xv, 431.

Zittel and Schlosser 1911 A, 380.  
1923 A, 456.

**Anacodon cultridens** Matthew.

Matthew, W. D. 1915 D, 16, fig. 11.  
Lower Eocene (Wasatch); Wyoming.

**Anacodon ursidens** Cope.

Hay, O. P. 1902 A, 747.  
Abel, O. 1914 A, 69, fig. 37.  
1919 A, 738, fig. 550.  
Loomis, F. B. 1907 B, 356.  
Matthew, W. D. 1909 C, 93.  
1915 D, 13, 14, fig. 10.  
Schlosser, M. 1921 A, 115.  
Lower Eocene (Wasatch); Wyoming.

*Neoclænodon* Gidley. Type *N. montanensis* Gidley.

Gidley, J. W. 1919 B, 547.

Zittel and Schlosser 1923 A, 456.

Paleocene (Fort Union); Montana.

*Neoclænodon latidens* Gidley.

Gidley, J. W. 1919 B, 554, fig. 10.

Paleocene (Fort Union); Montana.

*Neoclænodon montanensis* Gidley.

Gidley, J. W. 1919 B, 547, pl. xxviii, fig. 1; text-figs. 5-8.

Paleocene (Fort Union); Montana.

*Neoclænodon silberlingi* Gidley.

Gidley, J. W. 1919 B, 552, fig. 9.

Paleocene (Fort Union); Montana.

Superfamily *MESONYCHOIDÆ*, new form.

Abel, O. 1913 B, 713, 714 (Acreodi).

1914 A, 63, 64 (Acreodi).

1919 A, 733 (Acreodi).

1922 C, 280 (Acreodi).

Chardin, T. 1922 A, 87 (Acreodi).

Gawrilenko, A. 1924 A, 222 (Acreodi).

Gregory, W. K. 1920 A, 239 (Acreodi).

Matthew, W. D. 1909 D, 327, 330 (Acreodi).

1915 D, 5 (Acreodi).

Osborn, H. F. 1910 B, 527 (Acreodi, Mesonych-  
oidea).

Weber and Abel 1928 A, 338, 342 (Acreodi).

Zittel and Schlosser 1911 A, 376 (Acreodi).

1923 A, 455 (Acreodi).

## TRIISODONTIDÆ Scott.

Hay, O. P. 1902 A, 747.

Abel, O. 1914 A, 64.

Arlt, T. 1907 D, 246, 262.

Gregory, W. K. 1920 A, 239.

Matthew, W. D. 1901 A, 5, 6 (Subfam. of  
*Mesonychidæ*).

1909 C, 91, 101.

1909 D, 488 (Triisodontinæ); 330 (Triiso-  
dontidæ).

1912 B, 184.

Matthew, W. D. 1915 K, 445.

Osborn, H. F. 1909 D, 33, 34, 80 (Triisodontinæ).

Palmer, T. S. 1904 A, 775, 811.

Schlosser, M. 1898 B, 361, 365.

1900 B, 302.

1903 B, 148 ("triisodontiden").

Trouessart, E. L. 1904 A, 161 (Triisodontinæ).

Wortman, J. L. 1901 B, xii, 286 (Subfamily).

Zittel and Schlosser 1911 A, 377 (Triisodontinæ).

1923 A, 457, 665 (Triisodontinæ).

TRIISODON Cope. Type *T. quivirensis* Cope.

Hay, O. P. 1902 A, 747.

Abel, O. 1914 A, 62.

Ameghino, F. 1901 A, 351.

1906 A, 283 (Trisodon).

Gaudry, A. 1901 B, 525.

Gregory, W. K. 1910 A, 188, 311.

Haug, E. 1911 A, 1527.

Matthew, W. D. 1909 C, 101.

1909 D, 327.

1924 E, 749.

Osborn, H. F. 1907 G, 132, figs. 84, 94.

1909 D, 35.

Palmer, T. S. 1904 A, 692, 811.

Schlosser, M. 1898 B, 361.

1900 B, 302.

1903 B, 148.

1921 A, 120.

Scott, W. B. 1913 A, 561.

Seeley, H. G. 1886 A, 418.

Trouessart, E. L. 1904 A, 161.

Winge, H. 1924 A, 177, 182.

Wortman, J. L. 1901 B, xii, 285.

Zittel and Schlosser 1923 A, 457, fig. 525.

*Trisodon gaudrianus* (Cope).

Hay, O. P. 1902 A, 748.

Gardner, J. H. 1910 A, 729 (*T. gaudrianus*).

Matthew, W. D. 1909 C, 91.

1914 B, 384.

Reeside, J. B. 1924 A, 38.

Schlosser, M. 1900 B, 302 (*Goniacodon*).Trouessart, E. L. 1904 A, 162 (*T. gaudrianus*).

Paleocene (Puerco); New Mexico.

*Trisodon heilprinianus* Cope.

Hay, O. P. 1902 A, 748, in part.

Gardner, J. H. 1910 A, 729.

Matthew, W. D. 1901 A, 30, figs. 10-12.

1909 C, 91.

1914 B, 384.

Reeside, J. B. 1924 A, 38.

Schlosser, M. 1898 B, 365 (*T. heilprinianus*, *T.*  
*biculminatus*).

1900 B, 302.

1921 A, 119.

Trouessart, E. L. 1904 A, 162.

Paleocene (Puerco); New Mexico.

*Trisodon quivirensis* Cope.

Hay, O. P. 1902 A, 748.

Gardner, J. H. 1910 A, 729.

Leche, W. 1915 A, 351.

Matthew, W. D. 1909 C, 91.

1914 B, 384.

Reeside, J. B. 1924 A, 38.

Trouessart, E. L. 1904 A, 161.

Paleocene (Puerco); New Mexico.

GONIACODON Cope. Type *G. levisanus* Cope.

Hay, O. P. 1902 A, 748.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 101.

1909 D, 327.

Osborn, H. F. 1910 B, 527.  
 Palmer, T. S. 1904 A, 298, 811.  
 Schlosser, M. 1898 B, 361.  
 1900 B, 302.  
 1903 B, 148.  
 Wortman, J. L. 1901 B, xii, 285.

**Goniacodon levisanus (Cope).**

Hay, O. P. 1902 A, 748.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Paleocene (Torrejon); New Mexico.

**MICROCLÆNODON Scott. Type *Trisiodon assurgens* Cope.**

Hay, O. P. 1902 A, 748.  
 Matthew, W. D. 1909 C, 101.  
 1909 D, 327.  
 Palmer, T. S. 1904 A, 421, 811.  
 Schlosser, M. 1898 B, 361.  
 Trouessart, E. L. 1904 A, 162.

**Microclænodon assurgens (Cope).**

Hay, O. P. 1902 A, 748.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Paleocene (Torrejon); New Mexico.

**SARCOTHAUSTES Cope. Type *S. antiquus* Cope.**

Hay, O. P. 1902 A, 748.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 101.  
 1909 D, 327, 403.  
 1928 B, 974, fig. 13.  
 Osborn, H. F. 1910 B, 111, 527.  
 Palmer, T. S. 1904 A, 618, 811.  
 Schlosser, M. 1898 B, 361, 365.  
 1900 B, 303.  
 1903 B, 148.  
 Trouessart, E. L. 1904 A, 162.

Winge, H. 1904 A, 177, 182.  
 Wortman, J. L. 1901 B, xii, 285.

**Sarcothaustes antiquus Cope.**

Hay, O. P. 1902 A, 748.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
 1914 B, 384.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 303.  
 Trouessart, E. L. 1904 A, 162.  
 Paleocene (Torrejon); New Mexico.

**EOCOONODON Matthew and Granger. Type *Sarcothaustes coryphæus* Cope.**

Matthew and Granger 1921 A, 6.  
 Matthew, W. D. 1928 B, 974, fig. 13.

**Eoconodon coryphæus (Cope).**

Hay, O. P. 1902 A, 748 (*Triisiodon heilprinianus*, in part).  
 Matthew and Granger 1921 A, 6.  
 Schlosser, M. 1898 B, 365 (*Sarcothaustes*).  
 Paleocene (Torrejon); New Mexico.

**MESONYCHIDÆ Cope.**

Cope, E. D. 1876 A, 3.  
 Hay, O. P. 1902 A, 749.  
 Abel, O. 1913 B, 713 ("mesonychiden").  
 1914 A, 63, 149.  
 1919 A, 733.  
 1922 C, 284 ("mesonychiden").  
 Ameghino, F. 1905 C, 440.  
 Arldt, T. 1912 A, 702.  
 Chardin, T. 1922 A, 18, 30, 57 ("mesonychidés").  
 1927 A, 19 ("mesonychidés").  
 Depéret, C. 1905 C, 703 ("mesonychidés").  
 1908 A, 111.  
 Gregory, W. K. 1910 A, 300, 306, 405.  
 1920 A, 148, 208.  
 Howes, G. B. 1902 A, 523.  
 Matthew, W. D. 1901 A, 1, 5, 7.  
 1905 B, 70.  
 1905 D, 35.  
 1909 C, 91, 93, 96, 98, 101.  
 1909 D, 300, 324, 327, 329, 330, 485, 487-489, 499, 501 (*Mesonychidæ*); 488 (*Mesonych-inæ*).  
 1912 B, 184.  
 1913 A, 312.  
 1914 B, 387.  
 1915 D, 84.

Matthew, W. D. 1915 K, 445.  
 1917 A, 573.  
 1921 D, 212, 214.  
 1928 B, 962, 971, 974, fig. 13.  
 Matthew and Granger 1925 D, 1, 6.  
 Osborn, H. F. 1909 D, 130.  
 1910 B, 623.  
 Palmer, T. S. 1904 A, 753, 810.  
 Schlosser, M. 1898 B, 361, 365.  
 1900 B, 303.  
 1903 B, 148 ("mesonychinen").  
 1904 B, 452.  
 1921 A, 110.  
 Scott, W. B. 1913 A, 685.  
 Tomes, C. S. 1906 A, 45.  
 Trouessart, E. L. 1904 A, 161 (*Mesonychidæ*); 162 (*Mesonychinae*).  
 Weber and Abel 1928 A, 338.  
 Winge, H. 1924 A, 177, 178, 182 (*Mesonychini*).  
 Wortman, J. L. 1901 B, xii, 281, 283, 285, 286 (*Mesonychinae*).  
 1902 A, xiv, 23.  
 Zittel and Schlosser 1911 A, 376, 377 (*Mesonychidæ*, *Mesonychinae*).  
 1923 A, 456, 482, 665-668 (*Mesonychidæ*, *Mesonychinae*).

DISSACUS Cope. Type *D. navajovius* Cope.

- Hay, O. P. 1902 A, 749.  
 Ameghino, F. 1904 A, 21.  
     1905 C, 440.  
     1906 A, 284.  
 Chardin, T. 1922 A, 18, 48, 56, 80, fig. 9.  
 Clark and Sonntag 1926 A, 459, 463.  
 Depéret, C. 1903 A, 112.  
     1912 A, 708.  
 Dollo and Chardin 1924 A, 15.  
 Frick, C. 1928 A, 40.  
 Gaudry, A. 1901 A, 504.  
 Gidley, J. W. 1919 A, 274.  
 Gregory, W. K. 1921 A, 77, 234.  
 Haug, E. 1911 A, 1528.  
 Lemoine, V. 1885 C, 204.  
 Matthew, W. D. 1904 D, 814.  
     1909 C, 101.  
     1909 D, 327, 403, 487, 488-490.  
     1915 D, 4, 85.  
     1915 K, 415.  
     1924 E, 749.  
     1928 B, 954, 962.  
 Matthew and Granger 1924 B, 3.  
     1925 B, 3.  
 Osborn, H. F. 1907 G, 133, 216, figs. 87, 205.  
     1909 D, 35.  
     1910 B, 100, 111, 527.  
     1912 G, 236, fig. 3.  
 Palmer, T. S. 1904 A, 240, 810.  
 Schlosser, M. 1898 B, 361, 365.  
     1900 B, 303.  
     1901 K, 468.  
     1903 B, 148.  
     1921 A, 111.  
 Scott, W. B. 1913 A, 560, 561.  
 Trouessart, E. L. 1904 A, 162.  
 Weber and Abel 1928 A, xix, 338.  
 Winge, H. 1924 A, 180, 241, 246.  
 Wood, H. E. 1927 A, 297.  
 Wortman, J. L. 1901 B, xii, 285, 286.  
     1902 A, xiii, 46.  
     1921 A, 178.

- Zittel and Schlosser 1911 A, 377.  
     1923 A, 457, 664, 666.

**Dissacus navajovius** Cope.

- Hay, O. P. 1902 A, 749.  
 Chardin, T. 1922 A, 20.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
     1909 D, 487, 488, 490, text-fig. 91.  
     1914 B, 384.  
     1915 D, 86.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1888 B, 365 (*D. carnifex*).  
     1900 B, 303.  
     1921 A, 110 (*D. navijovicus*).  
 Trouessart, E. L. 1904 A, 163.  
     Paleocene (Torrejon); New Mexico.

**Dissacus navajovius longævus** Matthew.

- Matthew, W. D. 1915 D, 86.  
     Lower Eocene (Wasatch); Wyoming.

**Dissacus prænuntius** Matthew.

- Matthew, W. D. 1915 D, 86, 87.  
     Lower Eocene; Wyoming.

**Dissacus saurognathus** Wortman.

- Hav, O. P. 1902 A, 749.  
 Ameghino, F. 1904 A, 21, fig. 8.  
     1906 A, 351, fig. 186.  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1901 C, 91.  
     1909 D, 487, 488, 490, 499.  
     1914 B, 384.  
     1915 D, 86.  
 Osborn, H. F. 1904 F, 6, fig. 2.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1921 A, 110.  
 Trouessart, E. L. 1904 A, 163.  
 Wortman, J. L. 1902 A, xiii, 42, fig. 63.  
     1921 A, 182.  
     Paleocene (Torrejon); New Mexico.

PACHYÆNA Cope. Type *P. ossifraga* Cope.

- Hay, O. P. 1902 A, 749.  
 Chardin, T. 1921 A, 171.  
 Depéret, C. 1905 C, 703.  
     1907 B.  
     1908 A, 112.  
     1912 A, 706.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1906 B, 361.  
     1907 B, 534.  
     1909 C, 101.  
     1909 D, 327, 489, 491.  
     1910 E, 702.  
     1912 B, 182, 183.  
     1913 D, 85, 87, fig. 78.  
     1915 K, 415, 421.  
     1921 D, 219.  
     1924 E, 749.  
     1928 B, 962, 972, fig. 12.  
 Osborn, H. F. 1903 G, 667.  
     1905 I, 98.  
     1909 D, 45.  
     1910 B, 115, 126, 127, 133, 527.

- Palmer, T. S. 1904 A, 493, 810.  
 Romer, A. S. 1924 C, 97, figs. 1, 3.  
 Schlosser, M. 1903 B, 148.  
     1911 A, 90.  
 Scott, W. B. 1913 A, 274, 277, 560.  
 Stehlin, H. G. 1905 A, 555.  
 Tones, C. S. 1906 A, 45, fig. 20.  
 Trouessart, E. L. 1904 A, 163.  
 Wallace, A. R. 1876 A, i, 134.  
 Weber and Abel 1928 A, 338.  
 Winge, H. 1924 A, 241, 246.  
 Wortman, J. L. 1901 B, xix, 285, 286.  
 Zittel and Schlosser 1911 A, 377.  
     1923 A, 457.

**Pachyæna gigantea** Osborn and Wortman.

- Hay, O. P. 1902 A, 749.  
 Chardin, T. 1922 A, 82.  
 Matthew, W. D. 1901 A, 32, figs. 13-17.  
     1909 C, 93.  
     1909 D, 489, 491, text-fig. 91.

Matthew, W. D. 1915 D, 97, figs. 78, 84.

Schlosser, M. 1903 B, 148.

Trouessart, E. L. 1904 A, 163.

Lower Eocene (Wasatch, Wind River?); Wyoming.

***Pachyaena gigantea ponderosa* Matthew.**

Matthew, W. D. 1915 D, 98, figs. 85-87.

Lower Eocene (Wasatch); Wyoming.

***Pachyaena gracilis* Matthew.**

Matthew, W. D. 1915 D, 89, figs. 78, 79.

Lower Eocene (Wasatch); Wyoming.

***Pachyaena ossifraga* Cope.**

Hay, O. P. 1902 A, 750 (*P. ossifraga*, *P. intermedia*).

Abel, O. 1904 A, 183 (*Mesonyx*).

Cossmann, M. 1901 A, 62 (*P. intermedia*).

Matthew, W. D. 1901 A, 36.

1909 C, 98 (*P. ossifraga*, *P. intermedia*).

1909 D, 489, 491, text-fig. 91 (*P. ossifraga*); 489, 492 (*P. intermedia*).

1915 D, 92, 93, figs. 78, 81-83.

Merrill, G. P. 1907 A, 53.

Reeside, J. B. 1924 A, 46.

Schlosser, M. 1898 B, 365.

1903 B, 148 (*P. ossifraga*, *P. intermedia*).

Trouessart, E. L. 1904 A, 163 (*P. ossifraga*, *P. intermedia*).

Lower Eocene (Wasatch); Wyoming, New Mexico.

**MESONYX Cope. Type *M. obtusidens* Cope.**

Hay, O. P. 1902 A, 750.

Abel, O. 1913 B, 713.

Ameghino, F. 1905 C, 440.

Beddard, F. E. 1902 A, 456.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 393.

Kampfen, P. N. 1905 A, 500.

Kingsley, J. S. 1925 A, 211, fig. 223.

Lemoine, V. 1889 A, 255.

Lockwood, S. 1884 A, 355.

Matthew, W. D. 1901 A, 7.

1905 D, 23, fig. 1.

1907 B, 534.

1909 C, 101 (*Synoplotherium*).

1909 D, 323, 324, 325, 327, 403, 416, 489, 493, text-figs. 2-4 (*Mesonyx*); 316, 486, 489, 492 (*Synoplotherium*).

1912 B, 182.

1915 D, 85.

1924 E, 748.

Osborn, H. F. 1907 G, 79, 184, 142, 216, figs. 88, 205.

1910 B, 139, 161, 164, 170, 527.

1919 B, 558.

Palmer, T. S. 1904 A, 415, 810.

Schlosser, M. 1898 B, 365.

1901 K, 468.

1902 D, 301.

1903 B, 148.

Scott, W. B. 1913 A, 559, 561.

Seeley, H. G. 1886 A, 419.

Stromer, E. 1902 B, 554, 561.

Tomes, C. S. 1906 A, 53, fig. 19.

Trouessart, E. L. 1904 A, 164.

Wallace, A. R. 1876 A, 1, 134.

Weber and Abel 1928 A, 338.

Winge, H. 1924 A, 180, 242.

Wood, H. E. 1927 A, 297.

Zittel and Schlosser 1911 A, 378, fig. 540.

1923 A, 457, 458, fig. 579.

***Mesonyx? dakotensis* Scott.**

Hay, O. P. 1902 A, 750.

Oligocene (White River); South Dakota.

***Mesonyx obtusidens* Cope.**

Cope, E. D. 1872 NN, 1.

Hay, O. P. 1902 A, 750.

Abel, O. 1913 B, 713, fig. 14.

1914 A, 65, fig. 31.

1922 C, 284, figs. 237, 240.

Gregory, W. K. 1927 E, 343.

Matthew, W. D. 1901 A, 36.

1909 C, 96.

1909 D, 489, 493, 499, 500, pl. xlvii, fig. 2; text-figs. 91-96.

Osborn, H. F. 1904 F, 43 ("*Mesonyx*").

1924 E, 3, 5, fig. 3.

1924 L, 146, fig. ("*Mesonyx*").

Schlosser, M. 1904 B, 455.

Scott, W. B. 1913 A, 559, fig. 276.

Thorpe, M. R. 1923 A, 37.

Trouessart, E. L. 1904 A, 164.

Woodward, A. S. 1898 B, 382.

Wortman, J. L. 1901 B, xii, 291.

1902 A, xiii, 39, text-figs. 61, 64.

Zittel and Schlosser 1911 A, 377, fig. 541.

1923 A, 458, fig. 580.

Middle Eocene (Bridger); Wyoming.

***Mesonyx* sp. indet.**

Matthew, W. D. 1909 C, 98. Upper Eocene (Uinta); Utah.

**DROMOCYON Marsh. Type *D. vorax* Marsh.**

Marsh, O. C. 1876 H, 403.

Hay, O. P. 1902 A, 751 (*Mesonyx*, in part).

Ameghino, F. 1905 C, 440.

Gregory, W. K. 1910 A, 302, 404, 405.

1920 A, 148.

Lull, R. S. 1917 B, 553, fig. 176.

1918 C, 135, fig. 26.

Marsh, O. C. 1877 E.

Matthew, W. D. 1901 A, 6.

1905 B, 70.

1909 C, 96 (*Syn. of Synoplotherium*).

Matthew, W. D. 1909 D, 326 (*Syn. of Synoplotherium*).

Osborn, H. F. 1910 B, 150, 527, fig. 61.

Palmer, T. S. 1904 A, 245, 810.

Schlosser, M. 1921 A, 134.

Schuchert and Levene 1927 A, 334, fig.

Scott, W. B. 1913 A, 269, 271, 554, 559.

Wortman, J. L. 1901 B, xii, 285.

Zittel and Schlosser 1911 A, 377 (*Syn. of Synoplotherium*).

1923 A, 458 (*Syn. of Synoplotherium*).

**Dromocyon vorax** Marsh.

- Marsh, O. C. 1876 H, 403.  
 Hay, O. P. 1902 A, 751 (Mesonyx).  
 Abel, O. 1907 E, (250).  
 1919 A, 734, fig. 548 (Synoplothorium).  
 1922 C, 284, figs. 238, 241 (Synoplothorium).  
 Eaton, G. F. 1922 A, 445.  
 Gregory, W. K. 1910 A, 405, fig. 26.  
 Lull, R. S. 1917 B, 551, pl. xvii.  
 Matthew, W. D. 1909 C, 96 (Syn. of Synoplothorium lanius).  
 1909 D, 327, 489, 492 (Synoplothorium).

- Moodie, R. L. 1923 B, 125.  
 Osborn, H. F. 1910 B, 150, fig. 52.  
 1924 E, 5.  
 Schlosser, M. 1904 B, 453.  
 Scott, W. B. 1913 A, 271, fig. 140 (D. velox).  
 Trouessart, E. L. 1898 A, 226 (D. velox).  
 1904 A, 163.  
 Wieland, G. R. 1909 A, 125.  
 Wortman, J. L. 1901 B, xii, 288, pls. iv-viii; text-figs. 52, 54-60.  
 1902 A, xiv, 145.  
 1920 A, 17.  
 Middle Eocene (Bridger); Wyoming.

**SYNOPTOTHERIUM** Cope. Type *S. lanius* Cope.

- Cope, E. D. 1872 RR, 1.  
 Hay, O. P. 1902 A, 750 (Mesonyx, in part).  
 Cope, E. D. 1872 R, 483.  
 Granger, W. 1909 A, 22 (Dromocyon a syn.).  
 Haug, E. 1911 A, 1528.  
 Lockwood, S. 1884 A, 355.  
 Matthew, W. D. 1915 D, 85.  
 Palmer, T. S. 1904 A, 657, 810.  
 Zittel and Schlosser 1911 A, 377.  
 1923 A, 458.

**Synoplothorium lanius** Cope.

- Cope, E. D. 1872 RR, 1.  
 Hay, O. P. 1902 A, 750 (Mesonyx).  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 489, 492.  
 Schlosser, M. 1904 B, 453 (Mesonyx).  
 Trouessart, E. L. 1904 A, 164 (Mesonyx).  
 Wortman, J. L. 1901 B, xii, 291 (Mesonyx).  
 Middle Eocene (Bridger); Wyoming.

**HARPAGOLESTES** Wortman. Type *H. macrocephalus* Wortman.

- Wortman, J. L. 1901 B, xii, 285, 286.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1920 A, 148.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 101.  
 1909 D, 327, 489, 496.  
 1915 D, 85.  
 1924 E, 748.  
 1928 B, 973.  
 Osborn, H. F. 1910 B, 142, 168, 169, 527, fig. 49.  
 1924 E, 4.

**Harpagolestes macrocephalus** Wortman.

- Wortman, J. L. 1901 B, xii, 286, pl. iii; text-fig. 44.  
 Abel, O. 1922 C, 284.  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 489, 496.  
 Schlosser, M. 1904 B, 452.  
 Thorpe, M. R. 1923 A, 38.  
 Trouessart, E. L. 1904 A, 163.  
 Middle Eocene (Bridger); Wyoming.

**Harpagolestes uintensis** (Scott).

- Hay, O. P. 1902 A, 750 (Mesonyx).  
 Gregory, W. K. 1927 E, 843 (Mesonyx).  
 Matthew, W. D. 1901 A, 36.  
 1909 C, 98.  
 1909 D, 489, 497.  
 Osborn, H. F. 1924 E, 1, 2 (Mesonyx).  
 Peterson, O. A. 1919 A, 41.  
 Thorpe, M. R. 1923 B, 218.  
 Trouessart, E. L. 1904 A, 164 (Mesonyx).  
 Wortman, J. L. 1901 B, xii, 285, 286 (Mesonyx, Dromocyon).  
 1902 A, xiii, 46 (Mesonyx).  
 Upper Eocene (Uinta); Utah.

**Harpagolestes breviceps** Thorpe.

- Thorpe, M. R. 1923 B, 219, figs. 1-3.  
 Upper Eocene (Uinta); Utah.

**Harpagolestes immanis** Matthew.

- Matthew, W. D. 1909 D, 489, 497, text-figs. 91, 97, 100.  
 Peterson, O. A. 1919 A, 42.  
 Thorpe, M. R. 1923 A, 38.  
 Upper Eocene (Uinta); Utah.

**Harpagolestes** sp. indet.

- Matthew, W. D. 1909 C, 98. Upper Eocene (Uinta); Wyoming.

**HAPALODECTES** Matthew. Type *Dissacus leptognathus* Osborn and Wortman.

- Matthew, W. D. 1909 C, 93, 101.  
 1909 D, 327, 487-489, 498.  
 1915 D, 85, 102.  
 Matthew and Granger 1925 D, 2, figs. 1, 2.  
 Osborn, H. F. 1909 D, 126.  
 1912 G, 236, fig. 3.  
 Schlosser, M. 1921 A, 112.

- Zittel and Schlosser 1911 A, 377.  
 1923 A, 457.

**Hapalodectes compressus** Matthew.

- Matthew, W. D. 1909 D, 488, 499, pl. xiv, fig. 5; text-fig. 101.  
 1915 D, 103.  
 Lower Eocene (Wind River); Wyoming.

**Hapalodectes leptognathus** (Osborn and Wortman).

- Hay, O. P. 1902 A, 749 (Dissacus).  
 Matthew, W. D. 1909 C, 93.  
 1909 D, 487, 488, 498.  
 1915 D, 102.

- Schlosser, M. 1903 B, 148 (Dissacus).  
 Trouessart, E. L. 1904 A, 163 (Dissacus).  
 Lower Eocene (Wasatch); Wyoming.

**Hapalodectes** sp. indet.

- Matthew, W. D. 1909 C, 93. Lower Eocene  
 (Wasatch); Wyoming.

*Superfamily OXYÆNOIDÆ*, new form.

- Abel, O. 1913 B, 714, 718 (Pseudocreodi).  
 1914 A, 63, 65 (Pseudocreodi).  
 1919 A, 734 (Pseudocreodi).  
 1922 C, 280 (Pseudocreodi).  
 Chardin, T. 1922 A, 87 (Pseudocreodi).  
 Gregory, W. K. 1920 A, 239 (Pseudocreodi).  
 Matthew, W. D. 1909 D, 327, 330 (Pseudocreodi).

- Matthew, W. D. 1915 D, 5 (Pseudocreodi).  
 Osborn, H. F. 1910 B, 527 (Pseudocreodi, Oxyænoidea).  
 Weber and Abel 1928 A, 338, 342 (Pseudocreodi).  
 Zittel and Schlosser 1911 A, 378 (Pseudocreodi).  
 1923 A, 458 (Pseudocreodi).

*OXYÆNIDÆ* Cope.

- Cope, E. D. 1877 K, 89.  
 Hay, O. P. 1902 A, 756 (Oxyæninæ).  
 Abel, O. 1912 D, 603 ("oxyænid").  
 1912 F, 501.  
 1913 B, 714 ("oxyænid").  
 1914 A, 62, 67 ("oxyænid").  
 1919 A, 737.  
 1920 A, 421, 422 ("oxyænid").  
 1921 A, 141 ("oxyænid").  
 1922 C, 287 ("oxyænid").  
 Arldt, T. 1912 A, 702.  
 Behlen, H. 1907 A, 275 ("oxyænid").  
 Brance, W. 1915 A, 43.  
 Chardin, P. T. 1927 A, 20 ("oxyénidés").  
 Cossmann, M. 1901 A, 62.  
 Depéret, C. 1905 C, 703 ("oxyénidés").  
 Kellogg, R. 1922 A, 94.  
 Martin, R. 1906 A, 585.  
 Matthew, W. D. 1901 A, 6, 7, 21.  
 1905 B, 69, 70.  
 1905 D, 31.  
 1909 C, 93, 96, 98, 100.  
 1909 D, 564.

- Matthew, W. D. 1914 B, 387.  
 1915 D, 42.  
 1915 K, 445.  
 1921 D, 214.  
 1928 B, 971, 974, 980, fig. 13.  
 Matthew and Granger 1924 A, 5.  
 1925 A, 12.  
 Osborn, H. F. 1909 D, 132.  
 1910 B, 626.  
 Schlosser, M. 1903 B, 146 ("oxyænid").  
 1904 B, 452.  
 Scott, W. B. 1913 A, 687.  
 Seeley, H. G. 1886 A, 418.  
 Trouessart, E. L. 1904 A, 164.  
 Weber, M. 1904 A, 541, 551.  
 Weber and Abel 1928 A, 317, 338.  
 Winge, H. 1924 A, 177, 184, 242 (Palæonictidini, Oxyænini).  
 Wortman, J. L. 1901 B, xii, 283, 285.  
 1902 A, xiii, 115, 116, 434.  
 Zittel and Schlosser 1911 A, 378.  
 1923 A, 458, 482, 666-668.

*OXYÆNINÆ* Hay.

- Hay, O. P. 1902 A, 755 (Oxyæninæ, Ambloctonidæ).  
 Abel, O. 1919 A, 737.  
 Arldt, T. 1907 D, 670 (Palæonictidæ).  
 1912 A, 702 (Palæonictidæ).  
 Behlen, H. 1907 A, 274 ("palæonictiden").  
 Cossmann, M. 1901 A, 62 (Palæonictidæ).  
 Matthew, W. D. 1901 A, 5-7 (Palæonictidæ).  
 1905 D, 28 (Palæonictidæ).  
 1909 C, 93, 100 (Palæonictidæ).  
 1909 D, 410, 412, 419 (Palæonictidæ); 409 (Oxyæninæ).  
 Osborn, H. F. 1909 D, 93 (Ambloctonidæ); 40, 42, 46 (Palæonictidæ).

- Osborn, H. F. 1910 B, 626 (Palæonictidæ).  
 Schlosser, M. 1903 B, 146 ("palæonictiden").  
 1904 B, 451 (Palæonictidæ); 456 (Oxyæninæ).  
 Trouessart, E. L. 1904 A, 164.  
 Wortman, J. L. 1901 B, xi, 338; xii, 144, 201, 205, 283 (Palæonictidæ).  
 1902 A, xiv, 23 (Palæonictidæ).  
 Zittel and Schlosser 1911 A, 379 (Oxyæninæ); 566 (Palæonictidæ).  
 1923 A, 459 (Oxyæninæ); 459 (Palæonictidæ).

*OXYÆNA* Cope. Type *O. lupina* Cope.

- Hay, O. P. 1902 A, 756.  
 Abel, O. 1912 D, 602.  
 1920 A, 422, fig. 637.  
 1921 A, 140, fig. 21.  
 1922 C, 278, 282, fig. 235.  
 Ameghino, F. 1885 A, 154.  
 Bensley, B. A. 1901 C, 252.

- Cope, E. D. 1875 Y, 444, 448.  
 Cossmann, M. 1901 B, 187.  
 Granger, W. 1914 A, 202.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 393.  
 Lavocat, A. 1896 A, 26.  
 Loomis, F. B. 1905 C, 296.

- Matthew, W. D. 1901 A, 6.  
 1905 D, 25, 31, figs. 5, 12.  
 1907 B, 534.  
 1909 C, 100.  
 1909 D, 318, 322, 326, 327, 408-410, text-  
 figs. 1, 47, 48.  
 1912 B, 182.  
 1915 D, 42, 46.  
 1915 K, 421, 447, fig. 23.  
 1924 E, 749.  
 1928 B, 962, 971, 972, 974, figs. 12, 13.  
 Osborn, H. F. 1898 V, 206.  
 1907 G, 136, figs. 92, 94.  
 1909 D, 38, 45, 48.  
 1910 B, 127, 153, 527, fig. 44.  
 1919 B, 558.  
 Palmer, T. S. 1904 A, 491, 810.  
 Schlosser, M. 1898 J, 520.  
 1903 B, 146.  
 1903 D, 560.  
 1904 B, 455.  
 Schmidt, O. 1886 A, 283.  
 Scott, W. B. 1913 A, 274, 277, 565, 566, 571,  
 573, figs. 279, 280.  
 Stromer, E. 1902 A, 239.  
 1902 B, 554, 561.  
 Thorpe, M. R. 1923 A, 29.  
 Tones, C. S. 1906 A, 54, fig. 21.  
 Trouessart, E. L. 1904 A, 164.  
 Wallace, A. R. 1876 A, 1, 134.  
 Weber, M. 1904 A, 541.  
 Winge, H. 1924 A, 177, 185, 242.  
 Wortman, J. L. 1901 B, xii, 285.  
 1902 A, xiii, 115, 117, 433.  
 1903 A, xv, 431.  
 1906 A, 91.  
 Zittel und Schlosser 1911 A, 379.  
 1923 A, 459.

***Oxyæna æquidens* Matthew.**

- Matthew, W. D. 1915 D, 46, 47, fig. 41.  
 1914 B, 384 (*O. æquidens*).  
 Lower Eocene (Wasatch); Wyoming.

***Oxyæna forcipata* Cope.**

- Hay, O. P. 1902 A, 757.  
 Cope, E. D. 1875 Y, 444.  
 Matthew, W. D. 1909 C, 93.  
 1909 D, 412.  
 1915 D, 46, 49, figs. 45, 46.  
 Merrill, G. P. 1907 A, 52.

**PATRIOFELIS Leidy.**

- Hay, O. P. 1902 A, 757 (*Patriofelis*); 778  
 (*Ælurotherium*).  
 Abel, O. 1914 A, 67.  
 Beddard, F. E. 1902 A, 449 (*Patriofelis*); 456  
 (*Limnofelis*).  
 Cossmann, M. 1901 B, 187.  
 Fraas, K. 1905 B, 378.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1910 A, 313, 454, fig. 30.  
 1920 A, 239.  
 Haug, E. 1911 A, 1528.  
 Kellogg, R. 1922 A, 92.  
 Lull, R. S. 1917 B, 553, fig. 176.  
 Lydekker, R. 1904 C, 63.

Reeside, J. B. 1924 A, 46.

Trouessart, E. L. 1904 A, 164.

Lower Eocene (Wasatch); Wyoming, New Mexico.

***Oxyæna gulo* Matthew.**

- Matthew, W. D. 1915 D, 46, 53, figs. 47, 48.  
 Lower Eocene (Wasatch); Wyoming.

***Oxyæna lupina* Cope.**

- Hay, O. P. 1902 A, 757 (*O. lupina*, *O. huerfanensis*, *O. morsitans*).  
 Gidley, J. W. 1926 E, 41 (*This species?*).  
 Loomis, F. B. 1907 B, 356.  
 Matthew, W. D. 1905 D, 30, fig. 10.  
 1909 C, 93 (*O. lupina*, *O. huerfanensis*,  
*O. morsitans*).  
 1909 D, 412 (*O. lupina*, *O. huerfanensis*,  
*O. morsitans*).  
 1915 D, 46, 49, fig. 44.  
 Merrill, G. P. 1907 A, 52 (*O. lupina*, *O. morsitans*).  
 Osborn, H. F. 1904 F, 32.  
 1909 D, 49 (*O. huerfanensis*).  
 Reeside, J. B. 1924 A, 46 (*O. lupina*, *O. morsitans*).  
 Schlosser, M. 1903 B, 147.  
 1903 D, 561.  
 Scott, W. B. 1913 A, 572, fig. 284.  
 Trouessart, E. L. 1904 A, 164 (*O. lupina*, *O. morsitans*, *O. huerfanensis*).  
 Wortman, J. L. 1901 B, xii, 378.  
 Lower Eocene (Wasatch); Wyoming, New Mexico (Wind River); Wyoming.

***Oxyæna pardalis* Matthew.**

- Matthew, W. D. 1915 D, 46, 55, fig. 49.  
 Lower Eocene (Wasatch); Wyoming.

***Oxyæna transiens* Matthew.**

- Matthew, W. D. 1915 D, 46, 47, figs. 42, 43.  
 Thorpe, M. R. 1923 B, 223.  
 Lower Eocene (Wasatch); Wyoming, Colorado?

***Oxyæna* sp. indet.**

- Matthew, W. D. 1909 C, 93. Lower Eocene  
 (Wind River); Wyoming.  
 Merrill, G. P. 1907 A, 53. Lower Eocene  
 (Wasatch); Wyoming.

**Type *P. ulta* Leidy.**

- Matthew, W. D. 1901 A, 6 (*Protopsalis* a syn.).  
 1905 B, 70.  
 1905 D, 31.  
 1909 C, 100.  
 1909 D, 417, 565 (*Patriofelis*); 417 (*Oreocyon*, *Protopsalis*, *Ælurotherium*, *Limnofelis* as syns.).  
 1910 C, 289 (*Ælurotherium*).  
 1912 B, 182.  
 1915 D, 63.  
 1924 E, 748.  
 1928 B, 971, 974, fig. 13.  
 Osborn, H. F. 1905 I, 101 (*Ælurotherium*).  
 1907 G, 138, fig. 95.



- Osborn, H. F. 1909 D, 45, 50.  
1910 B, 627, fig. 61.
- Osborn, R. C. 1903 A, 653.
- Palmer, T. S. 1904 A, 517, 810 (*Patriofelis*); 82, 826 (*Æluotherium*).
- Schlosser, M. 1897 B, 20.  
1898 F, 134.  
1898 J, 521.  
1903 B, 147.  
1903 D, 561.  
1904 B, 456.
- Scott, W. B. 1913 A, 274, 568, 571.
- Stromer, E. 1902 A, 239.  
1902 B, 554, 561.  
1908 B, 168.
- Thorpe, M. R. 1923 A, 29, 30.
- Trouessart, E. L. 1904 A, 165.
- Wallace, A. R. 1876 A, 1, 134.
- Weber, M. 1904 A, 541, 551.
- Weber and Abel 1928 A, 338.
- Winge, H. 1924 A, 177, 185, 242.
- Wortman, J. L. 1901 B, xii, 285 (*Patriofelis*); 201, 205 (*Æluotherium*).  
1902 A, xiii, 115, 117, 433 (*Patriofelis*, *Protopsalis*); xiv, 23 (*Æluotherium*).  
1906 A, 90, 91.
- Zittel and Schlosser 1911 A, 379.  
1923 A, 458, 459, 667.
- Patriofelis ferox* (Marsh).**
- Hay, O. P. 1902 A, 757 (*P. ferox*); 778 (*Æluotherium leidyanum*).
- Abel, O. 1913 B, 715, fig. 13.  
1914 A, 68, fig. 36.  
1922 C, 288, fig. 242.
- Ameghino, F. 1905 C, 441, fig. 88.
- Leche, W. 1915 A, 350.
- Matthew, W. D. 1905 D, 33, fig. 11.  
1909 C, 96.  
1909 D, 412, 417, 418, 420, text-figs. 44-52 (*Æluotherium leidyanum*, *A. bicuspis* as syns.).
- Osborn, H. F. 1904 F, 8, 25, 38, fig. 8.  
1909 D, 50.  
1910 B, 165, fig. 65 (*P. vorax*).
- Schlosser, M. 1898 F, 135 (*Æluotherium leidyanum*).
- Schlosser, M. 1903 D, 561.  
1904 B, 456 (*P. ferox*, *P. leidyanum*); 451 (*Æluotherium bicuspis*).
- Scott, W. B. 1913 A, 271, 569, 570, figs. 140, 282, 283.
- Thorpe, M. R. 1923 A, 29, 30.
- Trouessart, E. L. 1904 A, 165 (*P. ferox*); 260 (*P. bicuspis*).
- Wortman, J. L. 1901 B, xii, 205, figs. (*Æluotherium bicuspis*).  
1902 A, xiii, 117, figs. 65-70; xiv, 23.
- Zittel and Schlosser 1923 A, 458, fig. 582.  
Middle Eocene (Bridger); Wyoming.
- Patriofelis latidens* (Marsh).**
- Hay, O. P. 1902 A, 757.
- Matthew, W. D. 1909 D, 417, 418, 420 (Syn. of *P. ferox*).
- Schlosser, M. 1904 B, 451 (*Æluotherium*).
- Thorpe, E. L. 1923 A, 29, 31.
- Trouessart, E. L. 1904 A, 260 (*Æluotherium*).
- Wortman, J. L. 1901 B, xii, 202 (*Æluotherium*; syn. of *P. ferox*).  
Middle Eocene (Bridger); Wyoming.
- Patriofelis tigrina* (Cope).**
- Hay, O. P. 1902 A, 757.
- Matthew, W. D. 1909 C, 93 (*P. tigrinus*).  
1909 D, 412, 419, 432.  
1915 D, 63.
- Trouessart, E. L. 1904 A, 165 (*Protopsalis*).
- Wortman, J. L. 1902 A, xii, 117 (*Protopsalis*); 123 (*Patriofelis*).  
Lower Eocene (Wind River); Wyoming.
- Patriofelis ulta* Leidy.**
- Hay, O. P. 1902 A, 758.
- Hayden, F. V. 1871 A, 145.
- Matthew, W. D. 1909 C, 96.  
1909 D, 412, 419, 432.  
1915 D, 62.
- Merrill, G. P. 1907 A, 54.
- Osborn, H. F. 1909 D, 50.
- Thorpe, M. R. 1923 A, 32.
- Trouessart, E. L. 1904 A, 165.  
Middle Eocene (Bridger); Wyoming.

**PALÆONICTIS Blainville. Type *P. gigantea* Blainville.**

- Hay, O. P. 1902 A, 755.
- Ameghino, F. 1903 D, 423.
- Broom, R. 1909 C, 133.
- Chardin, T. 1922 A, 54.
- Cope, E. D. 1875 Y, 447.
- Depéret, C. 1905 C, 703.  
1908 A, 112.  
1912 A, 706.
- Gervais, P. 1852 A, 130.  
1859 A, 225.
- Heilprin, A. 1887 A, 393 (*Palæonictis*).
- Lydekker, R. 1904 C, 63.
- Matthew, W. D. 1906 B, 361.  
1906 C, 216, text-fig. 6.  
1909 C, 100.  
1909 D, 327, 409-411, 419.  
1910 C, 289.  
1912 B, 184.
- Matthew, W. D. 1915 D, 42, 57.  
1915 K, 415, 421.  
1924 E, 749.  
1928 B, 962, 974, fig. 13.
- Miller, G. S. 1923 A, 13.
- Osborn, H. F. 1905 I, 98.  
1907 G, 135, figs. 90, 95, 96.  
1910 B, 115, 119, 126, 127, 527.
- Schlosser, M. 1903 I, 31.  
1906 A, 31.  
1911 A, 90.
- Scott, W. B. 1913 A, 277, 574.
- Seeley, H. G. 1878 A, 222.
- Stehlin, H. G. 1905 A, 555.
- Trouessart, E. L. 1904 A, 260.
- Weber and Abel 1928 A, xxi, 317, 338.
- Winge, H. 1924 A, 177, 184, 242, 246.
- Wortman, J. L. 1901 B, xii, 201, 205.

- Wortman, J. L. 1903 A, xv, 431.  
Zittel and Schlosser 1911 A, 379.  
1923 A, 458, 459, 665.

**Palæonictis occidentalis** Osborn and Wortman.

- Hay, O. P. 1902 A, 756.  
Chardin, T. 1922 A, 82.

**AMBLOCTONUS** Cope.

- Hay, O. P. 1902 A, 756.  
Ameghino, F. 1885 A, 154.  
Cope, E. D. 1875 Y, 444, 448.  
Matthew, W. D. 1901 A, 6 (Amblyctonus).  
1909 C, 100.  
1909 D, 327, 409, 410, 411, 419.  
1915 D, 59.  
1928 B, 962, 973 (Amblyctonus).  
Osborn, H. F. 1907 G, 138, fig. 95.  
1910 B, 527.  
Palmer, T. S. 1904 A, 90, 809.  
Schlosser, M. 1921 A, 107.  
Trouessart, E. L. 1904 A, 260 (Amblyctonus).  
Winge, H. 1924 A, 177, 184.  
Wortman, J. L. 1901 B, xii, 202.  
Zittel and Schlosser 1911 A, 379.  
1923 A, 459.

**Ambloctonus coloradensis** Matthew.

- Matthew, W. D. 1909 C, 96 (Patriofelis?).  
1909 D, 412, 419, 432 (Patriofelis).

**LIMNOCYONINÆ** Wortman.

- Wortman, J. L. 1902 A, xiii, 117, 124, 128.  
Abel, O. 1914 A, 67.  
1919 A, 737.  
Matthew, W. D. 1909 D, 408, 409.  
1915 D, 69.

**PROLIMNOCYON** Matthew.

- Matthew, W. D. 1915 D, 42, 67.  
1928 B, 962, 972, fig. 12.  
Winge, H. 1924 A, 184.  
Zittel and Schlosser 1923 A, 459.

**Prolimnocyon antiquus** Matthew.

- Matthew, W. D. 1915 D, 67, 70, figs. 57, 63.  
Lower Eocene (Wind River); Wyoming.

**LIMNOCYON** Marsh.

- Marsh, O. C. 1872 G, 126.  
Hay, O. P. 1902 B, 751 (Stypolophus, in part);  
755 (Telmatocyon).  
Abel, O. 1913 B.  
1919 A, 737.  
Granger, W. 1909 A, 22.  
Gregory, W. K. 1920 A, 146, fig. 76.  
Haug, E. 1911 A, 1528.  
Marsh, O. C. 1899 B, 397 (Telmatocyon).  
Matthew, W. D. 1901 A, 6, 20, 21 (Telmatocyon); 23 (Syn. of Sinopa).  
1906 C, 206.  
1909 C, 100.  
1909 D, 323, 325, 327, 403, 408-410, 433-435, 464, text-figs. 2, 4, 47, 48.  
1924 E, 748.  
1928 B, 973, 974, fig. 13.

- Matthew, W. D. 1909 C, 93.  
1909 D, 412.  
1915 D, 58.

Osborn, H. F. 1904 F, 7.

Trouessart, E. L. 1904 A, 260.

Wortman, J. L. 1901 B, xii, 202 (P. americanus).

Lower Eocene (Wasatch); Wyoming.

**Type A. sinosus** Cope.

- Matthew, W. D. 1915 D, 62.  
Osborn, H. F. 1897 G, 256 (Patriofelis ulta).  
1898 G, 256 (Patriofelis ulta).  
1900 I, 278, fig. 8 (Patriofelis ulta).  
Middle Eocene (Huerfano); Colorado.

**Ambloctonus hyænoideus** Matthew.

- Matthew, W. D. 1915 D, 61, figs. 50, 52, 53.  
Lower Eocene (Wasatch); New Mexico.

**Ambloctonus priscus** Matthew.

- Matthew, W. D. 1915 D, 60, figs. 50, 51.  
Lower Eocene (Wasatch); Wyoming.

**Ambloctonus sinosus** Cope.

- Hay, O. P. 1902 A, 756.  
Matthew, W. D. 1909 C, 93.  
1909 D, 412.  
1915 D, 61.  
Reeside, J. B. 1924 A, 46.  
Lower Eocene (Wasatch); New Mexico.

**Type P. atavus** Matthew.

**Prolimnocyon atavus** Matthew.

- Matthew, W. D. 1915 D, 67, 68, figs. 57-61.  
Lower Eocene (Wasatch); Wyoming.

**Prolimnocyon robustus** Matthew.

- Matthew, W. D. 1915 D, 67, 70, figs. 57, 62.  
Lower Eocene (Wasatch); Wyoming.

**Type L. verus** Marsh.

- Matthew and Granger 1925 A, 11.  
Moodie, R. L. 1923 B, 174.  
Osborn, H. F. 1909 D, 45.  
1910 B, 131, 133, 167, 527.  
Palmer, T. S. 1904 A, 376, 811 (Lymnocyon);  
667, 812 (Telmatocyon).  
Peterson, O. A. 1919 A, 42.  
Schlosser, M. 1904 B, 456.  
1911 A, 150.  
Scott, W. B. 1913 A, 573.  
Thorpe, M. R. 1923 A, 37.  
Trouessart, E. L. 1904 A, 165.  
Winge, H. 1924 A, 177, 185, 242.  
Wortman, J. L. 1901 B, xii, 281, 285.  
1902 A, xiii, 115, 125, 197 (Lymnocyon);  
198 (Telmatocyon a syn.).

Zittel and Schlosser 1911 A, 378.  
1923 A, 459.

**Limnocyon douglassi** Peterson.

Peterson, O. A. 1919 A, 45, pl. xxxiv, figs. 11-14.  
Upper Eocene (Uinta); Utah.

**Limnocyon potens** Matthew.

Matthew, W. D. 1909 D, 412, 447.  
Moodie, R. L. 1918 C, 277, fig. 20.  
1918 D, 506.  
1923 B, 252, 268, pl. li.  
Peterson, O. A. 1919 A, 46.  
Upper Eocene (Washakie); Wyoming.

**Limnocyon verus** Marsh.

Marsh, O. C. 1872 G, 126.  
Hay, O. P. 1902 A, 752 (Stypolophus); 755 (Telmatocyon riparius).

Abel, O. 1913 B, 715, fig. 17.

1914 A, 68, fig. 35.

Lydekker, R. 1910 F, 656, fig. 2.

Matthew, W. D. 1909 C, 96.

1909 D, 412, 433, 434, pl. xlv, fig. 1;  
pl. xlvii, fig. 2; text-figs. 53-58.

Peterson, O. A. 1919 A, 46.

Schlosser, M. 1904 B, 456.

Thorpe, M. R. 1923 A, 32 (L. verus); 33 (L. riparius).

Trouessart, E. L. 1904 A, 165.

Wortman, J. L. 1902 A, XIII, 198, pl. vi, figs. 71-75.

Middle Eocene (Bridger); Wyoming.

**Limnocyon** sp. indet.

Matthew, W. D. 1909 C, 93, 96, 98. Lower Eocene (Wind River); Wyoming: Middle Eocene (Bridger); Wyoming.

**DIPSALIDICTIS** Matthew. Type *D. platypus* Matthew.

Matthew, W. D. 1915 D, 42, 63.  
1923 B, 962.

Winge, H. 1924 A, 177, 185.

Zittel and Schlosser 1923 A, 459.

**Dipsalidictis platypus** Matthew.

Matthew, W. D. 1915 D, 65, figs. 54-56.

1914 B, 384 (No description).

Thorpe, M. R. 1923 B, 223.

Lower Eocene (Wasatch); Wyoming.

**THINOCYON** Marsh. Type *T. velox* Marsh.

Hay, O. P. 1902 A, 761.

Abel, O. 1922 C, 288.

Granger, W. 1909 A, 22.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 100.

1909 D, 324, 325, 327, 408, 410, 433, 448,  
text-figs. 3, 4, 47, 48.

Palmer, T. S. 1904 A, 673, 812.

Winge, H. 1924 A, 177, 184, 242.

Wortman, J. L. 1902 A, XIII, 197, 198 (Syn? of *Limnocyon*).

Zittel and Schlosser 1911 A, 378.

1923 A, 459, 667.

**Thinocyon cledensis** Matthew.

Matthew, W. D. 1909 D, 412, 460.  
Upper Eocene (Washakie); Wyoming.

**Thinocyon medius** (Wortman).

Wortman, J. L. 1902 A, XIII, 202, figs. 81, 82 (Limnocyon).

Leche, W. 1915 A, 357 (Thiocyon).

Matthew, W. D. 1909 C, 96.

1909 D, 412, 453, 459, text-figs. 62-70.

Schlosser, M. 1904 B, 457 (Limnocyon).

Thorpe, M. R. 1923 A, 33, 34.

Trouessart, E. L. 1904 A, 165 (Limnocyon).

Zittel and Schlosser 1911 A, 378, fig. 542 (Limnocyon).

1923 A, 458, fig. 581 (Limnocyon).

Middle Eocene (Bridger); Wyoming.

**Thinocyon minimus** Matthew.

Matthew, W. D. 1909 D, 300, 412 (No description).

Middle Eocene (Bridger); Wyoming.

**Thinocyon mustelinus** Matthew.

Matthew, W. D. 1909 D, 461.

Thorpe, M. R. 1923 A, 34.

Middle Eocene (Bridger); Wyoming.

**Thinocyon velox** Marsh.

Hay, O. P. 1902 A, 761.

Matthew, W. D. 1909 C, 96.

1909 D, 412, 449, pl. xlv, figs. 2, 3; text-figs. 59-61.

Schlosser, M. 1904 B, 457 (Limnocyon).

Thorpe, M. R. 1923 A, 33.

Trouessart, E. L. 1904 A, 165 (Limnocyon).

Wortman, J. L. 1902 A, XIII, 202, figs. 76-80 (Limnocyon).

Middle Eocene (Bridger); Wyoming.

**Thinocyon** sp. indet.

Matthew, W. D. 1909 C, 96.

1909 D, 412.

Lower Eocene (Wind River); Wyoming:

Middle Eocene (Bridger); Wyoming: Upper Eocene (Uinta); Wyoming.

**OXYENODON** Matthew. Type *O. dysodus* Matthew.

Hay, O. P. 1902 A, 759.

Bensley, B. A. 1901 C, 252.

Cossmann, M. 1901 A, 62.

Matthew, W. D. 1909 C, 100.

1909 D, 327, 408, 410, 433.

1924 E, 748.

- Matthew, W. D. 1928 B, 973.  
 Palmer, T. S. 1904 A, 491, 810.  
 Schlosser, M. 1903 B, 148.  
 Scott, W. B. 1913 A, 555.  
 Wortman, J. L. 1902 A, XIII, 116, 197.  
 Zittel and Schlosser 1911 A, 378.  
 1923 A, 459.

**Oxyænodon dysclerus Hay.**

- Hay, O. P. 1902 A, 759.  
 Matthew, W. D. 1909 C, 98.  
 1909 D, 412.  
 Peterson, O. A. 1919 A, 42, 43, pl. xxxiv, figs. 1, 2; text-figs. 1, 2.  
 Schlosser, M. 1903 B, 147 (O. dysodotus).  
 Trouessart, E. L. 1904 A, 165 (Limnocyon).

**MACHÆROIDES Matthew.**

- Matthew, W. D. 1909 D, 327, 410, 461, 462, text-fig. 48.  
 Abel, O. 1913 B, 714 (Machairoides).  
 1914 A, 67.  
 1919 A, 737 (Machairoides).

**HYÆNODONTIDÆ Leidy.**

- Leidy, J. 1869 A, 38.  
 Hay, O. P. 1902 A, 756.  
 Abel, O. 1912 D, 601 ("hyænodontiden").  
 1912 F, 501, 678.  
 1913 B, 714 ("hyænodontiden").  
 1914 A, 60 ("hyænodontiden").  
 1919 A, 735.  
 1920 A, 421, 422 ("hyænodontiden").  
 1921 A, 141 ("hyænodontiden").  
 1922 C, 286 ("hyænodontiden").  
 Ameghino, F. 1889 A, 1015.  
 1905 C, 442.  
 Arldt, T. 1907 D, 659.  
 1912 A, 702.  
 Behlen, H. 1907 A, 275 ("hyaenodontiden").  
 Branca, W. 1915 A, 43.  
 Chardin, T. 1922 A, 58.  
 1927 A, 20 ("hyænodontidés").  
 Cope, E. D. 1880 U, 154.  
 Cossmann, M. 1901 A, 62.  
 Depéret, C. 1908 A, 113.  
 Fraas, E. 1904 A, 14 ("hyaenodontiden").  
 Gregory, W. K. 1914 E, 526.  
 1920 A, 208.  
 Kellogg, R. 1922 A, 94.  
 Leche, W. 1921 A, 72.  
 Lydekker, R. 1915 B, 277.  
 Martin, R. 1906 A, 410 (Syn. of Proviverridæ).  
 Matthew, W. D. 1901 A, 1, 5, 7, 19, 21.  
 1905 B, 70.  
 1905 D, 32.  
 1909 C, 127.  
 1909 D, 300, 324, 327, 330, 463-468.  
 1913 A, 312.  
 1914 B, 387.

- Wortman, J. L. 1902 A, XIII, 197, 206 (Limnocyon dysodotus, not Oxyænodon dysodotus Matthew).

Upper Eocene (Uinta); Utah.

**Oxyænodon dysodotus Matthew.**

- Hay, O. P. 1902 A, 759.  
 Cossmann, M. 1901 A, 62 (O. dipodus).  
 Matthew, W. D. 1909 C, 98.  
 1909 D, 412.  
 Peterson, O. A. 1919 A, 42.  
 Schlosser, M. 1903 B, 147.  
 1904 B, 457 (Limnocyon dysotus).  
 Trouessart, E. L. 1904 A, 165 (Limnocyon).  
 Upper Eocene (Uinta); Utah.

\*

**Type *M. eothen* Matthew.**

- Scott, W. B. 1913 A, 573.  
 Zittel and Schlosser 1911 A, 379.

**Machæroides eothen Matthew.**

- Matthew, W. D. 1909 D, 412, 462, text-fig. 71.  
 Middle Eocene (Bridger); Wyoming.

- Matthew, W. D. 1915 D, 71.  
 1915 K, 445.  
 1921 D, 214.  
 1928 B, 971, 974, 980, fig. 13.  
 Matthew and Granger 1925 A, 12.  
 1925 C, 1.  
 Osborn, H. F. 1905 H, 218.  
 1905 I, 103.  
 1909 D, 127.  
 1910 B, 618.  
 Schlosser, M. 1904 B, 452, 457.  
 1911 A, 73, 148.  
 Schwarz, E. 1924 A, 420 ("hyaenodonts").  
 Scott, W. B. 1913 A, 683.  
 Seelcy, H. G. 1886 A, 418.  
 Steinmann, G. 1907 A, 470.  
 Stromer, E. 1906 A, 209.  
 1916 A, 403.  
 1926 A, 110.  
 Thorpe, M. R. 1922 B, 277.  
 Trouessart, E. L. 1904 A, 166.  
 Weber, M. 1904 A, 539.  
 Weber and Abel 1928 A, 336, 338.  
 Winge, H. 1896 A, 126, 127 (With subfamilies Proviverrini, Mesonyehini, Hyænodontini).  
 1919 A, 59.  
 1924 A, 177, 178, 181, 241 (Hyænodontini, Proviverrini).  
 Winge and Miller 1921 A, 12, 45.  
 Wortman, J. L. 1901 B, XII, 283, 285.  
 1902 A, XIII, 433.  
 Zittel and Schlosser 1911 A, 379.  
 1923 A, 459, 482, 666-668, 670 (Hyænodontidæ); 461 (Hyænodontinæ).

**PROVIVERRINÆ Matthew.**

- Matthew, W. D. 1909 C, 101.  
 Hay, O. P. 1902 A, 751 (Proviverridæ).  
 Abel, O. 1919 A, 735 (Proviverrinæ).  
 Arldt, T. 1907 D, 677 (Proviverridæ).

- Behlen, H. 1907 A, 275 ("proviverriden").  
 Depéret, C. 1905 C, 703 ("proviverridés").  
 Martin, R. 1906 A, 410 (Proviverridæ).  
 Matthew, W. D. 1901 A, 58 (Proviverridæ).

Matthew, W. D. 1909 D, 464, 465 (Proviverridae, Proviverrinae).  
 Palmer, T. S. 1904 A, 766, 811 (Proviverridae).  
 Schlosser, M. 1886 C, 293 (Proviverridae).  
 1898 B, 361, 366.

Steinmann, G. 1907 A, 470 (Proviverridae).  
 Stromer, E. 1908 B, 168 (Proviverridae).  
 Weber and Abel 1928 A, 338.  
 Zittel and Schlosser 1911 A, 379.  
 1923 A, 460.

### SINOPIA Leidy. Type *S. rapax* Leidy.

Leidy, J. 1871 F, 115.  
 Hay, O. P. 1902 A, 751 (Stypolophus).  
 Abel, O. 1914 A, 62.  
 1922 C, 286.  
 Ameghino, F. 1905 C, 442.  
 Andrews, C. W. 1906 A, xxii.  
 Bardenheath, K. S. 1913 A, 76 (Stypolophus).  
 Chardin, T. 1922 A, 59, 82.  
 1924 A, 13.  
 Cope, E. D. 1875 Y, 448 (Stypolophus).  
 1880 U, 153 (Stypolophus).  
 Dollo and Chardin 1924 A, 13.  
 Fraas, E. 1904 A, 14.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1918 A, 4.  
 Haug, E. 1911 A, 1528.  
 Leche, W. 1915 A, 350.  
 Lönnberg, E. 1910 B, 238.  
 1911 A, 60.  
 Lydekker, R. 1904 C, 63, fig. 4.  
 1910 F, 655.  
 Martin, R. 1906 A, 410 (Sinopia, Stypolophus).  
 Matthew, W. D. 1901 A, 6, 19, 20, 23.  
 1905 B, 69 (Sinopia); 71 (Prototomus).  
 1905 D, 32.  
 1906 C, 203, 204, 205, 216, fig. 6 (Sinopia);  
 204 (Stypolophus, Prototomus).  
 1907 B, 534.  
 1909 C, 101.  
 1909 D, 574, figs. 2, 3 (Sinopia); 417  
 (Prototomus); 318, 469 (Stypolophus).  
 1915 D, 71.  
 1915 K, 421.  
 1924 E, 748, 749 (Sinopia).  
 1928 B, 962, 971, 972, 974, figs. 12, 13.  
 Matthew and Granger 1925 A, 11.  
 Miller, G. S. 1923 A, 11.  
 Osborn, H. F. 1898 V, 206 (Stypolophus).  
 1907 G, 134, figs. 89, 94, 96, 196.  
 1909 D, 38, 54.  
 1910 B, 127, 183, 161, 164, 527.  
 1912 G, 236, fig. 3.  
 Osborn and Wortman 1892 A, 110 (Stypolophus).  
 Palmer, T. S. 1904 A, 833, 811 (Sinopia); 651,  
 811 (Stypolophus).  
 Schlosser, M. 1898 J, 522.  
 1904 B, 457.  
 1911 A.  
 Scott, W. B. 1913 A, 555, 565, 566, 567, figs.  
 279, 280.  
 Seeley, H. G. 1888 A, 418 (Stypolophus).  
 Steinmann, G. 1912 B, 727.  
 Stromer, E. 1906 A, 215.  
 1908 B, 168.  
 Thorpe, M. R. 1923 A, 37.  
 Tomes, C. S. 1906 A, 55, fig. 22.  
 Trouessart, E. L. 1904 A, 166.  
 Wallace, A. R. 1876 A, i, 134.  
 Weber, M. 1904 A, 539 (Sinopia, Stypolophus).

Weber and Abel 1928 A, 339.  
 Winge, H. 1924 A, 179, 181, 182, 241, 246  
 (Stypolophus).  
 Winge and Müller 1921 A, 12 (Stypolophus).  
 Wood, H. E. 1927 A, 297.  
 Wortman, J. L. 1901 B, xii, 281, 285 (Stypolophus).  
 1902 A, xiii, 433, 434.  
 1903 A, xv, 431.  
 Zittel and Schlosser 1911 A, 380.  
 1923 A, 460, 667.

### Sinopia aculeata (Cope).

Cope, E. D. 1872 NN, 1 (Triacodon).  
 Hay, O. P. 1902 A, 752 (Stypolophus).  
 Cope, E. D. 1872 PP, 1 (Triacodon).  
 Matthew, W. D. 1901 A, 24.  
 1909 D, 474.  
 Schlosser, M. 1904 B, 459 (Stypolophus).  
 Wortman, J. L. 1902 A, xiv, 20.

### Sinopia grangeri Matthew.

Matthew, W. D. 1906 C, 206, pl. xvi; text-figs.  
 1-5, 7-20.  
 Drevermann, F. 1913 C, 200, fig. 2.  
 Gidley, J. W. 1918 A, 60.  
 Gregory, W. K. 1918 A, 6, fig. 3.  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 470, 472.  
 1915 D, 72.  
 Schlosser, M. 1911 A, 79.  
 Middle Eocene (Bridger); Wyoming.

### Sinopia hians (Cope).

Hay, O. P. 1902 A, 752 (Stypolophus).  
 Cope, E. D. 1875 Y, 444 (Stypolophus).  
 Matthew, W. D. 1901 A, 25.  
 1909 C, 93.  
 1909 D, 470.  
 1915 D, 72, 75, figs. 68-71.  
 Merrill, G. P. 1907 A, 58 (Prototomus); 61  
 (Stypolophus).  
 Reeside, J. B. 1924 A, 46.  
 Trouessart, E. L. 1904 A, 166.  
 Wortman, J. L. 1902 A, xiv, 20.  
 Lower Eocene (Wasatch); Wyoming, New  
 Mexico.

### Sinopia? insectivora (Cope).

Cope, E. D. 1872 PP, 1 (Stypolophus).  
 Hay, O. P. 1902 A, 752 (Stypolophus).  
 Matthew, W. D. 1901 A, 24 (Sinopia?).  
 1909 D, 474 (Stypolophus).  
 Schlosser, M. 1904 B, 459 (Stypolophus).  
 Trouessart, E. L. 1904 A, 166.  
 Wortman, J. L. 1902 A, xiv, 20.  
 Middle Eocene (Bridger); Wyoming.

### Sinopia major Wortman.

Wortman, J. L. 1902 A, xiv, 18, figs. 98, 99.  
 Matthew, W. D. 1906 C, 207, text-figs. 1, 2.

- Matthew, W. D. 1909 C, 96.  
 1909 D, 470, 473, pl. xlv, fig. 4.  
 1915 D, 72.  
 Thorpe, M. R. 1923 A, 36.  
 Trouessart, E. L. 1904 A, 166.  
 Schlosser, M. 1904 B, 459.  
 1911 A, 76.  
 Middle Eocene (Bridger); Wyoming.

### ***Sinopa minor* Wortman.**

- Wortman, J. L. 1902 A, xiv, 17, figs. 96, 97.  
 Matthew, W. D. 1906 C, 207, text-figs. 1, 2.  
 1909 C, 96.  
 1909 D, 470, 473.  
 1915 D, 72.  
 Schlosser, M. 1904 B, 459.  
 Thorpe, M. R. 1923 A, 35.  
 Trouessart, E. L. 1904 A, 166.  
 Middle Eocene (Bridger); Wyoming.

### ***Sinopa mordax* Matthew.**

- Matthew, W. D. 1915 D, 72, 73, fig. 64.  
 Lower Eocene (Wasatch); Wyoming.

### ***Sinopa multicuspis* (Cope).**

- Hay, O. P. 1902 A, 752 (Stypolophus).  
 Gidley, J. W. 1926 E, 41.  
 Matthew, W. D. 1901 A, 27.  
 1909 C, 93.  
 1909 D, 470.  
 1915 D, 72, 80, figs. 72, 73.  
 Merrill, G. P. 1907 A, 58 (Prototomus); 61 (Stypolophus).  
 Reeside, J. B. 1924 A, 46.  
 Trouessart, E. L. 1904 A, 167.  
 Lower Eocene (Wasatch); New Mexico, Wyoming.

### ***Sinopa opisthotoma* Matthew.**

- Matthew, W. D. 1901 A, 28, text-fig. 9.  
 1909 C, 93.  
 1909 D, 470.  
 1915 D, 72, 73.  
 Trouessart, E. L. 1904 A, 167.  
 Wortman, J. L. 1902 A, xiv, 21.  
 Lower Eocene (Wasatch); Wyoming.

### ***Sinopa pungens* (Cope).**

- Cope, E. D. 1872 OO, 1 (Stypolophus).  
 Hay, O. P. 1902 A, 752 (Stypolophus).  
 Matthew, W. D. 1901 A, 24.  
 1906 C, 209, text-fig. 2.  
 1909 C, 96.  
 1909 D, 470, 472 (Stypolophus).  
 1915 D, 72.  
 Trouessart, E. L. 1904 A, 166 (Syn. of *S. rapax*).  
 Wortman, J. L. 1902 A, xiii, 125 (Syn. of *S. rapax*).  
 Middle Eocene (Bridger); Wyoming.  
***Sinopa rapax* Leidy.**  
 Hay, O. P. 1902 A, 752 (Stypolophus).  
 Abel, O. 1922 C, 281, 286, fig. 236.  
 Cope, E. D. 1872 OO, 1.  
 1884 O, 289 (Stypolophus vorax, *errore*).  
 Drevermann, F. 1913 C, 199, fig. 1.  
 Matthew, W. D. 1901 A, 23.

- Matthew, W. D. 1905 B, 71.  
 1906 C, 206, text-figs. 1, 2.  
 1909 C, 96.  
 1909 D, 464, 470, 471, pl. xlv, figs. 1, 2;  
 pl. xlvii, fig. 2; pl. xlvii, fig. 2; text-figs. 72, 73.  
 1915 D, 72.  
 Schlosser, M. 1904 B, 458.  
 Thorpe, M. R. 1923 A, 35.  
 Trouessart, E. L. 1904 A, 166.  
 Wortman, J. L. 1902 A, xiii, 435, figs. 83, 84;  
 xiv, 17 (*S. rapax*); 18 (*S. edax*).  
 Middle Eocene (Bridger); Wyoming.

### ***Sinopa rapax lania* Matthew.**

- Matthew, W. D. 1909 D, 472, pl. xlv, fig. 3,  
 pl. xlvii, fig. 1.  
 Upper Eocene (Washakie); Wyoming.

### ***Sinopa secundaria* (Cope).**

- Hay, O. P. 1902 A, 752 (Stypolophus).  
 Matthew, W. D. 1901 A, 27.  
 1909 D, 470.  
 1915 D, 71, 72, 82, fig. 77 (This species?).  
 Merrill, G. P. 1907 A, 58 (Prototomus); 61 (Stypolophus).  
 Trouessart, E. L. 1904 A, 167.  
 Lower Eocene (Wasatch); New Mexico.

### ***Sinopa shoshoniensis* Matthew.**

- Matthew, W. D. 1915 D, 72, 73, fig. 65.  
 Lower Eocene (Wasatch); Wyoming.

### ***Sinopa strenua* (Cope).**

- Hay, O. P. 1902 A, 752 (Stypolophus).  
 Matthew, W. D. 1901 A, 26.  
 1909 C, 93.  
 1909 D, 470.  
 1915 D, 72, 74, figs. 66, 67.  
 Merrill, G. P. 1907 A, 58 (Prototomus); 61 (Stypolophus).  
 Reeside, J. B. 1924 A, 46.  
 Simpson, G. G. 1928 J, 5, fig. 1.  
 Trouessart, E. L. 1904 A, 166.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

### ***Sinopa vera* (Marsh).**

- Hay, O. P. 1902 A, 752 (Stypolophus).  
 Matthew, W. D. 1901 A, 23.  
 Wortman, J. L. 1901 B, xii, 200 (Triacodon grandis a syn.).  
 Middle Eocene (Bridger); Wyoming.

### ***Sinopa viverrina* (Cope).**

- Hay, O. P. 1902 A, 753 (Stypolophus).  
 Matthew, W. D. 1901 A, 27.  
 1909 C, 93.  
 1909 D, 470.  
 1915 D, 72, 83.  
 Merrill, G. P. 1907 A, 59 (Prototomus); 61 (Stypolophus).  
 Reeside, J. B. 1924 A, 46.  
 Seeley, H. G. 1886 A, 418.  
 Trouessart, E. L. 1904 A, 167.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

**Sinopa vulpecula** Matthew.

Matthew, W. D. 1915 D, 72, 80, figs. 74-76.  
Lower Eocene (Wasatch); Wyoming.

**Sinopa** sp. indet.

Matthew, W. D. 1909 C, 93. Lower Eocene  
(Wind River); Wyoming.

**TRITEMNODON** Matthew. Type *Limnocyon agilis* Marsh.

Matthew, W. D. 1906 C, 205, 207, 216.  
Abel, O. 1922 C, 282.  
Haug, E. 1911 A, 1528.  
Leche, W. 1915 A, 350.  
Lull, R. S. 1917 B, 553, fig. 176.  
Matthew, W. D. 1908 C, 69.  
1909 C, 100.  
1909 D, 325-327, 464, 465, 467, 474, 476, 483.  
1915 D, 71.  
1928 B, 974, fig. 13.  
Matthew and Granger 1924 B, 1.  
Osborn, H. F. 1909 D, 41, 45.  
1910 B, 31, 133, 161, 163, 527.  
Schlosser, M. 1911 A, 79, 150.  
Scott, W. B. 1913 A, 565, 566, 567, 633, figs.  
279-281.  
Thorpe, M. R. 1923 A, 37.  
Winge, H. 1924 A, 179.  
Zittel and Schlosser 1911 A, 380.  
1923 A, 460.

**Tritemnodon agilis** (Marsh).

Hay, O. P. 1902 A, 752 (Stypolophus).  
Abel, O. 1913 B, 714, fig. 15 (T. agile).  
1919 A, 736, fig. 549 (Sinopa).  
1922 C, 286, fig. 239.  
Cope, E. D. 1872 PP, 1 (Stypolophus brevicol-  
carabus).  
Lönberg, E. 1910 B, 239, fig. 1.  
1911 A, 61, fig.  
Matthew, W. D. 1901 A, 24 (Stypolophus brevi-  
calcaratus a syn.).

Matthew, W. D. 1905 B, 71 (Sinopa).  
1906 C, 205, 207, text-figs. 1, 6.  
1909 C, 96.  
1909 D, 464, 475, pl. xlvi, fig. 1; text-figs.  
74-90.  
1915 D, 76.  
1915 K, fig. 23.  
Osborn, H. F. 1910 B, 163, fig. 62.  
Schlosser, M. 1904 B, 458 (Sinopa agilis); 459  
(Stypolophus gracilis).  
Scott, W. B. 1913 A, 271, fig. 140.  
Thorpe, M. R. 1923 A, 29, 36, 37.  
Trouessart, E. L. 1904 A, 166 (Sinopa).  
Wortman, J. L. 1902 A, xiii, 437, pls. ix, x;  
text-figs. 85-90, 92-95 (Sinopa agilis); xiv, 17,  
18, 20 (S. gracilis).  
Middle Eocene (Bridger); Wyoming.

**Tritemnodon whitiae** (Cope).

Hay, O. P. 1902 A, 753 (Stypolophus whitae).  
Fraas, E. 1904 A, 14 (Stypolophus).  
Loomis, F. B. 1907 B, 356 (Stypolophus).  
Matthew, W. D. 1901 A, 26 (Sinopa).  
1906 C, 207, text-figs. 1, 2.  
1909 C, 93.  
1909 D, 470 (Tritemnodon?).  
1915 D, 84.  
Schlosser, M. 1911 A, 79.  
Trouessart, E. L. 1904 A, 166 (Sinopa).  
Wortman, J. L. 1902 A, xiv, 20 (Sinopa).  
Lower Eocene (Wind River); Wyoming.

**PROVIVERA** Rüttimeyer. Type *P. typica* Rüttimeyer.

Hay, O. P. 1902 A, 753.  
Ameghino, F. 1902 D, 423.  
Chardin, T. 1922 A, 59.  
Cope, E. D. 1880 U, 152.  
Matthew, W. D. 1901 A, 6, 20.  
1906 C, 204, 205.  
1909 D, 327, 466, 467.  
Schlosser, M. 1898 J, 522.  
Simpson, G. G. 1925 J, 8.  
Stromer, E. 1908 B, 169.  
Trouessart, E. L. 1904 A, 168.

Wortman, J. L. 1901 B, xii, 61, 235.  
1902 A, xiii, 433.  
1903 A, xv, 431.  
Zittel and Schlosser 1911 A, 380, fig. 543.  
1923 A, 460, 668, fig. 553.

**Provivera americana** Scott.

Hay, O. P. 1902 A, 753.  
Trouessart, E. L. 1904 A, 168.  
Middle Eocene (Bridger); Wyoming.

**TRIACODON** Marsh. Type *T. fallax* Marsh.

Hay, O. P. 1902 A, 753.  
Cope, E. D. 1872 PP, 1.  
Matthew, W. D. 1901 A, 20.  
1906 C, 204.  
1909 D, 340.  
Palmer, T. S. 1904 A, 687, 811.  
Trouessart, E. L. 1904 A, 165, 171 (Syn. of  
*Limnocyon*).  
A genus whose systematic position is at  
present indeterminable.

**Triacodon fallax** Marsh.

Hay, O. P. 1902 A, 753.  
Cope, E. D. 1872 NN, 1 (T. fallax).  
Matthew, W. D. 1909 D, 340.  
Thorpe, M. R. 1923 A, 36 (Syn. of Sinopa  
minor).  
Trouessart, E. L. 1904 A, 245 (Syn. ? of Viver-  
ravis gracilis).  
Wortman, J. L. 1901 B, xii, 200, fig. 36 (Syn.  
of Viverravis gracilis).  
Upper Eocene (Bridger); Wyoming.

**Triacodon grandis** Marsh.

- Hay, O. P. 1902 A, 753.  
 Matthew, W. D. 1909 D, 341, 342.  
 Trouessart, E. L. 1904 A, 165 (Syn. of *Limno-  
 cyon verus*).  
 Wortman, J. L. 1901 B, xii, 200 (Syn.? of  
*Limnoeyon verus*).  
 Middle Eocene (Bridger); Wyoming.

**Triacodon nanus** Marsh.

- Hay, O. P. 1902 A, 753.  
 Matthew, W. D. 1909 D, 341, 342.  
 Thorpe, M. R. 1923 A, 28.  
 Wortman, J. L. 1901 B, xii, 200 (This genus?).  
 Middle Eocene (Bridger); Wyoming.

**HYÆNODONTINÆ** Matthew.

- Matthew, W. D. 1909 D, 466.  
 Hay, O. P. 1902 A, 758.  
 Abel, O. 1914 A, 65, 66.  
 1919 A, 735.

- Weber and Abel 1928 A, 339.  
 Zittel and Schlosser 1911 A, 380.  
 1923 A, 461.

**HYÆNODON** Laizer and Parieu. Type *H. leptorhynchus* Laizer and Parieu.

- Hay, O. P. 1902 A, 758.  
 Abel, O. 1912 D, 602.  
 1914 A, 66.  
 1920 A, 422, fig. 637.  
 1921 A, 140, fig. 21.  
 1922 C, 278, 286, fig. 235.  
 Ameghino, F. 1885 A, 154.  
 1889 A, 1015.  
 1904 A, 27.  
 1904 C, 117.  
 1905 A, 1.  
 1905 C, 442.  
 1912 B, 177.  
 Andrews, C. W. 1906 A, xxii.  
 Bardonfleth, K. S. 1913 A, 107.  
 Beddard, F. E. 1902 A, 455.  
 Bonsley, B. A. 1901 C, 252.  
 Bronn, H. G. 1848 A, 597.  
 1849 A, 721.  
 Cope, E. D. 1880 U, 151, 152, 156.  
 Douglass, E. 1905 A, 211.  
 Drevermann, F. 1913 C, 201, fig.  
 Frick, C. 1926 A, 40.  
 Gaudry, A. 1875 D, 1282.  
 Gervais, P. 1852 A, 127, explan. pls. xi, xxiv,  
 xxv.  
 1859 A, 232.  
 Giebel, C. G. 1855 A, 24, pl. x.  
 Gregory, W. K. 1920 A, 14, 147, 239, figs. 77, 78.  
 Haug, E. 1911 A, 1528.  
 Hayden, F. V. 1871 A, 105, 107.  
 Heilprin, A. 1887 A, 393.  
 Hoernes, R. 1886 A, 658.  
 Huxley, T. H. 1880 D, 450.  
 Jepsen, G. L. 1926 A, 1.  
 Leche, W. 1915 A, 348.  
 Lemoine, V. 1889 A, 235.  
 Lobley, J. L. 1908 A, 211.  
 Lull, R. S. 1917 B, 553, fig. 176.  
 Lydekker, R. 1899 B, 925, pl. lxii, fig. 1.  
 1904 C, 63, fig. 5.  
 1910 F, 655.  
 Mackie, S. J. 1863 D, 336.  
 Major, C. J. F. 1880 A, 39.  
 Martin, R. 1906 A, 410, 458.  
 Matthew, W. D. 1901 A, 6, 19.  
 1901 B, 369, 370.  
 1905 B, 69.  
 1905 D, 25, 32, figs. 4, 7.

- Matthew, W. D. 1906 C, 205, 216, text-fig. 6.  
 1908 C, 69.  
 1909 C, 103, 110.  
 1909 D, 315, 322, 324, 326, 327, 403, 464,  
 466, text-figs. 1, 3.  
 1915 K, 420.  
 1928 B, 971, 974, fig. 13.  
 Matthew and Granger 1924 A, 5.  
 1924 B, 1.  
 1925 D, 4.  
 Miller, G. S. 1923 A, 11.  
 O'Harra, C. C. 1910 A, 77, 78, 126, pl. xxiv.  
 1920 A, 78, pl. xxv.  
 Osborn, H. F. 1907 G, 136, figs. 91, 94, 96.  
 1907 K, 829 ("hyænodons").  
 1909 D, 59.  
 1910 B, 618, fig. 104.  
 1917 B, 241.  
 Owen, R. 1860 E, 339.  
 1868 A, 885.  
 Palmer, T. S. 1904 A, 323, 809.  
 Pompeckj, J. F. 1922 A, 51, 81.  
 Schlosser, M. 1898 B, 365.  
 1898 J, 517.  
 1902 J, 232.  
 1904 B, 459.  
 1911 A, 150, 166.  
 Scott, W. B. 1913 A, 562, 564-567, figs. 278-280.  
 Seeley, H. G. 1878 A, 222.  
 Sinclair, W. J. 1924 A, 103.  
 Stromer, E. 1902 A, 239.  
 1902 B, 554, 561.  
 1916 A, 403.  
 1926 A, 110.  
 Thorpe, M. R. 1922 B, 277, 280, 283.  
 1923 E, 241.  
 Tomes, C. S. 1906 A, 45, fig. 18.  
 Trouessart, E. L. 1904 A, 168.  
 Wallace, A. R. 1876 A, i, 118, 125, 134.  
 Weber, M. 1904 A, 381, 539.  
 Weber and Abel 1928 A, 308, 336, 339, fig. 208.  
 Winge, H. 1919 A, 59.  
 1924 A, 181, 219, 242, 246.  
 Winge and Miller 1921 A, 1.  
 Woodward, A. S. 1898 D, 331.  
 Wortman, J. L. 1901 B, xii, 281, 285.  
 1902 A, xiii, 433.  
 Zittel and Schlosser 1911 A, 381, fig. 540.  
 1923 A, 457, 460, 462, 668, figs. 579, 585.



***Hyænodon crucians* Leidy.**

- Hay, O. P. 1902 A, 758.  
 Cook, H. J. 1912 D, 35.  
 Lambe, L. M. 1908 A, 11, 60, pl. vii, figs. 4-6  
 (This species?).  
 Matthew, W. D. 1901 B, 357.  
 1909 C, 105.  
 O'Harra, C. C. 1920 A, 150.  
 Schlosser, M. 1898 J, 517.  
 Sinclair, W. J. 1924 A, 101, 103, 106.  
 Thorpe, M. R. 1922 B, 284, 286.  
 Wortman, J. L. 1902 A, XIII, 446, fig. 91  
 (Sinopa).  
 Middle Oligocene (Brule); Colorado, Nebraska.

***Hyænodon cruentus* Leidy.**

- Hay, O. P. 1902 A, 758.  
 Beddard, F. E. 1902 A, 455.  
 Cook, H. J. 1912 D, 35.  
 Darton and Siebenthal 1910 A, 11 (Hyracodon).  
 Lambe, L. M. 1908 A, 11, 59, pl. vii, figs. 1-3.  
 Matthew, W. D. 1901 B, 357, 380.  
 1909 C, 105.  
 1909 D, 464, text-figs. 72, 73.  
 Merrill, G. P. 1907 A, 41.  
 O'Harra, C. C. 1910 A, 78, fig. 11.  
 1920 A, 78, 150, fig. 22.  
 Schlosser, M. 1898 J, 517.  
 Sinclair, W. J. 1924 A, 101, 103, 106, fig. 1.  
 Thorpe, M. R. 1922 B, 283, 286.  
 Trouessart, E. L. 1904 A, 169.  
 Woodward, A. S. 1923 C, 25, fig. 7.  
 Middle Oligocene (Brule); Colorado, Nebraska, Wyoming.

***Hyænodon leptocephalus* Scott.**

- Hay, O. P. 1902 A, 759.  
 Beddard, F. E. 1902 A, 456.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 105.  
 O'Harra, C. C. 1920 A, 151.  
 Schlosser, M. 1898 J, 517.  
 Sinclair, W. J. 1924 A, 104.  
 Stromer, E. 1926 A, 111.

**NEOHYÆNODON Thorpe. Type *Hyænodon horridus* Leidy.**

Thorpe, M. R. 1922 B, 278, 285.

***Neohyænodon horridus* (Leidy).**

- Unless otherwise indicated the authors, as cited, use the generic name *Hyænodon*.  
 Hay, O. P. 1902 A, 758.  
 Ameghino, F. 1905 C, 442.  
 Cook, H. J. 1912 D, 35.  
 Giebel, C. G. 1893 A, pl. I.  
 Gregory, W. K. 1920 A, 147, fig. 78.  
 Matthew, W. D. 1901 B, 357.  
 1909 C, 105.  
 Merrill, G. P. 1907 A, 41.

**HEMIPSALODON Cope. Type *H. grandis* Cope.**

- Hay, O. P. 1902 A, 759.  
 Haug, E. 1911 A, 1528.  
 Lambe, L. M. 1908 A, 61.  
 Matthew, W. D. 1901 A, 20 (= ? Pterodon).

Thorpe, M. R. 1922 B, 284, 286.  
 Middle Oligocene (Brule); South Dakota Nebraska?

***Hyænodon montanus* Douglass.**

- Douglass, E. 1901 B, 243, 253.  
 1903 A, 149.  
 Matthew, W. D. 1909 C, 105.  
 Thorpe, M. R. 1922 B, 284, 286.  
 Trouessart, E. L. 1904 A, 169.  
 Middle Oligocene (White River); Montana.

***Hyænodon mustelinus* Scott.**

- Hay, O. P. 1902 A, 759.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 105.  
 O'Harra, C. C. 1920 A, 151.  
 Schlosser, M. 1898 J, 517.  
 Sinclair, W. J. 1924 A, 103.  
 Thorpe, M. R. 1922 B, 277, 286.  
 Trouessart, E. L. 1904 A, 169.  
 Middle Oligocene (Brule); South Dakota, Nebraska?

***Hyænodon paucidens* Osborn and Wortman.**

- Hay, O. P. 1902 A, 759.  
 Cook, H. J. 1912 D, 35.  
 Gregory, W. K. 1920 A, 147, fig. 77.  
 Matthew, W. D. 1909 C, 105.  
 O'Harra, C. C. 1920 A, 150.  
 Schlosser, M. 1898 J, 517.  
 Sinclair, W. J. 1924 A, 103.  
 Thorpe, M. R. 1922 B, 277, 286.  
 Middle Oligocene (Brule); South Dakota, Nebraska?

***Hyænodon* sp. indet.**

- Cook, H. J. 1912 D, 33. Oligocene (Chadron); Nebraska.  
 Matthew, W. D. 1909 C, 103. Oligocene (Lower).  
 Peterson, O. A. 1906 C, 33, fig. 6 (This genus?).  
 Wanless, H. R. 1923 A, 220. Oligocene (White River); Nebraska.

O'Harra, C. C. 1910 A, 77.

- 1920 A, 150.  
 Osborn, H. F. 1904 F, 12, 34.  
 1910 B, 189, fig. 81.  
 Schlosser, M. 1898 J, 517.  
 Scott, W. B. 1913 A, 563, fig. 277.  
 Sinclair, W. J. 1924 A, 101, 103.  
 Stromer, E. 1902 A, 265.  
 Thorpe, M. R. 1922 B, 278, 285, figs. 1, 2  
 (Neohyænodon).  
 Middle Oligocene (Brule); Colorado, S. Dakota, Nebraska.

Osborn, H. F. 1910 B, 216, 527.

Palmer, T. S. 1904 A, 318, 809.

Schlosser, M. 1898 J, 522.

Scott, W. B. 1913 A, 565.

Zittel and Schlosser 1911 A, 380 (Syn. of *Pterodon*).

1923 A, 461 (Syn. of *Pterodon*).

### **Hemipsalodon grandis** Cope.

Hay, O. P. 1902 A, 759.

Lambe, L. M. 1904 C, 29, 38, 52.

Lambe, L. M. 1905 D, 369 A, 371 A.

1908 A, 11, 61, pl. vii, figs. 7, 8.

1912 A, 12.

Matthew, W. D. 1909 C, 103, 110.

Zittel and Schlosser 1923 A, 462 (*Pterodon*).

Oligocene (Lower); Canada.

### **PTERODON** Blainville. Type *Pterodon dasyuroides* Blainville.

Blainville, H. M. D. 1839, Ann. Franc. Étrang.  
Anat. Physiol., III, 23.

Abel, O. 1914 A, 66.

Ameghino, F. 1904 A, 8, 9, 25.

1906 A, 355, fig. 192.

Andrews, C. W. 1906 A, xxii, 219.

Bardenfleth, K. S. 1913 A, 99.

Depéret, C. 1907 A, 455.

Gervais, P. 1859 A, 236.

Hoernes, R. 1886 A, 658.

Leche, W. 1915 A, 350.

Lydekker, R. 1899 B, 925, pl. lxii, fig. 2.

Martin, R. 1906 A, 412, 430.

Matthew, W. D. 1905 B, 72.

1906 C, 205, 216, 217, text-fig. 6.

1908 C, 69.

Matthew, W. D. 1909 D, 464, 469.

1928 B, 971, 974, fig. 13.

Osborn, H. F. 1907 G, 137, figs. 94, 96.

Palmer, T. S. 1904 A, 595, 810.

Schlosser, M. 1887 B, 195.

1904 B, 459.

1910 A, 505.

1911 A.

Scott, W. B. 1913 A, 565, 566, figs. 279, 280.

Seeley, H. G. 1878 A, 222.

Weber and Abel 1928 A, 339.

Zittel and Schlosser 1911 A, 380 (*Hemipsalodon* a syn.).

This genus is introduced because *Hemipsalodon* may be a synonym of it.

### **PSEUDOPTERODON** Schlosser.

Type *P. ganodus* Schlosser.

Schlosser, M. 1887 B, 199, pl. v, figs. 9, 26, 29, 35, 36.

Matthew, W. D. 1903 B, 209.

1909 C, 103, 110.

Palmer, T. S. 1904 A, 592, 810.

Trouessart, E. L. 1904 A, 170.

Zittel and Schlosser 1911 A, 381.

1923 A, 462.

### **Pseudopterodon?** *minutus* (Douglass).

Douglass, E. 1903 B, 242, 255 (*Hyænodon*).

1903 A, 149 (*Hyænodon*).

Matthew, W. D. 1903 B, 208, fig. 6 (This genus?).

1909 C, 103 (This genus?).

Trouessart, E. L. 1904 A, 170 (*Pterodon*).

Oligocene (Lower); Montana.

### *Superfamily* **MIACOIDÆ**, Chardin.

Chardin, T. 1915 A, 111, 188.

Abel, O. 1912 D, 600 (*Eucreodi*).

1913 B, 714, 718 (*Eucreodi*).

1914 A, 63, 68 (*Eucreodi*).

1920 A, 421 (*Eucreodi*).

1922 C, 280 (*Eucreodi*).

Chardin, T. 1922 A, 87 (*Eucreodi*).

Gregory, W. K. 1920 A, 238 (*Eucreodi*).

Matthew, W. D. 1909 D, 327, 330 (*Eucreodi*).

1915 D, 5 (*Eucreodi*).

Osborn, H. F. 1910 B, 528 (*Eucreodi*).

Schlosser, M. 1921 A, 113 (*Eucreodi*).

Weber and Abel 1928 A, 337, 342 (*Eucreodi*).

Zittel and Schlosser 1911 A, 382 (*Eucreodi*).

1923 A, 462 (*Eucreodi*).

### **MIACIDÆ** Cope.

Cope, E. D. 1880 C, 78.

Hay, O. P. 1902 A, 759 (*Uintacyonidæ*).

Abel, O. 1912 D, 600 ("*miaciden*").

1912 F, 501.

1913 B, 714.

1914 A, 63, 69.

1919 A, 738.

1921 A, 141 ("*miaciden*").

1922 C, 289 ("*miaciden*").

Ardt, T. 1907 D, 665.

1912 A, 702.

Carlson, A. 1921 A, 71.

1922 A, 30, 88 ("*miacidés*").

Gidley, J. W. 1915 B, 334.

Gregory, W. K. 1910 A, 308, 459.

1920 A, 148, 238.

Hilzheimer, M. 1913 A, 566.

Huene, F. 1927 D, 146 ("*miaciden*").

Matthew, W. D. 1909 C, 91, 93, 96, 98, 100.

1909 D, 564 (*Miacidæ*); 340 (*Vulpavidæ* a syn.).

1912 B, 184.

1914 B, 387.

1915 A, 217.

1915 D, 16.

1915 K, 445, 474.

1921 D, 212, 214.

1925 E, 751.

1928 B, 962, 971, 973, 980.

Matthew and Granger 1924 A, 6.

1925 D, 5.

Moodie, R. L. 1916 E, 141.

Osborn, H. F. 1909 D, 130.

1910 B, 623.

1925 C, 751.

Pohle, H. 1920 A, 49, 50, 61.

1924 A, 25 ("*miaciden*").

- Scharff, R. F. 1911 A, 149, 151.  
 Schlosser, M. 1898 B, 361.  
     1900 B, 303.  
     1921 A, 113.  
 Scott, W. B. 1913 A, 685.  
 Seeley, H. G. 1886 A, 418.  
 Sokolowsky, A. 1919 A, 239.

- Weber, M. 1904 A, 540.  
 Weber and Abel 1928 A, 328, 337.  
 Winge, H. 1924 A, 177, 182, 183, 242 (Amphictididae, Miacididae).  
 Zittel and Schlosser 1911 A, 383 (Miaces, Mio-cyon).  
     1923 A, 462, 482, 665-668.

## VIVERRAVINÆ Matthew.

- Matthew, W. D. 1909 D, 340.  
 Hay, O. P. 1902 A, 754 (Viverravidæ).  
 Abel, O. 1913 B, 715.  
     1919 A, 739.  
     1922 C, 289.  
 Behlen, H. 1907 A, 274 ("viverraviden").  
 Lydekker, R. 1904 C, 62 (Viverravidæ).  
 Matthew, W. D. 1901 A, 1, 7, 8 (Viverravidæ)  
     1905 D, 40 (Viverravidæ).  
     1909 D, 330, 339 (Viverravidæ); 345, 348,  
     351, 352 (Viverravinæ).  
     1915 D, 16.

- Palmer, T. S. 1904 A, 776, 812 (Viverravidæ).  
 Pohle, H. 1920 A, 60, 61 (Viverravinæ); 61  
     (Viverravidæ).  
     1924 A, 25.  
 Schlosser, M. 1902 A, 140 (Viverravidæ).  
     1904 B, 449 (Viverravidæ).  
 Trouessart, E. L. 1904 A, 245 (Viverravidæ).  
 Weber and Abel 1928 A, 320, 337.  
 Wortman, J. L. 1901 B, xi, 338, 340; xii, 143,  
     197 (Viverravidæ).  
 Zittel and Schlosser 1911 A, 383.  
     1923 A, 463.

DIDYMICTIS Cope. Type *D. protenus* Cope.

- Hay, O. P. 1902 A, 754 (Viverravus, in part).  
 Abel, O. 1914 A, 62.  
 Ameghino, F. 1906 A, 284.  
 Behlen, H. 1907 A, 273.  
 Chardin, T. 1922 A, 59, 82.  
 Cope, E. D. 1875 Y, 444, 448.  
 Gregory, W. K. 1912 C, 189.  
     1920 A, 239.  
 Haug, E. 1911 A, 1527.  
 Matthew, W. D. 1906 C, 216, text-fig. 6.  
     1907 B, 534.  
     1909 C, 100.  
     1909 D, 327, 341, 342, 345, 353, 361, 402,  
     text-fig. 8.  
     1915 D, 4, 18, 19.  
     1915 K, 421.  
     1924 E, 749.  
     1928 B, 954, 962, 972, 974, figs. 12, 13.  
 Osborn, H. F. 1907 G, 139, fig. 96.  
     1909 D, 46.  
     1910 B, 108, 111, 127, 134, 528.  
     1912 G, 236, fig. 3.  
     1919 B, 558.  
 Palmer, T. S. 1904 A, 230, 812.  
 Pohle, H. 1920 A, 48, 58, fig. 8.  
 Schlosser, M. 1898 B, 361.  
     1901 K, 467.  
     1916 A, 30.  
 Scott, W. B. 1913 A, 555, 558.  
 Seeley, H. G. 1886 A, 418.  
 Tomes, C. S. 1906 A, 56 (Didymictis).  
 Weber and Abel 1928 A, 337.  
 Winge, H. 1924 A, 177, 183, 242.  
 Wood, H. E. 1927 A, 299.  
 Zittel and Schlosser 1911 A, 383.  
     1923 A, 463.

*Didymictis altidens* Cope.

- Hay, O. P. 1902 A, 754 (Viverravus).  
 Loomis, F. B. 1907 B, 356 (Viverravus).  
 Matthew, W. D. 1901 A, 8 (Viverravus).  
     1909 C, 93.  
     1909 D, 341, 349, 361.  
     1915 D, 20, 22, figs. 12, 16-19.

- Osborn, H. F. 1909 D, 49.  
 Sinclair and Granger 1911 A, 91 (This species?).  
 Trouessart, E. L. 1904 A, 246 (Viverravus).  
     Lower Eocene (Wasatch and Wind River);  
     Wyoming.

*Didymictis curticens* Cope.

- Hay, O. P. 1902 A, 754 (Viverravus).  
 Matthew, W. D. 1909 D, 341.  
 Trouessart, E. L. 1904 A, 246 (Viverravus).  
     Lower Eocene (Wasatch); Wyoming.

*Didymictis haydenianus* Cope.

- Hay, O. P. 1902 A, 754 (Viverravus).  
 Gardner, J. H. 1910 A, 729.  
 Matthew, W. D. 1909 C, 91.  
     1909 D, 341, 349, 361 (*D. haydenianus*);  
     341, 361 (*D. primus* a syn.).  
     1914 B, 384.  
     1915 D, 19, 20, fig. 12.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 303.  
 Trouessart, E. L. 1904 A, 246 (Viverravus).  
     Paleocene (Torrejon); New Mexico.

*Didymictis leptomylus* Cope.

- Hay, O. P. 1902 A, 755 (Viverravus).  
 Loomis, F. B. 1907 B, 356 (Viverravus).  
 Matthew, W. D. 1901 A, 10 (Var. of *Viverravus*  
     *protenus*).  
     1909 C, 93.  
     1909 D, 341, 349, 361.  
     1914 B, 384 (This species?).  
 Reeside, J. B. 1924 A, 46.  
 Sinclair and Granger 1912 A, 60 (This species?).  
 Trouessart, E. L. 1904 A, 246 (Viverravus).  
     Lower Eocene (Wasatch); New Mexico:  
     (Wind River); Wyoming: Paleocene (Fort  
     Union?); Wyoming.

*Didymictis protenus* Cope.

- Hay, O. P. 1902 A, 755 (Viverravus).  
 Loomis, F. B. 1907 B, 356 (Viverravus).  
 Matthew, W. D. 1901 A, 9, figs. 1-5 (*Viverra-*  
     *vus*).

- Matthew, W. D. 1909 C, 93.  
 1909 D, 341-362, text-fig. 8.  
 1915 D, 20, 21, fig. 12.  
 Merrill, G. P. 1907 A, 34 (Didymictis); 44 (Limnocyon).  
 Reesde, J. B. 1924 A, 46 (D. pretenus).  
 Trouessart, E. L. 1904 A, 246 (Viverravus).  
 Lower Eocene (Wasatch); New Mexico, Wyoming.

VIVERRAVUS Marsh. Type *V. gracilis* Marsh.

- Hay, O. P. 1902 A, 754.  
 Abel, O. 1922 C, 289.  
 Chardin, T. 1915 A, 111.  
 Gregory, W. K. 1910 A, 309, 311, 437.  
 Haug, E. 1911 A, 1528.  
 Lydekker, R. 1904 C, 62.  
 1910 F, 654.  
 Matthew, W. D. 1901 A, 8.  
 1909 C, 100.  
 1909 D, 323, 327, 342, 345, 353, 356, 358, 359, 388, text-fig. 2.  
 1915 D, 18, 27.  
 1921 H, 511.  
 1928 B, 962, 974, fig. 13.  
 Matthew and Granger 1924 B, 9, fig. 6.  
 Osborn, H. F. 1909 D, 46.  
 1910 B, 127, 134, 528.  
 1912 G, 236, fig. 3.  
 Palmer, T. S. 1904 A, 707, 812.  
 Pohle, H. 1920 A, 56.  
 Schlosser, M. 1902 A, 135.  
 1904 B, 449.  
 Trouessart, E. L. 1904 A, 245.  
 Weber and Abel 1928 A, 337.  
 Winge, H. 1924 A, 177, 183, 242.  
 Wortman, J. L. 1901 B, xii, 144.  
 1902 A, xiii, 46.  
 Zittel and Schlosser 1911 A, 383.  
 1923 A, 463, 667.

**Viverravus acutus** Matthew.

- Matthew, W. D. 1915 D, 27, figs. 21, 22.  
 Lower Eocene (Wasatch); Wyoming.

**Viverravus dawkinsianus** (Cope).

- Cope, E. D. 1881 D, 191 (Didymictis).  
 Hay, O. P. 1902 A, 754 (V. gracilis, in part).  
 Matthew, W. D. 1909 C, 93.  
 1909 D, 341, 349, 361.  
 1915 D, 28, fig. 20.  
 Osborn, H. F. 1909 D, 49.  
 Trouessart, E. L. 1904 A, 245 (Syn. of V. gracilis).  
 Lower Eocene (Wasatch and Wind River); Wyoming; (Huerfano); Colorado.

**Didymictis protenus lysitensis** Matthew.

- Matthew, W. D. 1915 D, 20, 21, figs. 13-15.  
 Lower Eocene (Wasatch); Wyoming.

**Didymictis** sp. indet.

- Lull, R. S. 1915 D, 326. Paleocene (Fort Union); Montana.

**Viverravus gracilis** Marsh.

- Hay, O. P. 1902 A, 754 (V. gracilis); 761 (Harpalodon vulpinus).  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 340, 341, 342, 349, 357 (V. gracilis); 342 (Harpalodon vulpinus).  
 Thorpe, M. R. 1923 A, 24 (V. gracilis, V. vulpinus).  
 Trouessart, E. L. 1904 A, 245.  
 Wortman, J. L. 1901 B, xii, 145, figs. 18-20; 200, 201, 283, 285 (Ziphacodon rugatus, Triacodon fallax, Harpalodon sylvestris, H. vulpinus as syns.).  
 Middle Eocene (Bridger); Wyoming.

**Viverravus minutus** Wortman.

- Wortman, J. L. 1901 B, xii, 147, fig. 21.  
 Chardin, T. 1915 A, 113.  
 Gregory, W. K. 1920 A, 151.  
 Matthew, W. D. 1909 C, 96.  
 1909 D, 341, 349, 357, pl. xliii, fig. 1; text-figs. 9-12.  
 Schlosser, M. 1904 B, 449.  
 Thorpe, M. R. 1923 A, 25.  
 Trouessart, E. L. 1904 A, 245.  
 Zittel and Schlosser 1923 A, 463, fig. 586.  
 Middle Eocene (Bridger); Wyoming.

**Viverravus nitidus** Marsh.

- Hay, O. P. 1902 A, 755.  
 Matthew, W. D. 1909 D, 341, 342.  
 Thorpe, M. R. 1923 A, 25 (This genus?).  
 Trouessart, E. L. 1904 A, 246.  
 Middle Eocene (Bridger); Wyoming.

**Viverravus politus** Matthew.

- Matthew, W. D. 1915 D, 28, figs. 20, 23.  
 Lower Eocene (Wasatch); Wyoming.

**Viverravus scarius** Matthew.

- Matthew, W. D. 1909 D, 341, 347, 349, 360, text-figs. 8, 13, 14.  
 Thorpe, M. R. 1923 A, 25.  
 Middle Eocene (Bridger); Wyoming.

**Viverravus** sp. indet.

- Matthew, W. D. 1909 C, 96. Middle Eocene (Bridger); Wyoming.

MIACINÆ Matthew.

- Matthew, W. D. 1909 D, 345, 351.  
 Abel, O. 1913 B, 714.  
 1919 A, 739.  
 1920 A, 422.  
 1922 C, 289.  
 Matthew, W. D. 1915 D, 16.

- Pohle, H. 1920 A, 61.  
 1924 A, 25, 29.  
 Weber and Abel 1928 A, 338.  
 Zittel and Schlosser 1911 A, 383.  
 1923 A, 463.

UINTACYON Leidy. Type *U. edax* Leidy.

- Hay, O. P. 1902 A, 759.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1901 A, 7.  
     1902 C, 286 (Uintacyon, Prodaphænus).  
     1909 C, 93, 100.  
     1909 D, 327, 342, 344, 346, 353, 372, 402.  
     1915 D, 18, 29.  
     1928 B, 962.  
 Osborn, H. F. 1905 I, 101.  
     1910 B, 127, 528.  
 Palmer, T. S. 1904 A, 699, 812.  
 Pohle, H. 1920 A, 61.  
 Schlosser, M. 1902 A, 134, 138.  
     1904 B, 448 (Uintacyon, Prodaphænus).  
 Scott, W. B. 1913 A, 555, 558.  
 Trouessart, E. L. 1904 A, 216.  
 Wallace, A. R. 1876 A, 1, 134.  
 Weber, M. 1904 A, 540, 541.  
 Winge, H. 1924 A, 177, 183, 242.  
 Wortman, J. L. 1901 A, 202.  
     1901 B, xi, 339, 445 (Uintacyon); 448, 449 (Prodaphænus).  
     1902 A, xiii, 46 (Uintacyon, Prodaphænus).  
 Zittel and Schlosser 1911 A, 383.  
     1923 A, 463.

**Uintacyon acutus** Thorpe.

- Thorpe, M. R. 1923 B, 222, fig. 4.  
 Upper Eocene (Uinta); Utah.

**Uintacyon bathygnathus** (Scott).

- Hay, O. P. 1902 A, 760.  
 Matthew, W. D. 1909 C, 96.  
     1909 D, 341, 349, 373 [U. (Miocyon)].  
 Schlosser, M. 1904 B, 449 (Miakis).  
 Trouessart, E. L. 1904 A, 216 (Syn. of U. vorax).  
 Middle Eocene (Bridger); Wyoming.

**Uintacyon edax** Leidy.

- Hay, O. P. 1902 A, 760.  
 Matthew, W. D. 1909 C, 96.  
     1909 D, 341, 342, 349, 374.  
 Schlosser, M. 1904 B, 448.  
 Thorpe, M. R. 1923 A, 27.  
 Trouessart, E. L. 1904 A, 216.  
 Wortman, J. L. 1901 B, xi, 445, 450, figs. 12-15.  
 Middle Eocene (Bridger); Wyoming.

**Uintacyon jugulans** Matthew.

- Matthew, W. D. 1909 D, 341, 349, 373, text-fig. 16.

MIACIS Cope. Type *M. parvivorus* Cope.

- Cope, E. D. 1872 PP, 2.  
 Hay, O. P. 1902 A, 760 (Prodaphænus); 761 (Vulpavus, in part; Harpalodon).  
 Adloff, P. 1903 A, 362, fig. 4.  
 Ameghino, F. 1902 D, 423 (Myakis).  
 Behlen, H. 1907 A, 273.  
 Chardin, T. 1915 A, 111.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1920 A, 239.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 393.  
 Lavocat, A. 1896 A, 26.

Thorpe, M. R. 1923 A, 27.

- Zittel and Schlosser 1911 A, 383.  
     1923 A, 463, fig. 587.  
 Middle Eocene (Bridger); Wyoming.

**Uintacyon major** Matthew.

- Matthew, W. D. 1909 D, 341, 349, 375, 376, text-fig. 17.  
 Thorpe, M. R. 1923 A, 27, 28.  
 Middle Eocene (Bridger); Wyoming.

**Uintacyon massetericus** (Cope).

- Hay, O. P. 1902 A, 755 (Viverravus).  
 Matthew, W. D. 1909 C, 93.  
     1909 D, 341, 361 (Didymictis); 349 (Uintacyon).  
     1915 D, 30, figs. 24, 25 (Didymictis).  
 Lower Eocene (Wasatch); Wyoming.

**Uintacyon massetericus rudis** Matthew.

- Matthew, W. D. 1915 D, 31, fig. 26.  
 Lower Eocene (Wasatch); Wyoming.

**Uintacyon scotti** (Wortman and Matthew).

- Hay, O. P. 1902 A, 760 (Prodaphænus).  
 Hatcher, J. B. 1902 F, 77, fig. 4 (Prodaphænus).  
 Matthew, W. D. 1909 C, 98.  
     1909 D, 341, 343.  
 Schlosser, M. 1902 A, 135 (Prodaphænus).  
     1902 J, 153 (Prodaphænus).  
 Thorpe, M. R. 1923 A, 28.  
 Trouessart, E. L. 1904 A, 217 (Prodaphænus).  
 Wortman, J. L. 1901 A, 202 (Prodaphænus).  
     1901 B, xi, 450, fig. 17 (Prodaphænus).  
 Upper Eocene (Uinta); Wyoming.

**Uintacyon vorax** Leidy.

- Hay, O. P. 1902 A, 760.  
 Matthew, W. D. 1909 C, 96.  
     1909 D, 341, 342, 349, 374, pl. xlvii, fig. 2.  
     1915 D, 32 (This species?).  
 Schlosser, M. 1904 B, 449.  
 Thorpe, M. R. 1923 A, 27.  
 Trouessart, E. L. 1904 A, 216.  
 Wortman, J. L. 1901 B, xi, 448, fig. 16.  
 Middle Eocene (Bridger); Wyoming.

**Uintacyon sp. indet.**

- Matthew, W. D. 1909 C, 96. Middle Eocene (Bridger); Wyoming.

Lemoine, V. 1889 A, 237.

- Matthew, W. D. 1909 C, 100.  
     1909 D, 564 (Miakis); 343, 362 (Neovulpavus, a syn.); 341, 349 (Miocyon, subg.); 346 (Lycarion, subg.); 342, 346, 353, 362 (Harpalodon, subg.); 327, 341, 343, 353, 362 (Prodaphænus).  
     1915 D, 18, 32, fig. 27.  
     1921 H, 511.  
     1924 C, 122, 128, 748 (Miakis, Prodaphænus).  
     1928 B, 962, 972, 974, figs. 12, 13.

- Osborn, H. F. 1905 I, 101 (*Prodaphænus*).  
 1907 G, 50, figs. 38, 43.  
 1909 D, 46.  
 1910 B, 127, 134, 170, 528.  
 1912 G, 236, fig. 3.

Palmer, T. S. 1904 A, 420, 812 (*Miacis*); 311, 812 (*Harpalodon*); 568, 812 (*Prodaphænus*).

Pohle, H. 1920 A, 48.  
 1924 A, 27.

Scott, W. B. 1913 A, 555, 558.

Seeley, H. G. 1886 A, 418.

Weber and Abel 1928 A, 337, 340.

Winge, H. 1924 A, 177, 183, 242.

Zittel and Schlosser 1911 A, 383.

1923 A, 463, 667 (*Miacis*; *Myocyon* syn. of *Uintacyon*).

### ***Miacis exiguus* Matthew.**

Matthew, W. D. 1915 D, 33, figs. 27-29.  
 Lower Eocene (Wasatch); Wyoming.

### ***Miacis hargerii* (Wortman).**

Wortman, J. L. 1901 B, xi, 342, 347, figs. 2-11 (*Vulpavus*).

Ameghino, F. 1906 B, 14 (*Vulpavus*).

Matthew, W. D. 1909 C, 96.

1909 D, 341, 343, 349, 364, 369, text-fig. 15 [M. (*Lycarion*)].

Schlosser, M. 1904 B, 447 (*Vulpavus*).

Thorpe, M. R. 1923 A, 26 [M. (*Lycarion*)].

Trouessart, E. L. 1904 A, 216 (*Vulpavus*).

Middle Eocene (Bridger); Wyoming.

### ***Miacis latidens* Matthew.**

Matthew, W. D. 1915 D, 34, figs. 27, 30.  
 Lower Eocene (Wind River); Wyoming.

### ***Miacis medius* Matthew.**

Matthew, W. D. 1909 D, 341, 349, 364, 370, text-fig. 15 [M. (*Lycarion*)].  
 1924 C, 128.

Middle Eocene (Lower Washakie); Wyoming.

### ***Miacis parvivorus* Cope.**

Cope, E. D. 1872 PP, 2.

Hay, O. P. 1902 A, 761 (*Vulpavus*).

Matthew, W. D. 1909 C, 96.

1909 D, 365, 572, fig. 15.

Matthew and Granger 1925 D, 5.

### **MIMOCYON Peterson. Type *M. longipes* Peterson.**

Peterson, O. A. 1919 A, 48.

Matthew and Granger 1925 D, 5 (*Miacis*).

### **VASSACYON Matthew. Type *Uintacyon promicrodon* (Wortman and Matthew).**

Matthew, W. D. 1909 C, 93, 100.

Gregory, W. K. 1920 A, 239.

Matthew, W. D. 1909 D, 327, 341, 343, 346, 347, 376.

1915 D, 17, 18, 39, fig. 40.

1925 B, 962.

Pohle, H. 1920 A, 61.

Winge, H. 1924 A, 177, 183, 242.

Zittel and Schlosser 1911 A, 383.

1923 A, 463.

Schlosser, M. 1902 A, 136 (*Vulpavus*).

Thorpe, M. R. 1923 A, 26.

Trouessart, E. L. 1904 A, 216 (*Vulpavus*).

Wortman, J. L. 1901 B, xi, 444 (*Vulpavus*).

Lower Eocene (Bridger); Wyoming.

### ***Miacis robustus* Peterson.**

Peterson, O. A. 1919 A, 50, pl. xxxiv, figs. 3-5 (*Prodaphænus*?).

Upper Eocene (Uinta); Utah.

### ***Miacis sylvestris* (Marsh).**

Hay, O. P. 1902 A, 761 (*Harpalodon*).

Matthew, W. D. 1909 C, 96.

1909 D, 341, 349, 364, 370, text-fig. 15.

1924 C, 128.

Thorpe, M. R. 1923 A, 26 [M. (*Harpalodon*)].

Wortman, J. L. 1901 B, xii, 201, fig. 38 (*Harpalodon*).

Middle Eocene (Bridger); Wyoming.

### ***Miacis uintensis* Osborn.**

Hay, O. P. 1902 A, 760 (*Prodaphænus*).

Matthew, W. D. 1909 C, 93.

1909 D, 341, 371.

Thorpe, M. R. 1923 B, 220.

Upper Eocene (Uinta); Utah.

### ***Miacis vulpinus* (Scott and Osborn).**

Hay, O. P. 1902 A, 760 (*Uintacyon*).

Matthew, W. D. 1909 C, 986.

1909 D, 349, 372 (*Miacis*); 241, 372 (*Amphicyon*).

Peterson, O. A. 1919 A, 48.

Upper Eocene (Uinta); Utah.

### ***Miacis washakius* (Wortman).**

Wortman, J. L. 1901 B, xi, 445 (*Neovulpavus*).

Matthew, W. D. 1909 C, 98 (*Miacis*).

1909 D, 341, 343, 370 (*Neovulpavus*); 341,

343, 349, 364, 370, text-fig. 15 (*Miacis*).

Trouessart, E. L. 1904 A, 216 (*Neovulpavus*).

Wortman and Matthew 1899 A, 110, figs. 4-6 (*Vulpavus palustris*; not of Marsh).

Eocene (Washakie); Wyoming.

### ***Miacis* sp. indet.**

Matthew, W. D. 1909 C, 93, 96. Eocene (Wasatch, Wind River, Bridger); Wyoming.

1909 D, 349.

### ***Mimocyon longipes* Peterson.**

Peterson, O. A. 1919 A, 48, pl. xxxiv, figs. 6-10. Matthew and Granger 1925 D, 5 (*Miacis*).

Upper Eocene (Uinta); Utah.

OÖDECTES Wortman. Type *O. herpestoides* Wortman.

Wortman, J. L. 1901 B, xii, 148.

Chardin, T. 1915 A, 113.

Haug, E. 1911 A, 1528.

Lydekker, R. 1904 C, 62.

Matthew, W. D. 1909 C, 100.

1909 D, 573.

1915 D, 18.

Osborn, H. F. 1909 D, 46, 52.

1910 B, 131, 134, 528.

Palmer, T. S. 1904 A, 476, 840.

Peterson, O. A. 1919 A, 54.

Pohle, H. 1920 A, 61.

Schlosser, M. 1910 A, 506.

Scott, W. B. 1913 A, 558.

Winge, H. 1924 A, 177, 183, 242.

Wortman, J. L. 1902 A, xiii, 46.

Zittel and Schlosser 1911 A, 384.

1923 A, 464, 667.

**Oödetes herpestoides** Wortman.

Wortman, J. L. 1901 B, xii, 148, 193, figs. 22-35.

Matthew, W. D. 1909 C, 96.

1909 D, 341, 349, 377.

Schlosser, M. 1904 B, 451.

PLEUROCYON Peterson. Type *P. magnus* Peterson.

Peterson, O. A. 1919 A, 52.

**Pleurocyon magnus** Peterson.

Peterson, O. A. 1919 A, 52, pl. xxxv.

Upper Eocene (Uinta); Utah.

VULPAVUS Marsh. Type *V. palustris* Marsh.

Hay, O. P. 1902 A, 761.

Ameghino, F. 1906 B, 14.

Chardin, T. 1922 A, 56 (*Vulpavus*, *Phlaodectes*).

Gregory, W. K. 1920 A, 149, 239, fig. 79.

Haug, E. 1911 A, 1528.

Kraglievich, L. 1925 A, 191.

Lydekker, R. 1904 C, 62, fig. 3.

Matthew, W. D. 1901 A, 7.

1909 C, 100.

1909 D, 318, 323, 324, 325, 340, 346, 347,

379, 382, 385, 390, 394, 399, 402, text-figs. 2-4.

1915 D, 18, 36.

1924 E, 748.

1928 B, 962, 974, fig. 13.

Osborn, H. F. 1905 I, 101.

1907 G, 89.

1909 D, 46, 52.

1910 B, 127, 134, 528.

1912 G, 236, fig. 3.

Peterson, O. A. 1919 A, 54.

Pohle, H. 1920 A, 58, fig. 8.

1924 A, 29.

Schlosser, M. 1902 A, 134.

1904 B, 447, 449.

Scott, W. B. 1913 A, 555, 558.

Trouessart, E. L. 1904 A, 215.

Weber, M. 1904 A, 540, 541.

Weber and Abel 1928 A, 336, 338.

Winge, H. 1924 A, 177, 183, 242.

Wortman, J. L. 1901 B, xi, 339, 341, 437, 442.

1902 A, xiii, 46.

Thorpe, M. R. 1923 A, 28.

Trouessart, E. L. 1904 A, 246.

Middle Eocene (Bridger); Wyoming.

**Oödetes proximus** Matthew.

Matthew, W. D. 1909 D, 341, 347, 349, 378, text-figs. 8, 18-22.

Middle Eocene (Bridger); Wyoming.

**Oödetes pugnax** (Wortman and Matthew).

Hay, O. P. 1902 A, 760 (Uintacyon).

Matthew, W. D. 1909 C, 96 (This genus?).

1909 D, 341, 349, 377.

Schlosser, M. 1904 B, 449 (Uintacyon).

Trouessart, E. L. 1904 A, 216 (Uintacyon).

Wortman, J. L. 1901 B, xi, 448 (Uintacyon).

Middle Eocene (Bridger); Wyoming.

**Oödetes** sp. indet.

Matthew, W. D. 1909 C, 93, 96. Eocene (Wind River, Bridger); Wyoming.

1909 D, 349.

**Pleurocyon medius** Peterson.

Peterson, O. A. 1919 A, 59.

Upper Eocene (Uinta); Utah.

Zittel and Schlosser 1911 A, 384.

1923 A, 464, 667.

**Vulpavus australis** Matthew.

Matthew, W. D. 1915 D, 39, figs. 31, 33.

Lower Eocene (Wasatch); New Mexico.

**Vulpavus canavus** (Cope).

Hay, O. P. 1902 A, 760 (Uintacyon canavus, U. brevirostris).

Matthew, W. D. 1909 C, 93 (V. canavus, V. brevirostris).

1909 D, 341, 349 (Miacis canavus, M. brevirostris).

1915 D, 37, figs. 31, 32 (Miacis brevirostris a syn.).

Trouessart, E. L. 1904 A, 216 (Uintacyon brevirostris); 217 (Prodaphænus).

Wortman, J. L. 1901 B, xi, 448 (Uintacyon brevirostris); 450 (Prodaphænus canavus).

Lower Eocene (Wind River, Big Horn); Wyoming.

**Vulpavus completus** Matthew.

Matthew, W. D. 1909 D, 341, 349, 398.

Middle Eocene (Bridger); Wyoming.

**Vulpavus ovatus** Matthew.

Matthew, W. D. 1909 D, 341, 349, 391, pl. xliii, fig. 3; text-figs. 32-41 [V. (Phlaodectes)].

Middle Eocene (Bridger); Wyoming.

**Vulpavus palustris** Marsh.

- Hay, O. P. 1902 A, 761.  
 Matthew, W. D. 1909 C, 96.  
     1909 D, 340, 341, 349, 370, 380.  
 Schlosser, M. 1902 A, 135.  
     1904 B, 447.  
 Thorpe, M. R. 1923 A, 28.  
 Trouessart, E. L. 1904 A, 215.  
 Wortman, J. L. 1901 B, xi, 341, fig. 1.  
 Wortman and Matthew 1899 A, 118 (Not of Marsh).  
     Middle Eocene (Bridger); Wyoming.

**Vulpavus profectus** Matthew.

- Matthew, W. D. 1909 D, 341, 347, 349, 382, pl. xliii, fig. 2; pl. xlviii, fig. 2; text-figs. 23-31.

**PALÆARCTONYX** Matthew.

- Matthew, W. D. 1909 D, 327, 341, 343, 344, 346, 348, 353, 399, 402.  
 Chardin, T. 1922 A, 56.  
 Matthew, W. D. 1915 D, 18.  
     1923 B, 975.  
 Pohle, H. 1920 A, 59.  
 Zittel and Schlosser 1911 A, 384.  
     1923 A, 464.

**ZIPHACODON** Marsh. Type *Z. rugatus* Marsh.

- Hay, O. P. 1902 A, 761.  
 Matthew, W. D. 1909 D, 342.  
 Palmer, T. S. 1904 A, 715, 812.  
 Trouessart, E. L. 1904 A, 171 (Syn. of *Viverravus*).

The position of this genus is at present indeterminate.

**CREOTARSIDÆ**, new family.

The position of this family is not determined.

**CREOTARSUS** Matthew. Type *C. lepidus* Matthew.

- Matthew, W. D. 1918 H, 611.

- Abel, O. 1913 B, 715, fig. 19.  
     1920 A, 422, fig. 688.  
     1922 C, 289, fig. 243.  
 Lydekker, R. 1910 F, 654, fig. 1.  
 Peterson, O. A. 1919 A, 58.  
 Pohle, H. 1920 A, 55, 59, fig. 6.  
     1924 A, 30.  
 Weber and Abel 1923 A, 338, fig. 205.  
     Middle Eocene (Bridger); Wyoming.

**Vulpavus** sp. indet.

- Matthew, W. D. 1909 C, 93, 96. Lower Eocene (Wasatch); New Mexico.  
     1909 D, 349. Middle Eocene (Bridger); Wyoming.  
 Reeside, J. B. 1924 A, 46. Lower Eocene (Wasatch); New Mexico.

Type *M. meadi* Matthew.**Palæarctonyx meadi** Matthew.

- Matthew, W. D. 1909 D, 346, 349, 402, text-figs. 42-46.  
     Middle Miocene (Bridger); Wyoming.

**Zipbacodon rugatus** Marsh.

- Hay, O. P. 1902 A, 761.  
 Matthew, W. D. 1909 D, 341, 342.  
 Thorpe, M. R. 1923 A, 39.  
 Trouessart, E. L. 1904 A, 245 (Syn. of *Viverravus gracilis*).  
 Wortman, J. L. 1901 B, xxi, 200, fig. 37 (Syn. of *Viverravus gracilis*).  
     Middle Eocene (Bridger); Wyoming.

**Suborder FISSIPEDA** Fischer de Waldheim.

- Fischer de Waldheim, G. 1813, *Geognosia*, II, 454.

Unless otherwise indicated the authors, as cited, spell this name *Fissipedia*.

- Hay, O. P. 1902 A, 762.  
 Abel, O. 1904 A, 183 ("fissipedier").  
     1912 D, 599 ("fissipedier").  
     1912 F, 174 ("fissipedier").  
     1913 B, 712, 715, 718.  
     1913 C, 199.  
     1914 A, 70.  
     1920 A, 421 ("fissipedier").  
     1921 A, 141.  
 Arldt, T. 1907 D, 654.  
 Beddard, F. E. 1902 A, 387.  
 Bonaparte, C. L. 1832 A, 292 (*Fissipedes*).

- Case, E. C. 1899 B, 180 (*Fissipeda*).  
 Cope, E. D. 1891 N, 75, 90.  
 Cuvier, G. 1825 A, iv, 227-483, pls. xiii-xxxviii ("carnassiers").  
 Doran, A. H. G. 1878 A, 390.  
 Fischer, J. B. 1829 A, 141 (*Feræ*).  
 Gaupp, E. 1913 A, 125 ("fissipedier").  
 Gregory, W. K. 1910 A, 309, 465 (*Crassidentia*=*Fissipedia*+*Miacidæ*).  
     1920 A, 148, 238.  
 Hay, O. P. 1912 D, 769.  
     1914 A, 474.  
 Hilzheimer, M. 1913 A, 566.  
 Hogben, L. T. 1919 A, 74.  
 Kampfen, P. N. 1905 A, 539.  
 Lull, R. S. 1917 B, 562.



- Matthew, W. D. 1905 D, 36.  
 1907 B, 535.  
 1909 C, 99, 103, 105, 106, 107-110.  
 1909 D, 317, 354, 355, 411, 551.  
 1912 B, 184.  
 1915 A, 217.  
 1915 D, 4 (Feræ).  
 Osborn, H. F. 1907 G, 12, 131, 142.  
 1909 D, 33.  
 1925 C, 751.  
 Owen, R. 1857 E (Digitigrada, Plantigrada).  
 1858 A, 31 (Digitigrades, Plantigrades).  
 Pohle, H. 1920 A, 57.  
 Reynolds, S. H. 1897 A, 388.  
 Schlosser, M. 1897 B, 19.  
 1904 B, 447 (Carnassidentata).  
 Schwarz, E. 1912 B, 4 (Carnivora vera).

- Scott, W. B. 1913 A, 681.  
 1917 A, 32.  
 Steinmann, G. 1907 A, 470.  
 Stromer, E. 1916 A, 404.  
 Terra, P. 1911 A, 280.  
 Trouessart, E. L. 1904 A, 177 (Carnivora).  
 Weber, M. 1886 A, 231.  
 1904 A, 515.  
 Weber and Abel 1928 A, 301, 335.  
 Weber and Burlet 1927 A, xv.  
 Winge, H. 1924 A, 177 (Carnivora vera).  
 Woodward, A. S. 1923 C, 21 (Carnivora vera).  
 Wortman, J. L. 1901 B, xi, 337, 338; xii, 281 (Carnassidentia).  
 1902 A, xiv, 144 (Carnassidentia).  
 Zittel and Schlosser 1911 A, 384.  
 1923 A, 464, 482.

### *Superfamily URSOIDÆ, new form.*

Unless otherwise indicated, the authors, as cited, employ for this superfamily the name Arctoidea.

- Hay, O. P. 1902 A, 762 (Arctoidea); 769 (Cynoidea).  
 Abel, O. 1912 F, 500.  
 1913 B, 718.  
 1913 C, 199.  
 1914 A, 63, 70.  
 1919 A, 743.  
 1920 A, 422.  
 1922 C, 289.  
 Anderson, R. J. 1902 B, 368 ("arctoids").  
 Beddard, F. E. 1902 A, 424.  
 Brown, A. E. 1904 B, 90.  
 Gill, T. 1872 B, 58.  
 Gregory, W. K. 1910 A, 100.  
 1920 A, 239.  
 Hilzheimer, M. 1913 A, 566.  
 Jaekel, O. 1911 A, 229 (Urso-Canidi).  
 Kükenenthal, W. 1913 A, 501.

- Lockington, W. N. 1884 A, 431.  
 Matthew, W. D. 1909 C, 316, 330 (Arctoidea); 345 (Cynoidea).  
 1915 K, 445.  
 Moodie, R. L. 1922 C, 359 (Cynoidea).  
 Osborn, H. F. 1910 B, 528.  
 Pohle, H. 1920 A, 57.  
 Puccioni, N. 1908 A, 41 (Cynoidea).  
 Rehs, J. 1914 A, 56.  
 Reynolds, S. H. 1897 A, 369, 437, 438 (Cynoidea, Arctoidea).  
 Schwarz, E. 1912 B, 3 (Arctoidea, Cynoidea).  
 Scott, W. B. 1896 D, 54 (Cynoidea, Arctoidea).  
 Stromer, E. 1902 A, 230.  
 Weber, M. 1904 A, 528, 533.  
 Weber and Abel 1928 A, 318, 324, 329, 342 (Arctoidea).  
 Weber and Burlet 1927 A, xv (Arctoidea).  
 Winge, H. 1896 A, 126 (Arctoidei).  
 1924 A, 177, 192, 197 (Arctoidea).

### CANIDÆ Gray.

- Gray, J. E. 1821 A, 301.  
 Hay, O. P. 1902 A, 769.  
 Abel, O. 1912 F, 501.  
 1913 B, 717.  
 1914 A, 78.  
 1919 A, 747.  
 Ameghino, F. 1889 A, 1007.  
 1902 D, 423 ("canidés").  
 1905 A, 8.  
 1906 B, 9.  
 1912 B, 177 ("canidés").  
 Anderson, R. J. 1901 A, 682.  
 Anthony, R. 1912 A.  
 Arldt, T. 1907 B, 449 ("caniden").  
 1907 D, 643.  
 1912 A, 702.  
 Baird, S. F. 1876 A, ccviii ("dogs").  
 Bardenheath, K. S. 1913 A, 86.  
 Bateson, W. 1892 A, 105.  
 Bayer, F. 1897 A, 147.  
 Beddard, F. E. 1902 A, 413.  
 Behlen, H. 1907 A ("caniden").  
 Birula, A. A. 1913 A, 240.  
 Black, D. 1915 A, 353.  
 Bluntschli, H. 1912 B, 362 ("caniden").

- Boas, J. E. V. 1909 A, 529 ("caniden").  
 1914 B, 579 ("caniden").  
 Bonaparte, C. L. 1832 A, 287 (Canina).  
 Brandt and Woldrich 1887 A, 33 (Canina).  
 Carlsson, A. 1914 A, 228.  
 Carus, V. 1875 A, 123 (Canida).  
 Case, E. C. 1899 B, 180.  
 Chandler, A. C. 1914 B, 134.  
 Cleland, J. 1863 B, 297 ("dogs").  
 Cope, E. D. 1891 N, 76 ("dogs").  
 Cuvier, F. 1807 A, 126 ("chiens").  
 1825 A, 95 ("chiens").  
 Depéret, C. 1906 A, 618 ("canidés").  
 1907 B ("canidés").  
 1908 A, 307.  
 1912 A, 708 ("canidés").  
 Doran, A. H. G. 1873 A, 394, 406.  
 Dubois, E. 1922 A, 320 ("caniden").  
 Eaton, J. E. 1928 A, 133 ("wolves").  
 Elliot, D. G. 1901 A, 299.  
 Filhol, H. 1889 A, 222 ("canidés").  
 Frassetto, F. 1903 A, 220, 234.  
 Geoffroy St.-Hilaire, E. F. 1824 II, 263 ("chiens").  
 Gervais, P. 1859 A, 211 ("canidés").

- Ghigi, A. 1900 B, 99 ("cani").  
 Gidley, J. W. 1913 B, 99, figs. 4-8 ("canids").  
 Giebel, C. G. 1883 A ("caninen").  
 Grant, M. 1904 B, 194, 205.  
 Gregory, W. K. 1914 E, 526.  
 1927 A, 601 ("dogs").  
 Grevé, C. 1891 A, 400 ("caniden").  
 Hay, O. P. 1912 D, 776.  
 1914 A, 483.  
 1923 A, 312.  
 1927 E, 77 ("dogs").  
 Hiltzheimer, M. 1905 A ("caniden").  
 Hoernes, R. 1886 A, 694.  
 Hoever, R. 1911 A, 81 ("caniden").  
 Hrdlička, A. 1903 A, 372.  
 Huxley, T. H. 1880 C, 4.  
 1880 D, 404.  
 1880 F, 162.  
 Ihering, H. 1909 A, 285 ("hunde").  
 1910 A, 136.  
 Jaeger, G. F. 1842 A, 435 ("hunde").  
 Kampfen, P. N. 1905 A, 520.  
 Köstlin, O. 1844 A ("hunde").  
 Koken, E. 1901 B, 220 ("caniden").  
 Laloy, L. 1907 A, 587 ("canidés").  
 Leche, W. 1897 A.  
 Leunis and Ludwig 1883 A, 187.  
 Lobley, J. L. 1908 A, 194, 200, 204.  
 Lockington, W. N. 1884 A, 408 (Cynoidea, Canidæ).  
 Lönnberg, E. 1918 A, 3.  
 Lull, R. S. 1904 C, 3.  
 1917 B, 563.  
 Lydekker, R. 1903 D, 124.  
 1910 E, 352 ("wolves").  
 Martins, C. 1857 A, 68 ("chiens").  
 Matthew, W. D. 1901 A, 7, 18.  
 1902 C, 284.  
 1903 D, 912.  
 1905 D, 39.  
 1907 A, 179, 180, 187, 199.  
 1909 C, 123.  
 1909 D, 330, 353, 354.  
 1910 G, 158.  
 1912 B, 185.  
 1913 B, 291.  
 1914 G, 234, fig. 9.  
 1915 A, 187, 217, 218, 219.  
 1915 K, 445, fig. 17.  
 1918 A, 189, 194.  
 1924 C, 118, 121, 122, fig. 28.  
 1924 E, 745.  
 1928 B, 973, 974, fig. 13.  
 Matthew and Granger 1924 A, 6.  
 Mead, C. S. 1906 A, 481.  
 Meckel, J. F. 1825 A ("hunde").  
 Merriam, J. C. 1903 B, 277.  
 1906 A, 36, 64.  
 Miller, G. S. 1912 B, 77.  
 1924 C, 143.  
 Moodie, R. L. 1916 E, 141.  
 Nehring, A. 1890 A, 34 ("caniden").  
 Neuville, H. 1915 A, 7 ("canidés").  
 Noack, T. 1907 A, 660 ("hunde").  
 1910 A, 457 ("fuchse, wölfe").  
 O'Harra, C. C. 1910 A, 78.  
 O'Harra, C. C. 1920 A, 78.  
 Osborn, H. F. 1902 A, 87 ("dogs").  
 1905 H, 218.  
 1905 I, 101.  
 1909 D, 123.  
 1910 B, 609.  
 Owen, R. 1888 A, 369.  
 Pictet, F. J. 1853 A, 202, pl. iii, fig. 12 ("chiens").  
 Pocock, R. I. 1914 B, 913.  
 1916 F, 262.  
 Pohl, L. 1909 A, 382 ("caniden").  
 Puccioni, N. 1908 A, 49 ("cani").  
 Rehs, J. 1914 A, 56.  
 Reynolds, S. H. 1897 A, 539 (Canidæ, "dog").  
 1909 A, 1, pls. i-vi.  
 1910 A, 507.  
 Scharff, R. F. 1911 A, 149.  
 Schlegel, R. 1912 A, 1-29 ("caniden").  
 Schlosser, M. 1897 B, 18 ("caniden").  
 1902 A, 134.  
 1902 B, 297.  
 1902 J, 257.  
 1903 I, 26, 219 ("caniden").  
 1904 B, 447 ("caniden").  
 Schmidt, O. 1886 A, 259.  
 Schwarz, E. 1924 A, 420 ("dogs").  
 Slater, P. L. 1875 A, 207.  
 Scott, W. B. 1896 D, 54 ("dogs").  
 1913 A, 517, 518, 520, 527, 677.  
 1917 A, 32.  
 Seeley, H. G. 1886 A, 516.  
 Seton, E. T. 1909 A, 700.  
 Strecker, C. 1887 A, 317 ("canisarten").  
 Stromer, E. 1902 B, 554 ("caniden").  
 1906 A, 216.  
 Studer, T. 1901 A ("hunderassen").  
 1906 A, 23.  
 Taets, W. 1913 A, 5-178 ("hunde").  
 Taschenberg, O. 1899 A, 4492.  
 Terra, P. 1911 A, 284.  
 Tims, H. W. M. 1901 A, 282.  
 1902 A, 336.  
 1905 B, 1786.  
 Tornier, G. 1888 A, 255 ("caniden").  
 1891 A, 122 ("caniden").  
 1894 B, 104 ("caniden").  
 Trouessart, E. L. 1904 A, 215.  
 Vicq-d'Azyr, F. 1792 A, cvi (Canini).  
 Virchow, H. 1917 B, 323 ("caniden").  
 Wagner, R. 1843 A ("hunde").  
 Wallace, A. R. 1876 A, I, 118, 125, 134, 267; II, 197.  
 1894 A, 435.  
 Weber, M. 1904 A, 533.  
 Weber and Abel 1928 A, 307, 318, 324.  
 Wiegmann, F. R. 1838 B, 261, 286 ("hunde").  
 Williston, S. W. 1910 G, 596 ("dogs").  
 Windle, B. C. A. 1890 A, 5.  
 Winge, H. 1924 A, 177, 192, 197 (Canini).  
 Woodward, A. S. 1898 D, 336.  
 Wortman, J. L. 1901 A, 201.  
 1901 B, xi, 338, 343.  
 Zittel and Schlosser 1911 A, 386.  
 1923 A, 466, 482.

## CYNODICTINÆ Schlosser.

- Schlosser, M. 1911, in Zittel and Schlosser 1911 A, 386 (Cynodictinæ); 389 (Cynodontinæ).  
 Weber and Abel 1928 A, 328.  
 Zittel and Schlosser 1923 A, 466, 670 (Cynodictinæ); 469 (Cynodontinæ).

PROCYNODICTIS Wortman and Matthew. Type *P. vulpiceps* Wortman and Matthew.

- Hay, O. P. 1902 A, 760.  
 Matthew, W. D. 1909 D, 343.  
 Osborn, H. F. 1910 B, 169, 170, 528.  
 Palmer, T. S. 1904 A, 568, 812.  
 Scott, W. B. 1913 A, 529, 530.  
 Trouessart, E. L. 1904 A, 217.  
 Wortman, J. L. 1901 B, xi, 443, 450.  
 Zittel and Schlosser 1911 A, 386.  
 1923 A, 466, 689.  
**Procyonictis vulpiceps** Wortman and Matthew.  
 Hay, O. P. 1902 A, 760.  
 Matthew, W. D. 1903 B, 210.  
 1909 C, 99.  
 1909 D, 341.  
 Schlosser, M. 1902 A, 136.  
 Thorpe, M. R. 1923 B, 221.  
 Trouessart, E. L. 1904 A, 217.  
 Upper Eocene (Uinta); Utah.

CYNODICTIS Bravard and Pomel. Type *C. parisiensis* Pomel.

- Hay, O. P. 1902 A, 771.  
 Beddard, F. E. 1902 A, 423.  
 Carlsson, A. 1914 A, 227.  
 Chardin, T. 1915 A, 119, 129.  
 1922 A, 98.  
 Depéret, C. 1906 A, 618.  
 1908 A, 167.  
 1912 A, 708.  
 Frick, C. 1926 A, 16.  
 Gaudry, A. 1891 C, 53.  
 Gervais, F. 1859 A, 216.  
 Gregory, W. K. 1912 C, 189.  
 1920 A, 151.  
 Hatcher, J. B. 1902 F, 83.  
 Haug, E. 1911 A, 1528.  
 Huxley, T. H. 1880 C, 4.  
 1880 D, 447, 455.  
 Lydekker, R. 1904 C, 62.  
 Martin, R. 1906 A, 411.  
 Matthew, W. D. 1901 B, 369, 371, 380.  
 1906 C, 214.  
 1907 A, 181, 182.  
 1907 B, 534.  
 1909 C, 110.  
 1909 D, 353.  
 1915 A, 197, 219, 221.  
 1915 K, 420.  
 1924 C, 107, 119, 122, fig. 28.  
 1924 E, 748.  
 1928 B, 973, 974, fig. 13.  
 Matthew and Granger 1924 B, 8, fig. 6.  
 1925 D, 5.  
 Merriam, J. C. 1906 A, 58, 59.  
 O'Harra, C. C. 1910 A, 79, 146.  
 Osborn, H. F. 1907 G, 196, fig. 196.  
 1909 D, 57, 61, 63.  
 Palmer, T. S. 1904 A, 210, 824.  
 Pictet, F. J. 1853 A, 207.  
 Schlosser, M. 1902 A, 137.  
 1902 B, 298.  
 1902 J, 163, 285.  
 1903 I, 26, 211 (Cynodictis); 25 (Galecynus).  
 1904 B, 447.  
 Schmidt, O. 1886 A, 271.  
 Scott, W. B. 1913 A, 254, 530, 547.  
 Seeley, H. G. 1886 A, 517 (Galecynus).  
 Sinclair, W. J. 1924 A, 106.  
 Stromer, E. 1902 A, 256.  
 1902 B, 554, 561.  
 Studer, Th. 1906 A, 56.  
 Thorpe, M. R. 1922 E, 425.  
 1923 E, 241.  
 Tomes, C. S. 1906 A, 56, fig. 25.  
 Trouessart, E. L. 1904 A, 223.  
 Weber, M. 1904 A, 534, 540, 541.  
 Weber and Abel 1928 A, 328.  
 Winge, H. 1924 A, 177, 193, 195, 242.  
 Woodward, A. S. 1898 D, 330.  
 Wortman, J. L. 1901 B, xi, 443.  
 Zittel and Schlosser 1911 A, 387.  
 1923 A, 467, 668.  
**Cynodictis angustidens** (Marsh).  
 Hay, O. P. 1902 A, 772 (Daphnœus).  
 Lydekker, R. 1884 A, 247 (Amphicyon).  
 Thorpe, M. R. 1922 C, 162 (Amphicyon); 163, 164, 173 (Cynodictis).  
 1922 E, 425, fig. 1 (C. gregarius, a syn.).  
 Miocene (Valentine); Nebraska, South Dakota, Colorado.  
**Cynodictis gregarius** (Cope).  
 Hay, O. P. 1902 A, 771.  
 Cook, H. J. 1912 D, 36.  
 Dall and Harris 1892 A, 289 (Galecynus).  
 Darton, N. H. 1905 A, 173.  
 Hatcher, J. B. 1902 F, 105, pl. xvi, fig. 1; pl. xviii, figs. 2, 3.  
 Matthew, W. D. 1901 B, 357, 369, 380, pl. xxxvii.  
 1909 C, 105.  
 1924 C, 122, 123, fig. 28 (Nothocyon).  
 O'Harra, C. C. 1910 A, 80, fig. 12.  
 1920 A, 82, figs. 26, 27.  
 Schlosser, M. 1902 A, 137.  
 1902 J, 50 (Pseudocynodictis).  
 Scott, W. B. 1913 A, 529, fig. 260.  
 Seeley, H. G. 1886 A, 517 (Galecynus).  
 Sinclair, W. J. 1924 A, 102, 111.  
 Thorpe, M. R. 1922 E, 425, fig. 1 (Syn. of C. angustidens).  
 Trouessart, E. L. 1904 A, 223.  
 Zittel and Schlosser 1911 A, 387 (Galecynus).

Zittel and Schlosser 1923 A, 467 (Galecynus).

Oligocene (Middle); Colorado: (Brule);  
Nebraska, South Dakota.

**Cynodontis lippincottianus (Cope).**

Hay, O. P. 1902 A, 771 (C. lippincottianus,  
C. hylactor).

Cook, H. J. 1912 D, 36.

Lambe, L. M. 1908 A, 11, 61, pl. viii, figs. 9-14.

Matthew, W. D. 1901 B, 357, 380 (Amphicyon  
gracilis a syn.).  
1909 C, 105.

Schlosser, M. 1902 J, 50 (Pseudocynodontis).

Thorpe, M. R. 1922 E, 427.

Trouessart, E. L. 1904 A, 223, 224.

Oligocene (Middle); Colorado: Oligocene  
(Brule); Nebraska.

**Cynodontis oregonensis Merriam.**

Merriam, J. C. 1906 A, 4, 5, 11, pl. ii, figs.  
4, 5.

Matthew, W. D. 1909 C, 106.

Merriam and Sinclair 1907 A, 184, 188, 189.

Thorpe, M. R. 1922 C, 162.

1922 E, 427, 428.

Zittel and Schlosser 1923 A, 467 (Galecynus).  
Oligocene (Middle John Day); Oregon.

**Cynodontis paterculus Matthew.**

Matthew, W. D. 1903 B, 209.

1909 C, 103.

1910 A, 33.

Thorpe, M. R. 1922 C, 163.

1922 E, 428.

Zittel and Schlosser 1911 A, 387 (Galecynus).

1923 A, 467 (Galecynus).

Oligocene (Titanotherium); Montana, Colo-  
rado, South Dakota.

**Cynodontis temnodon Wortman and  
Matthew.**

Hay, O. P. 1902 A, 771.

Cook, H. J. 1912 D, 38.

Matthew, W. D. 1901 B, 357, 370.

1909 C, 106.

1918 A, 189.

O'Harra, C. C. 1920 A, 153.

Trouessart, E. L. 1904 A, 225.

Oligocene (Brule); Colorado, Nebraska.

**Cynodontis sp. indet.**

Cook, H. J. 1912 D, 34. Oligocene (Chadron);  
Nebraska.

Matthew, W. D. 1909 C, 103. Oligocene  
(Chadron); South Dakota, etc.

**CYNODON Aymard, A. Type *C. velaunus* Aymard.**

Aymard, A. 1848, Ann. Soc. Agri. Sci., Arts  
et Comm. du Puy, xii, 244.

1850 A, 110.

1851 A, 92, 118, pl.

Chardin, T. 1915 A, 134, 189.

Gervais, P. 1852 A, 115, explan. pl. xxv.

1859 A, 218.

Hoernes, R. 1886 A, 694.

Matthew, W. D. 1909 C, 110 (This genus?).

1915 K, 420.

1924 C, 121, 122.

Matthew and Granger 1924 B, 4, fig. 6.

Nicholson and Lydekker 1889 A, 1434.

Osborn, H. F. 1910 B, 189, 528.

Winge, H. 1924 A, 177, 193, 195, 243.

Zittel, K. A. 1893 B, 624.

Zittel and Schlosser 1911 A, 389.

1923 A, 469.

**Cynodon sp. indet.**

Cook, H. J. 1912 D, 34. Oligocene (Chadron);  
Nebraska or adjacent region.

**CYNODESMUS Scott. Type *C. thovides* Scott.**

Hay, O. P. 1902 A, 773.

Beddard, F. E. 1902 A, 424.

Matthew, W. D. 1907 A, 174, 181, 182, 186,  
192.

1909 C, 118.

1912 B, 185.

1918 A, 189.

1924 C, 107, 109, 118, 122, fig. 28.

1924 E, 748.

1928 B, 974, fig. 13.

Merriam, J. C. 1906 A, 58.

O'Harra, C. C. 1910 A, 80, 130.

Osborn, H. F. 1909 D, 75, 80.

1912 G, 249.

Palmer, T. S. 1904 A, 210, 824.

Romer and Sutton 1927 A, 462.

Schlosser, M. 1902 B, 299.

Scott, W. B. 1913 A, 522, 525, 530.

Thorpe, M. R. 1922 E, 434.

Zittel and Schlosser 1911 A, 387.

1923 A, 467, 672.

**Cynodesmus brachypus (Cope)**

Hay, O. P. 1902 A, 775 (Canis).

Cope and Matthew 1915 A, pl. cxix a, figs. 4,  
7; pl. cxix b; pl. cxix c, figs. 1-3 (Canis, Cyno-  
desmus).

Matthew, W. D. 1904 C, 253 (Canis).

1907 A, 186, 187, 188.

1909 C, 112.

Peterson, O. A. 1910 A, 209, 213, figs. 6, 10.

Lower Miocene (Laramie Peak); Wyoming.

**Cynodesmus cuspidatus Thorpe.**

Thorpe, M. R. 1922 E, 433, figs. 4, 5.

Upper Miocene (Valentine); Nebraska.

**Cynodesmus minor Matthew.**

Matthew, W. D. 1907 A, 172, 180, 181, 189.

1909 C, 112.

O'Harra, C. C. 1920 A, 155.

Miocene (Lower); South Dakota.

**Cynodesmus thomsoni** Matthew.

- Matthew, W. D. 1907 A, 172, 178, 180, 181, 186, figs. 4, 5.  
 Cook, H. J. 1912 D, 42.  
 Matthew, W. D. 1909 C, 112.  
 1924 C, 109.  
 O'Harra, C. C. 1920 A, 155.  
 Peterson, O. A. 1910 A, 209, 267, fig. 62.  
 Thorpe, M. R. 1922 E, 433.  
 Miocene (Upper Rosebud); South Dakota.

**Cynodesmus thoëides** Scott.

- Hay, O. P. 1902 A, 773.  
 Douglass, E. 1903 A, 151.

- Matthew, W. D. 1904 C, 253.  
 1907 A, 186.  
 1909 C, 112.

- Peterson, O. A. 1910 A, 209.  
 Scott, W. B. 1913 A, 522, fig. 255.  
 Sellards, E. H. 1916 B, 89.  
 Thorpe, M. R. 1922 C, 170.  
 1922 E, 433.  
 Miocene (Lower); Montana.

**Cynodesmus** sp. indet.

- Cook, H. J. 1912 D, 43. Miocene (Sheep Creek); Nebraska.

**NOTHOCYON** Matthew. Type *Canis geismarianus* Cope.

- Hay, O. P. 1902 A, 771.  
 Beddard, F. E. 1902 A, 415.  
 Frick, C. 1926 A, 6, 7.  
 Haug, E. 1911 A, 1705.  
 Ihering, H. 1910 A, 159.  
 Matthew, W. D. 1901 B, 380.  
 1907 A, 174, 180, 181, 182, 184, 192.  
 1909 C, 110, 118.  
 1918 A, 189.  
 1924 E, 748.  
 Merriam, J. C. 1906 A, 13, 58.  
 O'Harra, C. C. 1910 A, 80, 130.  
 Osborn, H. F. 1909 D, 131.  
 1910 B, 230, 236, 528.  
 1912 G, 248.  
 Palmer, T. S. 1904 A, 482, 825.  
 Romer and Sutton 1927 A, 462.  
 Schlosser, M. 1902 A, 137.  
 Scott, W. B. 1913 A, 530.  
 Studer, Th. 1901 A, 8.  
 1906 A, 31, 33, 56.  
 Trouessart, E. L. 1904 A, 234 (Subg. of *Canis*).  
 Weber and Abel 1928 A, 329, 340.  
 Winge, H. 1924 A, 231, 233.  
 Zittel and Schlosser 1911 A, 387.  
 1923 A, 467, 672.

**Nothocyon annectens** Peterson.

- Peterson, O. A. 1906 C, 53, figs. 14, 15.  
 Cook, H. J. 1909 D, 268.  
 1912 D, 40.  
 Matthew, W. D. 1909 C, 112.  
 O'Harra, C. C. 1920 A, 155.  
 Peterson, O. A. 1924 B, 303.  
 Thorpe, M. R. 1922 E, 429.  
 Lower Miocene (Harrison); Nebraska, South Dakota.

**Nothocyon geismarianus** (Cope).

- Hay, O. P. 1902 A, 771.  
 Matthew, W. D. 1901 B, 381 (*Cynodictis*).  
 1907 A, 180, 182.  
 1909 C, 106.  
 1924 C, 122, fig. 28.  
 Merriam, J. C. 1906 A, 4, 5.  
 Merriam and Sinclair 1907 A, 184, 189.  
 Schlosser, M. 1902 A, 137.  
 Seeley, H. G. 1886 A, 517 (*Galecyne*).  
 Studer, Th. 1906 A, 31, 33 (*Canis geismarus*).

- Zittel and Schlosser 1911 A, 387.  
 1923 A, 467.  
 Upper Oligocene (John Day); Oregon.

**Nothocyon geismarianus mollis** Merriam.

- Merriam, J. C. 1906 A, 4, 13, pl. ii, fig. 1; pl. iii, fig. 1.  
 Merriam and Sinclair 1907 A, 184, 188, 189.  
 Upper Oligocene (John Day); Oregon.

**Nothocyon gregorii** Matthew.

- Matthew, W. D. 1907 A, 171, 180, 183, fig. 1.  
 Cook, H. J. 1912 D, 39.  
 Matthew, W. D. 1909 C, 112.  
 O'Harra, C. C. 1920 A, 155.  
 Lower Miocene (Harrison); South Dakota: (Monroe Creek); Nebraska.

**Nothocyon latidens** (Cope).

- Hay, O. P. 1902 A, 771.  
 Matthew, W. D. 1907 A, 180, 182.  
 1909 C, 106.  
 1924 C, 123.  
 Merriam, J. C. 1906 A, 4, 5, 13, 15, pl. ii, figs. 6, 7.  
 Merriam and Sinclair 1907 A, 184, 188, 189.  
 Romer and Sutton 1927 A, 463.  
 Schlosser, M. 1902 A, 137.  
 Studer, Th. 1906 A, 31 (*Canis*).  
 Thorpe, M. R. 1922 C, 164.  
 Upper Oligocene (Middle John Day); Oregon.

**Nothocyon latidens multicuspis** Thorpe.

- Thorpe, M. R. 1922 E, 430, fig. 3.  
 Lower? Miocene; Nebraska.

**Nothocyon lemur** (Cope).

- Hay, O. P. 1902 A, 772.  
 Cook, H. J. 1912 D, 39 (This species?).  
 Matthew, W. D. 1907 A, 180, 182.  
 1909 C, 106, 112.  
 1924 C, 123.  
 Merriam, J. C. 1906 A, 4, 5, 12, 14, pl. ii, figs. 2, 3, 6, 7, 8.  
 Merriam and Sinclair 1907 A, 184, 188, 189, 191, 192.  
 Peterson, O. A. 1906 C, 24, 33 (This species?).

- Romer and Sutton 1927 A, 463.  
 Schlosser, M. 1902 A, 137.  
 Seeley, H. G. 1886 A, 517 (Galecygnus).  
 Studer, Th. 1906 A, 31 (Canis).  
 Thorpe, M. R. 1922 C, 165.  
     Upper Oligocene (John Day); Oregon:  
     Lower Miocene (Harrison?); Nebraska.
- Nothocyon vulpinus** Matthew.  
 Matthew, W. D. 1907 A, 171, 180, 183, fig. 2.  
     1909 C, 112.  
 O'Harra, C. C. 1920 A, 155.  
 Thorpe, M. R. 1922 E, 429.  
     Lower Miocene (Harrison); South Dakota.

**Nothocyon vulpinus coloradoënsis**  
 Thorpe.

- Thorpe, M. R. 1922 E, 430, fig. 2.  
     Lower Miocene; Colorado.

**Nothocyon sp. indet.**

- Cook, H. J. 1909 D, 266, fig. 5. Miocene  
 (Lower Harrison); Nebraska.  
     1912 D, 42. Miocene (Upper Harrison);  
     Nebraska.  
 Thorpe, M. R. 1922 E, 432.

**PERICYON** Thorpe. Type *P. socialis* Thorpe.

- Thorpe, M. R. 1922 C, 162, 172.  
 Zittel and Schlosser 1923 A, 467.

**Pericyon socialis** Thorpe.

- Thorpe, M. R. 1922 C, 172, fig. 3.  
     Upper Oligocene (Upper John Day); Ore-  
     gon.

**MESOCYON** Scott. Type *Temnocyon coryphæus* Cope.

- Hay, O. P. 1902 A, 773.  
 Cook, H. J. 1909 D, 262.  
 Matthew, W. D. 1903 D, 913 (= Hypotem-  
     nocyon).  
     1907 A, 174, 181, 182, 192.  
     1909 C, 110, 118.  
     1924 C, 119, 122, fig. 28.  
 Merriam, J. C. 1906 A, 58, 59.  
 Osborn, H. F. 1909 D, 68, 75.  
 Palmer, T. S. 1904 A, 342, 824 (Hypotemno-  
     don); 414, 825 (Mesocyon).  
 Peterson, O. A. 1910 A, 259.  
 Schlosser, M. 1898 I, 514 (Hypotemnodon).  
     1903 I, 26, 176 (Hypotemnodon).  
 Scott, W. B. 1913 A, 528, 530.  
 Studer, Th. 1906 A, 56 (Hypotemnodon).  
 Thorpe, M. R. 1922 C, 173.  
 Trouessart, E. L. 1904 A, 218.  
 Zittel and Schlosser 1911 A, 387.  
     1923 A, 467.

**Mesocyon brachyops** Merriam.

- Merriam, J. C. 1906 A, 4, 5, 17, 18, fig. 2.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 184, 191, 192.  
 Thorpe, M. R. 1922 C, 169.  
     Oligocene (Upper John Day); Oregon.

**Mesocyon coryphæus** (Cope).

- Hay, O. P. 1902 A, 773.  
 Cook, H. J. 1909 D, 264.  
 Matthew, W. D. 1903 D, 913 (Temnocyon).  
     1907 A, 182.  
     1909 C, 106.  
 Merriam, J. C. 1906 A, 4, 5, 16, 17, 21, fig. 3.  
 Merriam and Sinclair 1907 A, 184, 188, 189,  
     191, 192.  
 Schlosser, M. 1898 I, 516 (Hypotemnodon).  
 Thorpe, M. R. 1922 C, 168.  
 Trouessart, E. L. 1904 A, 218.  
     Oligocene (Middle John Day); Oregon.

**Mesocyon drummondianus** Douglass.

- Douglass, E. 1903 A, 151, 164, figs. 9, 10 (This  
 genus?).  
 Matthew, W. D. 1909 C, 107.  
 Thorpe, M. R. 1922 C, 171.  
     Oligocene? (Upper); Montana.

**Mesocyon iamonensis** Sellards.

- Sellards, E. H. 1916 B, 88, pl. ii, fig. 11 (This  
 genus?).  
     Miocene; Florida.

**Mesocyon josephi** (Cope).

- Hay, O. P. 1902 A, 773.  
 Matthew, W. D. 1907 A, 182.  
     1909 C, 106.  
 Merriam, J. C. 1906 A, 4, 5, 17, 19.  
 Merriam and Sinclair 1907 A, 184, 188, 189.  
 Thorpe, M. R. 1922 C, 169.  
     Oligocene (Middle John Day); Oregon.

**Mesocyon josephi secundus** Thorpe.

- Thorpe, M. R. 1922 C, 170, figs. 1, 2.  
     Oligocene (Middle John Day); Oregon.

**Mesocyon robustus** Matthew.

- Matthew, W. D. 1907 A, 171, 185, fig. 3.  
     1909 C, 112.  
 O'Harra, C. C. 1920 A, 155.  
 Peterson, O. A. 1910 A, 259.  
 Thorpe, M. R. 1922 E, 429.  
     Lower Miocene (Rosebud); South Dakota,  
     Colorado.

**Mesocyon sp. indet.**

- Cook, H. J. 1912 D, 39. Miocene (Monroe  
 Creek); Nebraska.  
 Matthew, W. D. 1909 C, 112. Miocene (Mon-  
 roe Creek); Nebraska.  
 Merriam, J. C. 1906 A, 20, 21, figs. 4-6. Oligo-  
 cene (John Day); Oregon.  
 Osborn, H. F. 1918 A, 16. Upper Oligocene  
 (Alum Bluff); Florida.

## CANINÆ Gill.

- Gill, T. 1872 B, 63.  
 Hay, O. P. 1902 A, 77.  
 Abel, O. 1913 B, 717 (Caninæ, Cynodietinæ).  
 Arldt, T. 1912 A, 748.  
 Frassetto, F. 1902 A, 220.  
 Frick, C. 1926 A, 7, 13.  
 Giebel, C. G. 1855 A, 25.  
 Gray, J. E. 1868 B, 497 (Canina).

- Lydekker, R. 1884 A, 240.  
 Matthew, W. D. 1907 A, 181.  
 1924 C, 122, fig. 28.  
 Miller, G. S. 1924 C, 143.  
 Trouessart, E. L. 1904 A, 223.  
 Weber and Abel 1928 A, 328.  
 Zittel and Schlosser 1911 A, 389.  
 1923 A, 469 (Caninæ); 466 (Cynodietinæ).

TEPHROCYON Merriam. Type *Canis rurestris* Condon.

- Merriam, J. C. 1906 A, 6, 58.  
 Cook, H. J. 1922 B, 5.  
 Frick, C. 1926 A, 20.  
 Hay, O. P. 1923 A, 15.  
 Lydekker, R. 1914 A, 630.  
 Matthew, W. D. 1909 C, 118.  
 1915 A, 219.  
 1918 A, 188.  
 1924 C, 88, 109.  
 1924 E, 748.  
 1928 B, 974, fig. 13.  
 Matthew and Cook 1909 A, 366.  
 Merriam, J. C. 1911 B, 207, 216.  
 1913 D, 359, 360, 371.  
 1915 F, 257.  
 1917 A, 437.  
 1919 A, 451, 455, 528.  
 Osborn, H. F. 1910 B, 296, 356, 528.  
 Scott, W. B. 1913 A, 522, 527, 530.  
 Thorpe, M. R. 1922 C, 173.  
 Weber and Abel 1928 A, 329.  
 Zittel and Schlosser 1911 A, 389.  
 1923 A, 470, 673, 679.

## Tephrocyon kelloggi Merriam.

- Merriam, J. C. 1911 B, 205, 214, 215, 235, pl. xxxii, figs. 5-7.  
 Matthew, W. D. 1918 A, 188.  
 Merriam, J. C. 1911 B, 211, 213, 214, 215 ("T. near kelloggi").  
 1913 D, 360, 361, 367, figs. 9, 11, 12 (T. kelloggi); figs. 10, 13 ("T. near kelloggi").  
 1916 A, 173, figs. 1, 2 (This species?).  
 1917 A, 429 (This species?).  
 1919 A, 452, 464.  
 Miocene (Cedar Mountain, Virgin Valley):  
 Pliocene (Thousand Creek); Nevada.

## Tephrocyon rurestris (Condon).

- Condon, T. 1896 A, 11, pl., fig. of skull (Canis).  
 1902 A, 123, 139 ("dog"); pl. xviii, large fig. (Canis).  
 1910 A, 101, 115, 118, pl. xviii, large fig. (Canis).  
 Hay, O. P. 1924 A, 4.  
 Matthew, W. D. 1909 C, 114.  
 1918 A, 188.  
 Matthew and Cook 1909 A, 374.

LEPTOCYON Matthew. Type *Canis vafer* Leidy.

- Matthew, W. D. 1918 A, 185, 189.  
 1924 C, 120.  
 Zittel and Schlosser 1923 A, 470, 679.

- Merriam, J. C. 1906 A, 4, 6, pl. i, figs. 1-3.  
 1911 B, 209, 214, 239, fig. 8 (This genus and species?).  
 1913 D, 360, 361, 362, figs. 1-5, 15?  
 1919 A, 464, fig. 8 (This species?).  
 Merriam and Sinclair 1907 A, 196.  
 Thorpe, M. R. 1922 C, 175.  
 1922 E, 435.  
 Middle Miocene (Mascall); Oregon: (Virgin Valley); Nevada: Upper Miocene (Barstow); California.

## Tephrocyon temerarius (Leidy).

- Hay, O. P. 1902 A, 776 (Canis).  
 1924 D, 239 (Canis. This species?).  
 Cook, H. J. 1912 D, 44 (Tephrocyon. This species?).  
 Hay, O. P. 1924 A, 2 (Tephrocyon).  
 Matthew, W. D. 1901 B, 358, 359, 374 (Canis).  
 1909 C, 114 ("Canis" cf. temerarius); 115 ("Canis" temerarius).  
 1918 A, 185, 188 (Tephrocyon).  
 1924 C, 65, 71, 98.  
 Matthew and Cook 1909 A, 376 (Tephrocyon).  
 Merriam, J. C. 1913 D, 360, 361, 365, figs. 7-8 (Tephrocyon).  
 1917 A, 435 (Tephrocyon. This species?).  
 1919 A, 450, 462, 527, fig. 7 (Tephrocyon. This species?).  
 Merrill, G. P. 1907 A, 27 (Canis).  
 Peterson, O. A. 1910 A, 268, fig. 63 (Tephrocyon).  
 Sinclair, W. J. 1915 A, 76 (Tephrocyon. This species?).  
 Troxell, E. L. 1915 A, 616, 633, figs. 21, 22 (Canis).  
 Lower Pliocene (Arikaree); Nebraska:  
 Upper Miocene (Lower Snake Creek);  
 Nebraska: (Pawnee Creek); Colorado:  
 (Barstow?); California?

## Tephrocyon sp. indet.

- Merriam, J. C. 1911 B, 241, fig. 9 (This genus?). Miocene (Virgin Valley); Nevada.  
 1913 D, 361, figs. 14-16 (This genus?).  
 Middle Miocene; Nevada.  
 1917 A, 425.  
 Stock, C. 1925 A, 20. Lower Pliocene (Pinole-Orinda-Siesta); California.  
 See also *Tomarctus* sp. indet.

## Leptocyon vafer (Leidy).

- Hay, O. P. 1902 A, 776 (Canis).  
 Abel, O. 1913 B, 717 (Canis).

- Abel, O. 1914 A, 80 (Canis).  
 Cook, H. J. 1912 D, 44 (Tephrocyon. This species?).  
 Matthew, W. D. 1909 C, 115 ("Canis" vafer).  
 1918 A, 185, 190.  
 1924 C, 65.  
 Matthew and Cook 1909 A, 376 (To Tephrocyon?).  
 Merriam, J. C. 1913 D, 361 (Tephrocyon?).  
 1917 A, 435 (Canis. This species?).  
 1919 A, 533, figs. 138, a, b (Canis? This species?).

- Merrill, G. P. 1907 A, 28 (Canis).  
 Osborn, H. F. 1915 B, 206 (Canis).  
 Sinclair, W. J. 1915 A, 76 (Tephrocyon. This species?).  
 Thorpe, M. R. 1922 E, 437.  
 Trouessart, E. L. 1904 A, 238 (L. vafra).  
 Troxell, E. L. 1915 A, 633, 634 (Canis. This species?).  
 Pliocene (Ricardo); California: Upper Miocene (Snake Creek); Nebraska.

**ÆLURODON** Leidy. Type *A. ferox* Leidy = *A. sævus* Leidy.

- Hay, O. P. 1902 A, 773.  
 Frick, C. 1926 A, 17, 20.  
 Haug, E. 1911 A, 1706.  
 Heilprin, A. 1887 A, 386, 388.  
 Lydekker, R. 1884 A, 178.  
 Matthew, W. D. 1904 C, 249, 250.  
 1907 A, 181.  
 1909 C, 118.  
 1912 B, 185.  
 1915 A, 219.  
 1918 A, 188.  
 1924 C, 70, 88, 102, 109, 118, 122, 126, fig. 28.  
 1924 E, 748.  
 Matthew and Cook 1909 A, 370.  
 Merriam, J. C. 1906 A, 9, 58.  
 1915 F, 257, 262.  
 1915 G, 100.  
 1917 A, 437.  
 1919 A, 451, 455, 531.  
 O'Harra, C. C. 1910 A, 80, 132.  
 Osborn, H. F. 1909 D, 80, 81.  
 1910 B, 301, 349, 353, 528.  
 Palmer, T. S. 1904 A, 81, 823.  
 Pilgrim, G. E. 1912 A, 13.  
 Scott, W. B. 1913 A, 527.  
 Stock, C. 1928 D, 41.  
 Stock and Furlong 1926 A, 45.  
 Trouessart, E. L. 1904 A, 226.  
 Weber and Abel 1928 A, 329.  
 Zittel and Schlosser 1911 A, 388.  
 1923 A, 468, 673, 679.

**Æluodon? aphobus** Merriam, J. C.

- Merriam, J. C. 1919 A, 525, 527, 535, figs. 144, 145.  
 Matthew, W. D. 1924 C, 100.  
 Stock, C. 1928 D, 41, pl. i, fig. a.  
 Stock and Furlong 1926 A, 47 (This genus?).  
 Lower Pliocene (Ricardo); California.

**Æluodon? brachygnathus** Douglass.

- Douglass, E. 1903 A, 153, 173, fig. 16 (Æluodon?).  
 Matthew, W. D. 1904 C, 252 (Æluodon?).  
 1909 C, 114 (Æluodon?).  
 Miocene (Flint Creek); Montana.

**Æluodon compressus** Cope.

- Hay, O. P. 1902 A, 774.  
 Matthew, W. D. 1904 C, 251, 253.  
 1909 C, 115 (Æluodon?).  
 Matthew and Cook 1909 A, 373 (Canis).  
 Miocene (Arikaree); Nebraska.

**Æluodon francisi** Hay.

- Hay, O. P. 1924 A, 2, pl. iii, figs. 1, 2.  
 Upper Miocene (Fleming); Texas.

**Æluodon haydeni** (Leidy).

- Hay, O. P. 1902 A, 774.  
 Barbour and Cook 1917 B, 173, fig. 5.  
 Cook, H. J. 1912 D, 44.  
 Gidley, J. W. 1904 A, 245.  
 Matthew, W. D. 1904 C, 250, 251, fig. 5.  
 1909 C, 115.  
 1923 A, 12.  
 1924 C, 65.  
 Matthew and Cook 1909 A, 371, fig. 2.  
 Merrill, G. P. 1907 A, 27 (Canis).  
 O'Harra, C. C. 1920 A, 158.  
 Stock, C. 1928 D, 42.  
 Troxell, E. L. 1915 A, 632 (Canis. This species?).  
 Lower Pliocene (Upper Snake Creek); Nebraska, Montana, South Dakota.

**Æluodon haydeni validus** Matthew and Cook.

- Matthew and Cook 1909 A, 371.  
 Matthew, W. D. 1918 A, 185.  
 1924 C, 100.  
 Merriam, J. C. 1917 A, 435.  
 Sinclair, W. J. 1915 A, 76.  
 Stock, C. 1928 D, 42.  
 Lower Pliocene (Upper Snake Creek); Nebraska.

**Æluodon hyænoideus** Cope.

- Hay, O. P. 1902 A, 774.  
 Cope and Matthew 1915 A, pl. cxix, fig. 5 (Æluodon, Brachypsalis?).  
 Matthew, W. D. 1904 C, 252 ("Not this genus").  
 1909 C, 115.  
 1918 A, 195.  
 Pliocene (Snake Creek); Nebraska.

**Æluodon platyrhinus** Barbour and Cook.

- Barbour and Cook 1917 B, 173, figs. 1-4.  
 Pliocene (Valentine); Nebraska.

**Æluodon sævus** (Leidy).

- Hay, O. P. 1902 A, 774.  
 Barbour and Cook 1917 B, 173, figs. 7, 8.  
 Cope, E. D. 1891 N, 64, fig. 30.



- Cope and Matthew 1915 A, pls. cxviii, cxviii, cxviii, pl. cxix, figs. 1-9.  
 Gidley, J. W. 1904 A, 245.  
 Hay, O. P. 1924 D, 239 (*Ælurodon*, *Canis*. This species?).  
 Matthew, W. D. 1904 C, 250.  
 1909 C, 115.  
 1923 A, 12.  
 1924 C, 65, 102.  
 Merriam, J. C. 1917 A, 438.  
 Merrill, G. P. 1907 A, 21 (*Æ. ferox*, *Æ. savvus*); 27 (*Canis savvus*).  
 O'Harra, C. C. 1920 A, 158.  
 Thorpe, M. R. 1922 E, 439.  
 Troxell, E. L. 1915 A, 616, 633 (*Canis*. This species?).  
 Miocene (Arikaree); Nebraska, South Dakota: Pliocene (Republican River); Kansas: ? Pleistocene (Aftonian); Texas, *vide* Troxell: Lower Pliocene (Upper Snake Creek); Nebraska.  
***Ælurodon savvus secundus* Matthew and Cook.**  
*Matthew and Cook* 1909 A, 372, fig. 3.  
*Cook, H. J.* 1912 D, 44.  
*Hay, O. P.* 1924 A, 2.  
*Matthew, W. D.* 1918 A, 185.  
*Merriam, J. C.* 1917 A, 435.  
*Sinclair, W. J.* 1915 A, 76.  
 Pliocene (Snake Creek); Nebraska.  
***Ælurodon simulans* Hay.**  
*Hay, O. P.* 1924 A, 2, text-fig. 1.  
 Upper Miocene (Fleming); Texas.  
***Ælurodon taxoides* Hatcher.**  
*Hay, O. P.* 1902 A, 774.  
*Matthew, W. D.* 1904 C, 250.  
 1909 C, 115 (Syn. of *Æ. wheelerianus*).  
*Thorpe, M. R.* 1922 E, 440, 443.  
 Miocene (Arikaree); Nebraska.

### CANIS Linnæus. Type *C. familiaris* Linnæus.

- Hay, O. P.* 1902 A, 775 (*Canis*); 776 (*Pachycyon*).  
*Abel, O.* 1909 D, (226).  
 1912 D, 602 ("wolf").  
 1914 A, 80.  
 1920 A, 422, fig. 637 ("wolf").  
 1921 A, 140, fig. 21 ("wolf").  
*Adolphi, H.* 1899 A.  
*Allen, G. M.* 1920 A, 431 (*Pachycyon*).  
*Allen, J. A.* 1892 A.  
 1903 A.  
*Altman, F.* 1925 A, 108.  
*Ameghino, F.* 1885 A, 203.  
 1889 A, 1007.  
 1904 A, 8.  
 1906 B, 9.  
*Anderson, R. J.* 1902 A, 1121, fig. 13.  
 1902 B, 369, fig.  
 1903 A, 651.  
 1908 A, 547 ("dogs").  
 1909 A, 745.  
*Anthony, R.* 1905 A, 854 ("chiens").  
 1912 A, ("chien").  
*Arlt, T.* 1907 D, 643.

### *Ælurodon wheelerianus* Cope.

- Hay, O. P.* 1902 A, 774.  
*Barbour and Cook* 1917 B, 173, fig. 6.  
*Cope and Matthew* 1915 A, pl. cxix, figs. 1-3.  
*Frick, C.* 1926 A, 20 (*Canis*).  
*Gidley, J. W.* 1904 A, 245 (This species?).  
*Matthew, W. D.* 1904 C, 250, figs. 3, 4.  
 1909 C, 115 (Includes *Æ. tazoides* Hatcher).  
 1918 A, 185 (Includes *Æ. tazoides* Hatcher).  
*Merriam, J. C.* 1917 A, 435, 438 (This species?).  
 1919 A, 450, 464, 527, 533, figs. 10, 11 (This species?).  
*Sinclair, W. J.* 1915 A, 76, 78, fig. 1 (This species?).  
*Thorpe, M. R.* 1922 E, 439, 443 (This species?).  
*Zittel and Schlosser* 1911 A, 388, fig. 554.  
 1923 A, 468, fig. 593.  
 Miocene (Arikaree); New Mexico, Nebraska: ? Upper Miocene (Barstow); California.  
***Ælurodon?* sp. indet.**  
*Barbour and Cook* 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.  
 1917 B, 180. Pliocene (Valentine); Nebraska.  
*Matthew, W. D.* 1904 C, 252, 253 ("canid"). South Dakota.  
*Matthew and Cook* 1909 A, 372.  
*Merriam, J. C.* 1911 B, 241, fig. 10. Virgin Valley; Nevada.  
 1917 A, 429, 430. Pliocene (Thousand Creek); Nevada: 430 ("near *A. wheelerianus*"); (Ricardo); Nevada.  
 1919 A, 525, 527, 538, figs. 146-153 (*Ælurodon* or *Tephrocyon*). Barstow; California.  
*Merriam and Stock* 1928 A, 8, text-fig. 1. Pliocene (Thousand Creek); Nevada.  
*Sinclair, W. J.* 1915 A, 76.

### *C. familiaris* Linnæus.

- Baker, F. C.* 1920 A, 210, 374.  
*Bardenfleth, K. S.* 1913 A, 86.  
*Bateson, W.* 1892 A, 105 ("dog").  
*Beddard, F. E.* 1902 A, 416.  
*Bertelli, D.* 1909 A, 175, figs. 8, 9.  
*Beyer, H.* 1908 A, 101, fig. 24.  
 1909 A, 20 ("hunde").  
*Blanford, W. T.* 1876 A, 285.  
*Boas, J. E. V.* 1884 B, 392 ("hund").  
 1909 A, 526, figs. 2, 12 ("hund").  
 1914 B, 580.  
 1914 C, 203, figs. 96, 97.  
*Bolk, L.* 1913 A, 86.  
 1921 B, 169, figs. 52b, 68.  
 1922 A, 101, fig. 100.  
*Bonsdorff, E. J.* 1871 A, 318.  
*Bradley, O. C.* 1908 A, 484 ("dog").  
*Brandt and Woldrich* 1887 A, 38.  
*Bronn, H. G.* 1848 A, 213.  
 1849 A, 720, 738, seq.  
*Broom, R.* 1905 A, 88.  
*Bugnion, E.* 1901 A, 94 ("chien").  
*Carus and Engelmann* 1861 A, 1717.  
 E. 1904 A, 157 ("dog").

- Chaine, J. 1921 A, 125 ("loup," "chien").  
 Cleland, J. 1863 A, 120 ("dogs").  
 Cope, E. D. 1880 U, 156.  
 Cuvier, G. 1805 A.  
 1825 A, III, 267, pls.; IV, 246, pl. xvi  
 ("chien").  
 Doran, A. H. G. 1878 A, 395, pl. lix.  
 Dubois, E. 1922 A, 315.  
 Duerst, J. U. 1904 A, 41 ("chiens").  
 1908 A, 345.  
 Eimer, G. H. T. 1901 A, 259 ("hund").  
 Elliot, D. G. 1901 A, 299.  
 Ellenberger and Baum 1903 A ("hund").  
 Emery, C. 1890 A, 292 ("hund").  
 Engelmann, O. 1910 A, 486 ("hund").  
 Filhol, H. 1889 A, 221 ("chien").  
 Fischer, J. B. 1829 A, 172.  
 Foote, J. S. 1916 A, 138.  
 1921 A, 10, pl. in, fig. 24 ("bulldog").  
 Frassetto, F. 1903 A, 220, 234, 308.  
 Frets, G. P. 1912 A, 429, figs. 24-25, 51-61.  
 Fuchs, H. 1907 A, 153 ("hund").  
 1911 B, 382, fig. 17.  
 Gaudry, A. 1875 D, 1282.  
 1891 C, 54, fig. 19 ("wolf").  
 1901 B, 100 ("chien").  
 Gaupp, E. 1905 D, 1039.  
 1908 C, 745.  
 1910 C, 356 ("hund").  
 Geikie, J. 1914 A, 328 ("wolf").  
 Geinitz, E. 1903 A.  
 1904 A.  
 Gervais, P. 1852 A, 109.  
 1853 B, 37 ("chien").  
 1859 A, 211.  
 Gidley, J. W. 1913 B, 101 (Lyciscus); 102  
 (Lyciscus, Epiyon).  
 Giebel, C. G. 1855 A, 26, pls. ix, x.  
 1883 A, pls. xii, xiii, lxxix.  
 Gottlieb, H. 1914 A, 203 ("hunde").  
 Grevé, C. 1891 A, 404, 405.  
 Hay, O. P. 1912 D, 776.  
 1914 A, 484.  
 1925 D, 242.  
 Heilprin, A. 1887 A, 386-388 (Canis); 388  
 (Pachycyon).  
 Hensel, R. 1879 A.  
 Hilzheimer, M. 1905 A.  
 Hoefer, R. 1911 A, 84 ("hund").  
 Hoyer and Babik 1924 A, 452, pl. xxxiii, fig. 6  
 ("hunde").  
 Ilrdlička, A. 1903 A, 372.  
 1920 A, 463, pl. vi.  
 Hue, E. 1907 A, pls. i-xxi, xxx, xxxi, xxxii,  
 lxxvii, lxxxi, xcvi, cx, cxxiv, cxxxiv, cxlvii,  
 clxi, clxxvii.  
 Hull, E. 1914 A, 613.  
 Huxley, T. H. 1856 B, 191 ("dog," "wolf").  
 1880 D, 407, figs. 1-5, 7, 8.  
 1880 F, 162.  
 Ihering, H. 1910 A, 136.  
 Jacobi, A. 1921 A, 203, fig. 1.  
 Kampfen, P. N. 1905 A, 521, fig. 50.  
 Keller, C. 1903 A, 440 ("hunde").  
 Kingsley, J. S. 1925 A, 200, fig. 207 ("dog").  
 Klatt, B. 1912 A, 154, 164.  
 Köstlin, O. 1844 A.  
 Kraglievich, L. 1926 C, 68.  
 Krukenberg, A. 1849 A, 413 ("hund").  
 Laloy, L. 1907 A, 587.  
 Landois, H. 1863 A, 163 ("wolf").  
 Landsberger, R. 1914 A, 206 ("hund").  
 Lapicque and Girard 1907 A, 1017.  
 Leboucq, H. 1884 A, 85, fig. 45.  
 Leche, W. 1900 A, 991.  
 1912 A, 76.  
 Le Damany, P. 1903 G, 127, figs. 1, 20 ("chien").  
 Ledouble, A. F. 1903 A, 642 ("chiens").  
 Lepkowski, W. 1897 A, 571, figs. 1, 2, 7, 19,  
 20 ("hunde").  
 Leunis and Ludwig 1883 A, 188.  
 Lobley, J. L. 1908 A, 194, 211.  
 Lockington, W. N. 1884 A, 415.  
 Lubosch, W. 1907 A, 619 ("hunde").  
 Lucae, J. P. 1872 A, 372.  
 Lull, R. S. 1922 C, 603.  
 Mackie, S. J. 1863 D, 337.  
 Magitot, E. 1875 A, 79 ("chiens").  
 Major, C. J. F. 1880 A, 39 ("hunde").  
 Matschie, P. 1896 A, 249.  
 1901 A, 308.  
 Matthew, W. D. 1906 C, 216, text-fig. 6.  
 1909 C, 118.  
 1909 D, 324, text-fig. 3.  
 1910 G, 154, 159.  
 1915 A, 219.  
 1918 A, 188.  
 1924 C, 88, 106, 109, 122, fig. 28.  
 1924 E, 748.  
 1928 B, 974, fig. 13.  
 Mead, C. S. 1909 A, 195.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 62.  
 Merriam, J. C. 1906 A, 8, 58.  
 Meunier, S. 1903 A, 776 ("loups").  
 Miller, G. S. 1912 B, 77.  
 1924 C, 150.  
 Müller, F. 1911 A, 335 ("hund").  
 Mysberg, W. A. 1917 A, 655.  
 Nehring, A. 1880 A.  
 1890 A, 34.  
 Noack, T. 1907 A, 661.  
 1908 A, 254.  
 Olmstead, M. P. 1911 A, 339.  
 Osborn, H. F. 1905 I, 110.  
 1907 G, 139, fig. 96.  
 1909 D, 83, 85, 89.  
 1910 B, 609, fig. 71.  
 1915 B, 205.  
 1916 B, 536.  
 1925 F, 961 ("dog").  
 Owen, R. 1845 B, 475, pl. cxxv, figs. 1-4.  
 1845 E, 127.  
 1848 B, 187, pl. ii.  
 1868 A, 869, fig. 262.  
 Palmer, T. S. 1904 A, 157, 823 (Canis); 494  
 825 (Pachycyon).  
 Pander and Alton 1822 A, 8 ("hunde").  
 Paramore, R. H. 1910 A, 1459, fig. 10 ("dog").  
 Pauli, S. 1899 A, 154, fig. 1.  
 1900 B, 489, pl. xxvii; text-figs. 4-6.  
 Pocock, R. I. 1914 A, 478.  
 1914 B, 918, text-fig. 4.  
 1916 F, 261.  
 Pohl, L. 1911 A, 131.  
 1928 A, 487, fig. 1.

- Pohle, H. 1921 A, 116, fig. 1.  
 Rehs, J. 1914 A, 56.  
 Reichert, K. B. 1849 A, 467 ("hunde").  
 Retterer, E. 1884 A, 478, 507 ("chien").  
 1906 A, 197, figs. 1, 2, 5, 6 ("chien").  
 1916 A, 764 ("chien").  
 1919 B, 572 ("chien").  
 1919 C, 618 ("chiens").  
 1919 D, 741 ("chien").  
 1919 E, 1222 ("chien").  
 Retterer and Lelièvre 1910 A, 952 ("chien").  
 1910 B, 938 ("chien").  
 Retzius, A. 1837 A, 489.  
 1849 A, 631.  
 Reynolds, S. H. 1897 A, 374-415, 539, figs. 68-80, 84, 100.  
 1909 A, 1, pls. i-vi.  
 Römer, F. 1907 A, 73.  
 Roth, S. 1908 A, 141.  
 Rudolf, G. de M. 1922 A, 142, fig. 10 ("dog").  
 Scharff, R. F. 1895 A, 449-467.  
 1911 A, 149 (Canis); 430 (Lyciscus).  
 Schlegel, R. 1912 A, 1-29.  
 Schlosser, M. 1897 B, 18.  
 1898 I, 516.  
 1902 B, 298.  
 1903 I, 176, 209, 211.  
 Schmidt, O. 1886 A, 259.  
 Schwalbe, G. 1904 A, 207.  
 Scott, W. B. 1913 A, 522, 677 (Canis); 522 (Pachycyon).  
 Serres, M. 1835 A, 244 ("dog", "wolf").  
 Sippel, W. 1907 A, 521 ("hund").  
 Sisson, S. 1910 A, 150, figs. 115-137 ("dog").  
 Spurrell, H. G. F. 1906 A, 114 ("wolf").  
 Stach, J. 1905 A, 289 ("hunde").  
 Stromer, E. 1902 A.  
 Studer, T. 1901 A.  
 1906 A, 23.  
 Taets, W. 1913 A, 5-78.  
 Taschenberg, O. 1899 A, 4493.  
 Terra, P. 1911 A, 64, 265, figs. 12, 13; 277, figs. 102, 103.  
 Tims, H. W. M. 1902 A, 322.  
 1903 A, 140, fig. 2a.  
 1905 B, 1736, fig. 2.  
 Tourneux, F. and J. P. 1912 A, 90, figs. 24-28 ("chien").  
 Trouessart, E. L. 1904 A, 227.  
 Van den Broeck, A. J. P. 1912 A, 782.  
 Veith, A. 1912 A, 19.  
 Virchow, H. 1909 A, 421, fig. 3.  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A, I, 491; II, 197.  
 Weber, M. 1904 A, 533, 541.  
 Weber and Abel 1928 A, 307, 308, 312, 316, 324, figs. 184, 193, 199, 201.  
 Weber and Burlet 1927 A, figs. 42, 81, 114, 197, 198.  
 Weidenreich, F. 1922 A, 33 ("hund").  
 Wilder, B. G. 1874 A, 301 ("dogs").  
 Wiñeza, H. 1890 A, 650, pl. xxiv ("hund").  
 Windle, B. C. A. 1890 A, 5 ("dogs").  
 Winge, H. 1923 A, 354, pl. iii, fig. 6.  
 1924 A, 177, 193, 195, 243, 248.  
 Wright, G. F. 1911 B, 436 ("dog").  
 Zietzschmann, O. 1917 A, 437, pl. xxv ("hund").  
 Zittel and Schlosser 1911 A, 389.  
 Zittel and Schlosser 1923 A, 404, 470, 673, figs. 505-509, 512, 514, 616-618, 638, 590.  
**Canis? anceps** Scott.  
 Hay, O. P. 1902 A, 775.  
 Matthew, W. D. 1901 B, 374.  
 1909 C, 114 (This genus?).  
 Miocene (Middle); Montana.  
**Canis andersoni** Merriam, J. C.  
 Merriam, J. C. 1910 A, 393.  
 Abel, O. 1926 B, 237.  
 Hay, O. P. 1927 D, 184, 191.  
 Merriam, J. C. 1912 C, 260, figs. 41, 42.  
 Merriam and Stock 1925 A, 10.  
 Miller, L. H. 1912 A, 78.  
 Osborn, H. F. 1925 D, 531.  
 Stock, C. 1925 A, 30.  
 Swarth, H. S. 1915 A, 18.  
 Wyman, L. E. 1922 A, 23.  
 Pleistocene (La Brea); California.  
**Canis armbrusteri** Gidley.  
 Gidley, J. W. 1913 B, 96, 98, 102, figs. 2, 3.  
 1913 G, 50 ("dog").  
 Hay, O. P. 1923 A, 350.  
 Pleistocene (Middle); Maryland.  
**Canis? davisii** Merriam.  
 Merriam, J. C. 1911 B, 211, 212, 214, 230, figs. 11-13.  
 1917 A, 428, 429 (Canis?).  
 Merriam, Stock, Moody 1925 A, 58, 60, fig. 9 (This genus and species?).  
 Stock, C. 1925 A, 18 (This genus?).  
 Pliocene (Thousand Creek); Nevada: Lower Pliocene (Rattlesnake); Oregon.  
**Canis furlongi** Merriam.  
 Merriam, J. C. 1910 A, 393 (C. occidentalis furlongi).  
 Abel, O. 1926 B, 237 (C. occidentalis furlongi).  
 Hay, O. P. 1927 D, 184, 191.  
 Merriam, J. C. 1912 C, 251, fig. 32 (C. occidentalis furlongi).  
 Merriam and Stock 1925 A, 10 (C. occidentalis furlongi).  
 Miller, L. H. 1912 A, 78, 81 (C. occidentalis furlongi).  
 Osborn, H. F. 1925 D, 531, 533 (C. occidentalis furlongi).  
 Stock, C. 1925 A, 30 (C. occidentalis furlongi).  
 Pleistocene (La Brea); California.  
**Canis latrans** Say.  
 Hay, O. P. 1902 A, 775.  
 Allen, G. M. 1920 C.  
 Baker, F. C. 1920 A, 456.  
 Elliot, D. G. 1901 A, 301, pl. xxix.  
 Foote, J. S. 1916 A, 138, pl. xix.  
 Freudenberg, W. 1910 A, 26, pl. vi, fig. 1; pl. vii, figs. 1, 2.  
 1921 A, 138.  
 1922 A, 4.  
 Gilbert, G. K. 1890 A, 303, 394.  
 Grévy, C. 1891 A, 415.  
 Haug, E. 1911 A, 1836, 1837.  
 Hay, O. P. 1912 D, 781, pl. xxxi.  
 1914 A, 26, 38, 491, pl. lxxv.

- Hay, O. P. 1917 A, 60.  
 1918 C, 346 ("coyote").  
 1920 B, 129, 141.  
 1921 A, 633.  
 1923 A, 481.  
 1924 D, 375.  
 1926 D, 358 ("wolf").  
 1927 D, 303.  
 1928 C, 425.
- Hrdlička, A. 1903 A, 373.
- Huxley, T. H. 1880 D, 439.
- Lockington, W. N. 1884 A, 419.
- McCornack, E. C. 1920 A, 23.
- Matschie, P. 1896 A, 252 ("prähund").
- Matthew, W. D. 1902 F, 317, 320 (This species?).  
 1915 K, 402.  
 1918 A, 226.
- Merriam, C. H. 1897 B, 23.
- Merriam, J. C. 1903 B, 273, 290.  
 1911 F, 210, fig. 1 ("coyote").
- Miller, G. S. 1912 B, 79.  
 1924 C, 151.
- Miller, L. H. 1912 A, 81.
- Osborn, H. F. 1910 B, 457, 460, 464.
- Pocock, R. I. 1913 A, 382, figs. 70-72, 74.
- Scharff, R. F. 1911 A, 149, 430.
- Scott, W. B. 1913 A, 165, fig. 79.
- Seton, E. T. 1909 A, 789, pls. lxx-lxxv, map 43.
- Shufeldt, R. W. 1913 B, 160, pl. xi, figs. 61-64; pl. xlii, figs. 555-561 (This species?).
- Stock, C. 1925 A, 195.
- Studer, T. 1901 A, 15.
- Weber and Abel 1928 A, 326.
- Whitney, J. D. 1882 A, 136 (C. latrans?).
- Recent; northern Mississippi Valley from Rocky Mountains to eastern Illinois: Pleistocene; Lead region of Wisconsin, Nebraska, Indiana, California, Oregon: Upper Pliocene; Mexico (*vide* Freudentberg), Oklahoma, Texas.
- Canis lestes Merriam.**
- Merriam, C. H. 1897, Proc. Biol. Soc. Wash., xi, 25.
- Hay, O. P. 1927 D, 243 (C. latrans = ? C. lestes).
- Matthew, W. D. 1902 F, 320 (C. latrans, C. lestes?).
- Miller, G. S. 1912 B, 80.  
 1924 C, 151.
- Recent; British Columbia to Arizona: Pleistocene; Oregon?
- Canis lycaon Schreber.**
- Schreber, J. C. D. 1776, Säugethiere, pl. lxxxix.
- Hay, O. P. 1902 A, 776 (C. occidentalis, in part).
- Baird, S. F. 1857 A, 108 ("No. 1804").
- Cope, E. D. 1895 G, 596 (C. lupus).
- Cuvier, G. 1825 A, iv, 463.
- Fischer, J. B. 1829 A, 182.
- Frech and Geinitz 1903 A, 36 (C. lupus).
- Grevé, C. 1891 A, 409.
- Hay, O. P. 1923 A, 310.
- Holland, W. J. 1908 A, 232 (C. occidentalis).  
 1912 B, 751 (C. occidentalis).
- Leidy, J. 1839 H, 97 ("wolf").
- Mercer, H. C. 1894 A, 97 ("wolf").

- Miller, G. S. 1912 B, 73.  
 1912 C, 5.  
 1912 D, 95.  
 1924 C, 154.
- Rhoads, S. N. 1903 A, 228 (C. mexicanus nubilus).
- Woolman, L. 1897 B, 211 ("wolf").
- Recent, Eastern Canada: Pleistocene; Pennsylvania, New Jersey.
- The fossil wolf remains found in the eastern United States are referred to this species only provisionally.
- Canis nubilus Say.**
- Say, T. 1823, Long's Exped. Rocky Mts., i, 169.
- Brown, B. 1908 A, 182 (C. occidentalis).
- Eaton, G. F. 1923 A, 233 (C. occidentalis).
- Fischer, J. B. 1829 A, 183.
- Haug, E. 1911 A, 1886 (C. lupus).
- Hay, O. P. 1914 A, 32 (C. occidentalis).  
 1917 D, 48 (C. occidentalis?).  
 1920 B, 129.  
 1921 A, 633 (This species?).  
 1923 A, 481.  
 1924 D, 254, 255.  
 1927 D, 129.
- Holmes, W. H. 1903 A, 244 ("wolf").
- Lockington, W. N. 1884 A, 417 ("american wolf").
- Miller, G. S. 1912 B, 73.  
 1924 C, 154.
- Osborn, H. F. 1910 B, 464 (C. lupus); 488 (C. occidentalis).
- Williston, S. W. 1898 I, 92 (C. lupus).
- Recent; eastern Nebraska: Pleistocene; Arkansas, Illinois, Kansas, Nebraska, Oklahoma, Oregon.
- Some citations under *C. occidentalis* probably belong here. The two species are not well distinguished among the living animals; still less well among the fossils.
- Canis occidentalis Richardson.**
- Hay, O. P. 1902 A, 776.
- Baker, F. C. 1920 A, 456 (This species?).
- Conwentz, — 1900 A, 431 (C. lupus occ.).
- Elliot, D. G. 1901 A, 300.
- Frech, F. 1906 A, 483 ("wolf").
- Freudentberg, W. 1910 A, 28, 30.
- Gray, J. E. 1888 B, 501 (Lupus).
- Grevé, C. 1891 A, 409.
- Hay, O. P. 1914 A, 38 (This species?); 485, 486 (C. lupus).  
 1917 E, 60.  
 1918 C, 347 (This species?).  
 1923 A, 481.  
 1924 D, 375.  
 1927 D, 191, 192, 243.  
 1928 C, 425.
- Huxley, T. H. 1880 D, 439.
- Kandern, W. 1905 A, 467, figs. A, C, D.
- McCornack, E. C. 1920 A, 23 (This species?).
- Matthew, W. D. 1902 F, 320 (This species?).  
 1918 A, 226 (This species?).
- Merriam, J. C. 1912 C, 251.  
 1918 B, 531.
- Miller, G. S. 1912 B, 73.  
 1912 C, 2, 4.

Miller, G. S. 1924 C, 154.

Nathorst, A. G. 1901 A, 1.

Osborn, H. F. 1910 B, 460 (This species?).

Scott, W. B. 1913 A, 62, fig. 7 (This species?).

Seton, E. T. 1909 A, 749, map 42.

Shufeldt, R. W. 1913 B, 159, pl. x, fig. 25 (This species?).

Stock, C. 1925 A, 195.

Studer, Th. 1901 A, 9.

The citations given above probably refer to more than one species of large wolf.

See *C. lycaon*, *C. nubilus*.

Recent; Plains of Saskatchewan to Arctic coast: Pleistocene; Arkansas, Nebraska, California, Oregon.

### ***Canis ochropus* Eschscholtz.**

*Eschscholtz, J. F.* 1829, Zool. Atlas, III, 1.

Furlong, E. L. 1925 A, 139 (*C. oeropus*. This species?).

Hay, O. P. 1927 D, 184, 197, 223.

Merriam, C. H. 1897 B, 32.

Merriam and Stock 1925 A, 11 (This species?).

Miller, G. S. 1912 A, 81.

1924 C, 153.

Stock, C. 1918 A, 479.

1925 A, 113, 195.

1927 A, 156 (This species?).

Recent; San Joaquin Valley; California: Pleistocene (Hawver cave); California.

### ***Canis orcutti* Merriam, J. C.**

*Merriam, J. C.* 1910 A, 391.

Abel, O. 1926 B, 237 (*C. ochropus orcutti*).

Hay, O. P. 1927 D, 184, 191.

Merriam, J. C. 1912 C, 255, pl. xxiv, fig. 2; figs. 34-40 (*C. ochropus orcutti*).

Merriam and Stock 1921 A, 567 (*C. near ochropus*).

1925 A, 10 (*C. ochropus orcutti*).

Miller, L. H. 1912 A, 78.

Osborn, H. F. 1925 D, 531 (*C. ochropus orcutti*).

Stock, C. 1925 A, 30 (*C. ochropus orcutti*).

Swarth, H. S. 1915 A, 17, 18 (*C. ochropus orcutti*).

Wyman, L. E. 1922 A, 23 (*C. ochropus orcutti*).

Pleistocene (Early); California.

### ***Canis priscolatrans* Cope.**

Hay, O. P. 1902 A, 776.

Baker, F. C. 1920 A, 208, 215, 398.

Eaton, G. F. 1923 A, 233.

Freudenberg, W. 1910 A, 23, 30.

Haug, E. 1911 A, 1886.

Hay, O. P. 1923 A, 312, 322.

Osborn, H. F. 1910 B, 470.

Peterson, O. A. 1926 A, 233 (This species?).

Rhoads, S. N. 1903 A, 228.

Schlosser, M. 1902 H, 141.

Trouessart, E. L. 1904 A, 230.

Troxell, E. L. 1915 A, 628, 633, 634, fig. 19 (This species?).

Pleistocene (Early); Pennsylvania, Texas.

### ***Canis riviveronis* Hay.**

*Hay, O. P.* 1917 E, 46, 59.

Baker, F. C. 1920 A, 374.

Bédé, P. 1921 A, 15 (*C. riviveronis*).

Hay, O. P. 1923 A, 332.

Sellards, E. H. 1916 C, 158, pl. xxviii, figs. 2, 7, 8; text-fig. 15 (*C. latrans?*).

1916 D, 617 (*C. sp.*).

1916 E, 17 (*C. latrans?*).

1916 F, 9 (*C. sp.*).

Pleistocene; Florida.

### ***Canis robustus* (J. A. Allen).**

*Hay, O. P.* 1902 A, 776 (*Pachycyon*).

Allen, G. M. 1920 A, 452, 495, pls. vi, xi (*Pachycyon*).

Recent, epoch; Virginia.

The skeleton described by Dr. J. A. Allen appears to be that of an Indian dog.

### ***Canis texanus* Troxell.**

*Troxell, E. L.* 1915 A, 616, 627, 634, figs. 18, 20, 23.

Hay, O. P. 1924 D, 239.

1928 C, 425.

Matthew, W. D. 1924 C, 104 (This genus?).

Pleistocene; Texas.

### ***Canis* sp. indet.**

Anderson, F. M. 1908 A, 35 ("wolf"). Pleistocene; California.

Condon, T. 1902 A, 123, pl. xix ("small dog").

Cooke, C. W. 1926 A, 445 ("dog"). Pleistocene; Florida.

Deussen, A. 1924 A, 110. Pleistocene (Lissie); Texas.

Dumble, E. T. 1894 A, 564. Pleistocene (Plains region); Texas.

Eaton, G. F. 1923 A, 233, fig. 6. Pleistocene; Mexico.

Ford, J. 1873 A, 305. Pleistocene (Loess); Alton, Illinois.

Frick, C. 1921 A, 341, fig. 45 (This genus?). Pliocene (Eden); California.

Gidley, J. W. 1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1917 E, 46, 62.

1923 A, 481. Pleistocene; Pennsylvania, Maryland, South Carolina, Florida.

1924 D, 375. Pleistocene; Kansas, Nebraska.

McCornack, E. C. 1920 A, 23.

Matthew, W. D. 1909 C, 114. Miocene (Middle); Colorado.

Merriam, J. C. 1906 A, 4, 5, fig. 1.

1919 A, 462, 527, fig. 9 (This genus?).

Miocene (Barstow); California: Pliocene (Ricardo); California.

Merriam and Sinclair 1907 A, 196. Miocene (Mascall?); Oregon.

Osborn, H. F. 1910 B, 463. Pleistocene, Kansas: 490, Pleistocene; Alaska.

Putnam, F. W. 1899 A, 269 ("Indian dogs"). Pleistocene?

Quackenbush, L. S. 1909 A, 97, 127. Pleistocene; Alaska, Yukon.

Sinclair, W. J. 1903 A, 711 ("Lupus sp. nov. Merriam, J. C."). Pleistocene; California.

### *Ænocyon* Merriam, J. C.

Merriam, J. C. 1918 B, 532.

Hay, O. P. 1926 E, 389.

Matthew, W. D. 1924 C, 122, fig. 28.

Moodie, R. L. 1922 C, 360.

Osborn, H. F. 1925 D, 532.

### *Ænocyon ayersi* (Sellards).

Sellards, E. H. 1916 C, 152, 158, pl. xxiv; pl. xxx, figs. 1, 3 (Canis).

Chamberlin, R. T. 1916 A, 38 (Canis).

1917 A, 675 ("wolf").

Hay, O. P. 1920 B, 95, pl. iv, figs. 24-26 (This species?).

1923 A, 479.

1924 B, 259 ("dog").

1927 C, 281 ("dogs").

Merriam, J. C. 1918 B, 532.

Sellards, E. H. 1916 E, 15, 16, 23 (Canis).

1917 A, 240 (Canis).

1917 C, 76 (Canis).

1917 E, 198 ("wolf").

Simpson, G. G. 1928 H, 2, 9, figs. 5, 6 [Canis (Ænocyon)].

Pleistocene (Early); Florida, Tennessee.

### *Ænocyon dirus* (Leidy).

Unless otherwise indicated the authors quoted refer this species to the genus *Canis*.

Leidy, J. 1858 E, 21.

Hay, O. P. 1902 A, 775 (C. dirus; C. indianensis).

Abel, O. 1926 B, 236 (Canis); 438 (Ænocyon).

Baker, F. C. 1920 A, 456 (Canis dirus, C. indianensis).

Bryan, W. A. 1927 A, 70, fig. ("dire wolf").

Collins, H. O. 1910 A, 6 ("wolf").

Cooper, J. G. 1875 A, 390 (C. indianensis).

Cope, E. D. 1894 H, 453, pl. xxi, figs. 14-16 (Canis indianensis).

Eaton, G. F. 1923 A, 233 (C. indianensis).

Freudenberg, W. 1910 A, 22, pl. vi, figs. 2-4 (C. indianensis).

1921 A, 138.

Frick, C. 1926 C, 444, fig. 2 (This species?).

Furlong, F. L. 1925 A, 139, 152.

Gilbert, J. Z. 1910 B, 26, figs. (Canis occidentalis).

Haug, E. 1911 A, 1887 (Canis indianensis).

Hay, O. P. 1912 D, 777, text-figs. 74-77.

1914 A, 484, text-figs. 139-142.

1917 D, 49.

1918 B, 26 (Canis).

1920 B, 95, 141, pl. v, figs. 3, 4.

1923 A, 479 (Ænocyon).

1926 F, 426 ("wolves").

1927 D, 301 (Ænocyon); 303 (Canis).

1928 C, 425.

Lydekker, R. 1913 A, 5 (Canis).

Matthew, W. D. 1913 D, 297, pl.

1914 E, 57, plate ("wolf").

1914 I, 46.

1916 D, 45, 2 figs.

1916 F, 471 ("wolf").

Stock, C. 1925 A, 21 (This genus?). Lower Pliocene (Eden); California.

### Type *Canis dirus* Leidy.

Merriam, J. C. 1903 B, 288, pl. xxx, fig. 2 (C. indianensis).

1906 D, 249 (C. indianensis).

1908 D, 468, fig. ("wolf").

1909 A, 293 (C. indianensis).

1909 C, 11, fig. ("wolf").

1911 F, 210, fig. 1 ("wolf").

1912 C, 218, pls. xxiv-xxviii; text-figs. 1-26.

1913 B, 532 (Ænocyon).

1913 D, 519 (Ænocyon).

Merriam and Stock 1921 A, 567.

1925 A, 10, 11.

Miller, L. H. 1909 B, 306 (C. indianensis).

1912 A, 70, 78 (C. indianensis).

1925 A, 309 (Ænocyon).

Moodie, R. L. 1918 C, 278, fig. 21 (Canis).

1918 D, 507, figs. 32, 34-36 ("wolf").

1922 C, 361.

1923 B, 253, pl. liv.

Osborn, H. F. 1910 B, 477, 486 (C. indianensis).

1925 D, 528, 532, figs.

Peterson, O. A. 1926 A, 282.

Schuchert and Levene 1927 A, 341.

Scott, W. B. 1913 A, 204, 521; frontispiece.

Sellards, E. H. 1916 C, 153.

Sinclair, W. J. 1904 A, 17 (C. indianensis).

Stock, C. 1925 A, 30, 35, 113.

1927 A, 156 (This species?).

Stoner, R. C. 1913 A, 391 ("dire wolf").

Swarth, H. S. 1915 A, 16, fig. 7 (Canis).

Trouessart, E. L. 1904 A, 229 (Canis).

Troxell, E. L. 1915 A, 616, 632, figs. 16, 17.

Whitney, J. D. 1886 A, 162 ("wolf").

Wyman, L. E. 1922 A, 22, fig. 14.

Young and Cooper 1926 A, 5 ("wolf").

1927 A, 1, 2, 5, 6, fig. (Canis).

Zittel and Schlosser 1911 A, 390 (C. indianensis).

1923 A, 470, 680 (C. indianensis).

Pleistocene (Early and Middle); Indiana, California, Tennessee, Pennsylvania, Mexico.

### *Ænocyon milleri* (Merriam).

Merriam, J. C. 1912 C, 247, figs. 27-31 (Canis).

Abel, O. 1926 B, 237.

Hay, O. P. 1927 D, 184, 191.

Merriam, J. C. 1918 B, 531.

Merriam and Stock 1925 A, 10.

Osborn, H. F. 1925 D, 531 [Canis (Ænocyon)].

Stock, C. 1925 A, 30.

Swarth, H. S. 1915 A, 17 (Canis).

Wyman, L. E. 1922 A, 23.

Pleistocene (LaBrea); California.

### *Ænocyon mississippiensis* (Allen).

Allen, J. A. 1876 A, 49 (Canis).

Hay, O. P. 1902 A, 775 (Canis indianensis, in part).

Freudenberg, W. 1910 A, 23 (Canis).

Hay, O. P. 1914 A, 484 (Canis).

1923 A, 337.

- Merriam, J. C. 1912 C, 218 (*Canis dirus*).  
 Trouessart, E. L. 1904 A, 229 (Syn. of *Canis indianensis*).  
 Troxell, E. L. 1915 A, 633, 634 (*Canis*).  
 It is possible that this species is identical with *Aenocyon dirus*.  
 Pleistocene; Lead region of Illinois, Iowa, and Wisconsin.

***Aenocyon* sp. indet.**

- Hay, O. P. 1927 D, 171, 172 (This genus?).  
 Pleistocene; California.

**VULPES Fritsch.**

- Fritsch, J. L.* 1775, Natur-Syst. vierfüß. Thiere, Tab. Gen.  
 Hay, O. P. 1902 A, 775 (*Canis*, in part).  
 Allen, J. A. 1892 A.  
 1902 E, 375.  
 1903 A.  
 Altmann, F. 1925 A, 108.  
 Anderson, R. J. 1902 A, 1121.  
 1902 B, 369, fig.  
 1905 A, 328.  
 Arldt, T. 1907 D, 302, 317.  
 Beddard, F. E. 1902 A, 417.  
 Beyer, H. 1908 A, 96 ("fuchs").  
 Birula, A. A. 1913 A, 248, pls. viii-x.  
 Brandt and Woldrich 1887 A, 42.  
 Brown, H. G. 1848 B, 1373.  
 Causch, D. E. 1904 A, 164, fig. 4 ("fox").  
 Depéret, C. 1909 A, 141.  
 Doran, A. H. G. 1878 A, 395, pl. lix.  
 Dubois, E. 1922 A, 319 (*Canis vulpes*).  
 Emmer, G. H. T. 1901 A, 258 ("fuchs").  
 Elliot, D. G. 1901 A, 303.  
 Geike, J. 1914 A, 322 ("fox").  
 Genitz, E. 1903 A.  
 1904 A (*Canis*).  
 Gidley, J. W. 1913 B, 102.  
 Grant, M. 1904 B, 194.  
 Gray, J. E. 1868 B, 495, 515.  
 Grevé, C. 1891 A, 418 (*Canis*).  
 Hasse and Schwarck 1870 A, 97 (*Canis vulpes*).  
 Hensel, R. 1879 A, 549 ("fuchs").  
 Hue, E. 1907 A, pls. xxxiv, lxxvii, lxxxix, xcvi, cx, cxxiv, cxxv, cxlvii, clxii, clxxvii.  
 Huxley, T. H. 1880 D, 407, 453.  
 Klatt, B. 1912 A, 154 ("fuchs").  
 Lockington, W. N. 1884 A, 411.  
 Lönnberg, E. 1916 A, 1, 2 figs.  
 Lull, R. S. 1922 C, 603.  
 Matthew, W. D. 1915 K, 402.  
 1918 A, 188.  
 1924 C, 122, fig. 28.  
 Merriam, C. H. 1892 A, 62.  
 1900 A, 661.  
 Miller, G. S. 1912 B, 82.  
 1923 A, 9, pl. ii, fig. 1; pl. iii, fig. 4.  
 1924 C, 143.  
 Nehring, A. 1880 A (*Canis*).  
 Noack, T. 1910 A, 457.  
 Osborn, H. F. 1909 D, 89, 90.  
 1910 B, 635.  
 1915 B, 205.  
 1916 B, 545.  
 Pocock, R. I. 1914 B, 925.  
 Pohl, L. 1911 A, 138.  
 Retzius, A. 1849 A, 627, fig. 5 (*Canis*).  
 Scharff, R. F. 1895 A, 441 (*Canis*).  
 Schlosser, M. 1903 I, 209, 211.  
 1906 A, 25.  
 Schmidt, O. 1886 A, 261, fig. 48 ("fox").  
 Scott, W. B. 1913 A, 149, 150, 158, 517.  
 1917 A, 32.  
 Serres, M. 1835 A, 244 ("fox").  
 Taschenberg, O. 1899 A, 4704.  
 Trouessart, E. L. 1904 A, 235.  
 Virchow, H. 1907 A, 46 ("fuchs").  
 1917 B, 321, figs. 1-9, 12 ("fuchs").  
 Weber and Abel 1928 A, 325.  
 Winge, H. 1924 A, 193.  
 Zittel and Schlosser 1911 A, 390.  
 1923 A, 470.  
***Vulpes cascadiensis* C. H. Merriam.**  
*Merriam, C. H.* 1900 A, 665, pl. xxxvi, fig. 3.  
 Freudenberg, W. 1910 A, 30.  
 Hay, O. P. 1927 D, 314 (*V. cascadiensis*); 243 (*V. pennsylvanicus*).  
 Matthew, W. D. 1902 F, 320 (*V. pennsylvanicus*?).  
 Merriam and Stock 1925 A, 10.  
 Miller, G. S. 1912 B, 83.  
 1924 C, 144.  
 Miller, L. H. 1912 A, 70.  
 Osborn, H. F. 1910 B, 477.  
 Sinclair, W. J. 1903 A, 711.  
 1904 A, 17.  
 Stock, C. 1925 A, 113.  
 Recent; Oregon, Washington, California;  
 Pleistocene (caves); California.  
***Vulpes fulva* (Desmarest).**  
*Desmarest, A. G.* 1822 A (1820), i, 203 (*Canis*).  
 Brown, B. 1908 A, 182 (This species?).  
 Elliot, D. G. 1901 A, 304 (*V. pennsylvanica*).  
 Fischer, J. B. 1829 A, 191 (*Canis*).  
 Freudenberg, W. 1910 A, 28 (*V. pennsylvanicus*?).  
 Gray, J. E. 1868 B, 518 (*V. pennsylvanica*).  
 Grevé, C. 1891 A, 419 (*Canis*).  
 Hay, O. P. 1914 A, 32.  
 1917 E, 58.  
 1923 A, 299.  
 1924 D, 252.  
 1927 D, 192.  
 Hrdlička, A. 1903 A, 372 (*V. fulvus*).  
 Lockington, W. N. 1884 A, 413 ("red fox").  
 Lockwood, S. 1884 A, 353, fig. 172.  
 Merriam, C. H. 1900 A, 663, pl. xxxvii.  
 Miller, G. S. 1912 B, 82.  
 1924 C, 144.  
 Miller, L. H. 1912 A, 81 (*Canis pennsylvanicus*?).

Stock, C. 1925 A, 195 (This species? *V. pennsylvanicus*).

Recent; northeastern United States: Pleistocene; Arkansas, Nebraska.

All references of fox remains found west of the Alleghany Mountains to this species are of doubtful correctness.

### ***Vulpes latidentata* Cope.**

Hay, O. P. 1902 A, 775 (*Canis*).

Baker, F. C. 1920 A, 208, 215, 398 (*Canis*).

Freudenberg, W. 1910 A, 30.

Hay, O. P. 1917 E, 58.

1923 A, 312, 314 (*Urocyon, errore*).

Rhoads, S. N. 1903 A, 229.

Schlosser, M. 1902 H, 141.

Trouessart, E. L. 1904 A, 238.

Pleistocene (Early); Pennsylvania.

### ***Vulpes palmaria* Hay.**

Hay, O. P. 1917 E, 46, 57.

Baker, F. C. 1920 A, 374 (*V. palmaria*).

Hay, O. P. 1923 A, 382.

1927 D, 274.

Loomis, F. B. 1924 C, 506.

Sellards, E. H. 1916 C, 132, 152, 158, pl. xxx, fig. 4 (*V. pennsylvanicus*?).

1916 D, 617 (*V. pennsylvanicus*?).

1916 E, 17 (*V. sp.*).

1916 F, 7, 9 (*V. pennsylvanicus*?).

Pleistocene (Early); Florida.

### ***Vulpes* sp. indet.**

Furlong, E. L. 1904 A, 54.

1906 A, 243. Pleistocene (Samwel Cave); California.

Hay, O. P. 1923 A, 350 (This genus?). Pleistocene; Maryland.

1927 D, 214. Pleistocene; California.

Miller, L. H. 1912 A, 73. Pleistocene (Samwel Cave); California.

### **UROCYON Baird. Type *Canis cinereoargenteus* Schreber.**

Baird, S. F. 1857 A, 121, 138.

Allen, J. A. 1892 A.

Elliot, D. G. 1901 A, 307.

Grant, M. 1904 B, 194.

Gray, J. E. 1868 B, 495.

Gregory, W. K. 1921 A, 77.

Ihering, H. 1910 A, 164.

Kingsley, J. S. 1925 A, 210, fig. 222.

Matthew, W. D. 1915 K, 402.

1918 A, 189.

Merriam, C. H. 1892 A, 61.

Merriam, J. C. 1906 A, 9.

Miller, G. S. 1912 B, 85.

1924 C, 147.

Osborn, H. F. 1909 D, 89, 90.

1910 B, 477, 488, 528.

Palmer, T. S. 1904 A, 701, 826.

Scott, W. B. 1913 A, 162, 165, 517.

Trouessart, E. L. 1904 A, 239.

### ***Urocyon californicus* (Mearns).**

Mearns, E. A. 1897, Proc. U. S. Nat. Mus., xx, 459 (*U. cinereoargenteus californicus*).

Abel, O. 1926 B, 237.

Hay, O. P. 1927 D, 184, 191.

Merriam, J. C. 1912 C, 262, fig. 43.

Merriam and Stock 1925 A, 10.

Miller, G. S. 1912 B, 85.

1924 C, 147.

Osborn, H. F. 1925 D, 531.

Stock, C. 1925 A, 30.

1927 A, 156 (This species?).

Swarth, H. S. 1915 A, 18.

Wyman, L. E. 1922 A, 23.

Recent; Southern California: Pleistocene (La Brea); California.

### ***Urocyon californicus townsendi* Merriam, C. H.**

Merriam, C. H. 1899, N. A. Fauna, No. 16, 103.

Elliot, D. G. 1901 A, 309 (*U. townsendi*).

Furlong, E. L. 1904 A, 55 (*U. townsendi*).

1906 A, 245 (*U. townsendi*).

Hay, O. P. 1927 D, 214, 215 (*U. cinereoargenteus townsendi*).

Merriam and Stock 1925 A, 10 (*U. cinereoargenteus townsendi*).

Miller, G. S. 1912 B, 86.

1924 C, 147.

Miller, L. H. 1912 A, 70, 73 (*U. townsendi*).

Osborn, H. F. 1910 B, 477 (*U. townsendi*).

Sinclair, W. J. 1903 A, 711 (*U. townsendi*).

1904 A, 17 (*U. townsendi*).

Stock, C. 1925 A, 113 (*U. cinereoargenteus townsendi*).

Recent; northern California: Pleistocene; California.

### ***Urocyon cinereoargenteus* (Schreber).**

Schreber, J. C. D. 1775, Säugethiere, xii, pl. xcii (*Canis*).

Hay, O. P. 1902 A, 775 (*Canis cinereoargenteus*).

Baker, F. C. 1920 A, 208, 215, 354 (*Canis cinereoargenteus*); 474 (*Urocyon cinereoargenteus*).

Cope, E. D. 1895 G, 596 (*Vulpes virginianus*).

Elliot, D. G. 1901 A, 307.

Fischer, J. B. 1829 A, 191 (*Canis*).

Foote, J. S. 1916 A, 145, pl. xx ("greyfox").

Frech and Geinitz 1903 A (*Canis*).

Freudenberg, W. 1910 A, 28, pl. v, figs. 1, 12; pl. vii, figs. 5, 6 (*U. cinereoargenteus*).

1921 A, 138 (*U. cinereoargenteus*).

1922 A, 4 (*U. cinereoargenteus*).

Giebel, C. G. 1883 A, pl. xii (*Canis cinereoargenteus*).

Gray, J. E. 1868 B, 522 (*U. virginianus*).

Grevé, C. 1891 A, 421 (*Canis virginianus*).

Hay, O. P. 1923 A, 498.

Huxley, T. H. 1880 D, 416, 426, 454 (*Canis Vulpes*).

Leidy, J. 1889 H, 18 (*Vulpes virginianus*).



Lockington, W. N. 1884 A, 411 (*Vulpes cinereopargentatus*).

Mercer, H. C. 1894 A, 97 ("grayfox").

Miller, G. S. 1912 B, 86.  
1924 C, 147.

Rhoads, S. N. 1903 A, 229.

Recent (Type form); eastern North America: Pleistocene; Pennsylvania, Illinois, Mexico?

*Urocyon* sp. indet.

Brown, B. 1908 A, 183. Pleistocene (Middle); Arkansas.

Freudenberg, W. 1910 A, 30. Pleistocene; Arkansas.

Oidley, J. W. 1927 E, 274.

Hay, O. P. 1914 A, 32.

1924 D, 252. Pleistocene; Arkansas.

1927 D, 274. Pleistocene; Florida.

Osborn, H. F. 1910 B, 488. Pleistocene (Middle); Arkansas.

Simpson, G. G. 1928 H, 2 (This genus?). Pleistocene (Early); Florida.

#### SIMOCYONINÆ Trouessart.

Trouessart, E. L. 1897 A, 291.

Hay, O. P. 1902 A, 770.

Beddard, F. E. 1902 A, 423.

Matthew, W. D. 1907 A, 181.

1924 C, 122, fig. 28.

Merriam, J. C. 1908 A, 32.

Osborn, H. F. 1910 B, 529 ("Cyon or dhole-like group").

Trouessart, E. L. 1904 A, 221.

Zittel, K. A. 1893 B, 632.

#### ICTICYON Lund. Type not selected.

Lund, P. W. 1843, Overs. k. Danske Vid.

Selsk. Forh., Kjöbenh. 1842 (1843), No. 6, 80.

Frick, C. 1926 A, 17.

Matthew, W. D. 1902 C, 285, 286.

1907 A, 180, 181, 192.

1915 A, 217.

1924 C, 120.

Matthew and Cook 1909 A, 377.

Nicholson and Lydekker 1889 A, 1436.

Osborn, H. F. 1910 B, 296, 529.

Palmer, T. S. 1904 A, 347, 824.

Scott, W. B. 1913 A, 683.

Trouessart, E. L. 1904 A, 341.

Winge, H. 1924 A, 194, 243, 248 (Ictidocyon).

Zittel, K. A. 1893 B, 631.

*Icticyon*? sp. indet.

Matthew, W. D. 1902 C, 285 (Cyon? or Icticyon?).

1909 C, 114.

Miocene (Middle); Colorado.

#### CUON Hodgson. Type *C. primævus* Hodgson.

Hodgson, B. H. 1838, Ann. Nat. Hist., i, 152.

Agassiz, L. 1846, Nomencl. Zoolog. 1st ed. 108 (Cuon); 113 (Cyon).

Blanford, W. T. 1888, Fauna Brit. India Mamm., pt. i, 142-147 (Cyon).

Matthew, W. D. 1904 C, 249 (Cyon).

1907 A, 180, 181, 192 (Cyon).

1909 C, 118 (Cyon? or Icticyon?).

1915 A, 219, 266 (Cyon?).

Matthew, W. D. 1924 C, 120, 122, fig. 28 (Cyon).

Osborn, H. F. 1910 B, 296, 529 (Cyon).

Studer, Th. 1901 A, 7.

*Cuon* sp. indet.

Barbour and Cook 1917 A, 172 (Cyon sp. indet); Miocene (Devil's Gulch); Nebraska.

Matthew, W. D. 1909 C, 114 ("Cyon or Icticyon sp."). Miocene (Middle); Colorado.

#### DAPHÆNUS Leidy. Type *D. vetus* Leidy.

Hay, O. P. 1902 A, 772.

Beddard, F. E. 1902 A, 424 (Daphænus).

Frick, C. 1926 A, 6 (Daphænus).

Gregory, W. K. 1920 A, 149, fig. 80.

Hatcher, J. B. 1902 F, 66, 105 (Daphænus);

95, 105 (Proamphicyon, type *P. nebrascensis*);

99, 105 (Protemnocyon, type *P. inflatus*).

Haug, E. 1911 A, 1528 (Daphænus).

Jepsen, G. L. 1926 A, 1.

Lydekker, R. 1904 C, 62, fig. 2 (Daphænus).

Matthew, W. D. 1901 B, 369, 370, 445 (Daphænus).

1902 C, 286.

1903 D, 912. (Daphænus, Protemnocyon, Proamphicyon).

1906 C, 214, 216, text-fig. 6 (Daphænus).

1907 A, 181, 192, 200 (Daphænus).

1909 C, 110 (Daphænus).

1909 D, 353 (Daphænus).

1912 B, 182.

Matthew, W. D. 1915 A, 219 (Daphænus).

1915 K, 420 (Daphænus).

1918 A, 190 (Proamphicyon a syn.).

1924 C, 106, 109, 114, 116, 119, 122.

1924 E, 748.

1928 B, 974, fig. 13.

Merriam, J. C. 1906 A, 27, 53, 59 (Daphænus);

28, 58 (Protemnocyon); 59 (Proamphicyon).

Moodie, R. L. 1916 E, 185, fig. 5 (Daphænus).

1922 C, 360 (Daphænus).

1923 B, 246 (Daphænus).

O'Harra, C. C. 1910 A, 79, 146.

Osborn, H. F. 1907 G, 139, fig. 96.

1909 D, 61, 63 (Daphænus).

1910 B, 213, 222, 529, fig. 109 (Daphænus).

Palmer, T. S. 1904 A, 216, 824 (Daphænus);

579, 825 (Protemnocyon).

Peterson, O. A. 1910 A, 261 (Protemnocyon, Proamphicyon).

Pohle, H. 1920 A, 48 (Daphænus).

- Romer, A. S. 1924 B, 235, fig. 1.  
 Schlosser, M. 1898 I, 516 (Daphænus).  
     1902 A, 136, 138 (Daphænus).  
     1902 B, 297 (Daphænus).  
     1904 B, 449 (Daphænus).  
 Scott, W. B. 1913 A, 679.  
 Sinclair, W. J. 1924 A, 106.  
 Stromer, E. 1902 A, 238, 270 (Daphænus).  
     1902 B, 561 (Daphænus).  
 Thorpe, M. R. 1922 C, 166, 173.  
     1922 D, 375.  
 Trouessart, E. L. 1904 A, 217 (Daphænus).  
 Weber, M. 1904 A, 542.  
 Weber and Abel 1928 A, 340 (Daphænus).  
 Winge, H. 1924 A, 177, 193, 243.  
 Wortman, J. L. 1901 A, 202 (Daphænus).  
     1901 B, xi, 339, 448.  
 Zittel and Schlosser 1911 A, 386 (Protem-  
 nocyon); 388 (Daphænus).  
     1923 A, 468 (Daphænus); 467 (Protem  
 nocyon).

### **Daphænus dodgei** Scott.

- Hay, O. P. 1902 A, 772.  
 Cook, H. J. 1912 D, 34.  
 Hatcher, J. B. 1902 F, 95 (Daphænus).  
 Matthew, W. D. 1909 C, 103 (Daphænus).  
 O'Harra, C. C. 1920 A, 149.  
 Schlosser, M. 1904 B, 449 (Daphænus).  
 Trouessart, E. L. 1904 A, 217 (Daphænus).  
 Wortman, J. L. 1901 B, xi, 449, 450.  
     Oligocene (Chadron); Nebraska.

### **Daphænus felinus** Scott.

- Hay, O. P. 1902 A, 772.  
 Anonymous 1910 A, 197.  
 Cook, H. J. 1912 D, 36.  
 (Siebel, C. G. 1883 A, pl. li (Dinictis).  
 Hatcher, J. B. 1902 F, 65, 68, pl. xiv; pl. xvi,  
     figs. 2-5; pl. xvii; pl. xviii, figs. 1, 4, 5; pls.  
     xix, xx; text-figs. 1, 3-5 (Daphænus).  
     1903 C, 570.

Lambe, L. M. 1908 A, 11, 62, pl. viii, figs. 15,  
 16 (Daphænus).

Matthew, W. D. 1903 D, 912 (Daphænus).  
     1909 C, 105 (Daphænus).

Merriam, J. C. 1906 A, 27.  
 Moodie, R. L. 1916 E, 141 (Daphænus)

    1918 C, 279 (Daphænus).  
     1918 D, 506, figs. 38, 39 (Daphænus).

    1922 C, 359 (Daphænus).  
     1923 B, 247, 272, pl. liii (Daphænus).

O'Harra, C. C. 1910 A, 80, pl. xxv.  
     1920 A, 151, pl. xiii.

Peterson, O. A. 1909 B, 621.  
     1910 A, 208.

Romer, A. S. 1924 B, 235, fig. 1.

Scott, W. B. 1913 A, 523, 524, figs. 256, 257  
 (Daphænus).

Sinclair, W. J. 1924 A, 108.

Trouessart, E. L. 1904 A, 217 (Daphænus).  
     Oligocene (White River); South Dakota.

### **Daphænus hartshornianus** (Cope).

- Hay, O. P. 1902 A, 772.  
 Cook, H. J. 1912 D, 36.

Cope, E. D. 1884 O, 896, 906, pl. lxx, fig. 12  
 (Amphicyon).

Hatcher, J. B. 1902 F, 65.

Lambe, L. M. 1908 A, 11, 63, pl. vii, figs. 17-  
 20 (Protemnocyon).

Lydekker, R. 1884 A, 247 (Amphicyon).

Matthew, W. D. 1901 B, 357 (Daphænus).

    1909 C, 105 (Daphænus).

Merriam and Sinclair 1907 A, 184 (Amphi-  
 cyon).

O'Harra, C. C. 1920 A, 151.

Osborn, H. F. 1921 D, 3, fig. 2.

Romer, A. S. 1924 B, 235, fig. 1.

Sinclair, W. J. 1924 A, 101, 108, 111.

Thorpe, M. R. 1922 E, 428.

Trouessart, E. L. 1904 A, 217 (Daphænus).  
     Oligocene (Brule); Colorado, Nebraska.

### **Daphænus inflatus** (Hatcher).

Hatcher, J. B. 1902 F, 99, pl. xv; pl. xviii,  
 figs. 6-8 (Protemnocyon).

Cook, H. J. 1912 D, 36.

Matthew, W. D. 1909 C, 105.

O'Harra, C. C. 1920 A, 151.

Trouessart, E. L. 1904 A, 218 (Protemnocyon).  
     Middle Oligocene (Brule); South Dakota,  
     Nebraska, etc.

### **Daphænus nebrascensis** (Hatcher).

Hatcher, J. B. 1902 F, 95, figs. 6, 7 (Proam-  
 phicyon).

Cook, H. J. 1912 D, 36.

Matthew, W. D. 1909 C, 105 (Daphænus).

O'Harra, C. C. 1920 A, 151.

Sinclair, W. J. 1924 A, 107, 108 (Proamphi-  
 cyon).

Trouessart, E. L. 1904 A, 218 (Proamphi-  
 cyon).

    Middle Oligocene (Brule); South Dakota,  
     Nebraska.

### **Daphænus robustus** Scott.

Hay, O. P. 1902 A, 772.

Trouessart, E. L. 1904 A, 217 (Daphænus).

    Oligocene (White River); Colorado.

### **Daphænus vetus** Leidy.

Hay, O. P. 1902 A, 772.

Cook, H. J. 1912 D, 36 (D. vitus).

Hatcher, J. B. 1902 F, 65.

Matthew, W. D. 1901 B, 357 (Daphænus).

    1909 C, 105 (Daphænus).

Merrill, G. P. 1907 A, 32 (Amphicyon, Da-  
 phænus).

O'Harra, C. C. 1920 A, 151.

Romer, A. S. 1924 B, 235, fig. 1.

Schlosser, M. 1904 B, 449.

Sinclair, W. J. 1924 A, 101, figs. 2-4.

Thorpe, M. R. 1922 E, 428.

    1923 D, 98, figs. 3, 4.

Trouessart, E. L. 1904 A, 217 (Daphænus).

Wortman, J. L. 1901 B, xi, 448, 450, pl. ii.  
     Oligocene (Middle); Nebraska, Colorado.

### **Daphænus** sp. indet.

- Matthew, W. D. 1909 C, 103 (Daphænus).  
     Oligocene (Lower); Montana?

PARADAPHÆNUS Matthew. Type *Canis cuspidigerus* Cope.

- Hay, O. P. 1902 A, 772.  
 Matthew, W. D. 1909 C, 110.  
     1924 C, 122, 128, fig. 28.  
 Merriam, J. C. 1906 A, 58, 59.  
 Palmer, T. S. 1904 A, 512, 825.  
 Peterson, O. A. 1910 A, 260 (Paradaphænus).  
 Schlosser, M. 1902 A, 136.  
 Thorpe, M. R. 1922 C, 166, 173.  
 Wortman, J. L. 1901 A, 201.  
 Zittel and Schlosser 1911 A, 388.  
     1923 A, 468.

**Paradaphænus cuspidigerus** (Cope).

- Hay, O. P. 1902 A, 772.

- Lydekker, R. 1884 A, 247 (Amphicyon cuspidigerus, A. entoptychi).  
 Matthew, W. D. 1909 C, 106.  
 Merriam, J. C. 1906 A, 5.  
 Merriam and Sinclair 1907 A, 184.  
 Seeley, H. G. 1886 A, 517 (Amphicyon).  
     Upper Oligocene (John Day); Oregon.

**Paradaphænus transversus** Wortman and Matthew.

- Hay, O. P. 1902 A, 772.  
 Matthew, W. D. 1909 C, 106.  
 Thorpe, M. R. 1922 C, 166.  
     Upper Oligocene (John Day); Oregon.

TEMNOCYON Cope. Type *T. altigenis* Cope.

- Hay, O. P. 1902 A, 773.  
 Cook, H. J. 1909 D, 262.  
 Cope, E. D. 1880 U, 156.  
 Haug, E. 1911 A, 1705.  
 Heilprin, A. 1887 A, 388.  
 Lydekker, R. 1908 A, 506.  
 Matthew, W. D. 1902 C, 286.  
     1903 D, 913.  
     1904 C, 249.  
     1907 A, 180, 181, 192.  
     1909 C, 110.  
     1924 C, 103, 119, 122, fig. 28.  
     1924 E, 748.  
 Merriam, J. C. 1906 A, 24, 27, 58, 59.  
 Osborn, H. F. 1905 I, 103.  
     1909 D, 68.  
     1910 B, 230, 529.  
     1912 G, 246.  
 Palmer, T. S. 1904 A, 668, 826.  
 Peterson, O. A. 1910 A, 259.  
 Pilgrim, G. E. 1912 A, 14.  
 Schlosser, M. 1898 I, 514.  
     1902 A, 135, 186.  
     1902 B, 299.  
     1903 I, 26, 176, 211.  
     1904 B, 449.  
 Scott, W. B. 1913 A, 528, 530.  
 Seeley, H. G. 1886 A, 517.  
 Stromer, E. 1902 B, 554, 561.  
 Thorpe, M. R. 1922 D, 375.  
 Weber, M. 1904 A, 542.  
 Winge, H. 1924 A, 177, 193, 243.  
 Wortman, J. L. 1901 B, xi, 450.  
 Zittel and Schlosser 1911 A, 387.  
     1923 A, 467.

**Temnocyon altigenis** Cope.

- Hay, O. P. 1902 A, 773.  
 Cook, H. J. 1909 D, 264.  
 Matthew, W. D. 1903 D, 913.  
     1909 C, 107.  
 Merriam, J. C. 1906 A, 4, 5, 21, 25, 26, 29, pl. iii, fig. 2; text-figs. 7-11.  
 Merriam and Sinclair 1907 A, 184, 188, 189, 191, 192.

- Schlosser, M. 1898 I, 515.  
 Thorpe, M. R. 1922 C, 167.  
     Upper Oligocene (John Day); Oregon.

**Temnocyon ferox** Eyerman.

- Hay, O. P. 1902 A, 773.  
 Condon, T. 1896 A, 12, pl. small fig. (Canis shoshonensis).  
     1902 A, 123, pl. xviii, small fig. (Canis shoshonensis).  
     1910 A, 103, pl. xviii, small fig. (Canis shoshonensis, Temnocyon ferox).  
 Matthew, W. D. 1903 D, 913.  
     1909 C, 107.

- Merriam, J. C. 1906 A, 4, 5, 22, 29.  
 Merriam and Sinclair 1907 A, 184, 191, 192.  
 Schlosser, M. 1898 I, 515.  
 Trouessart, E. L. 1904 A, 218.  
     Upper Oligocene (John Day); Oregon.

**Temnocyon percussor** Cook.

- Cook, H. J. 1909 D, 266, fig. 3.  
     1912 D, 40.  
 O'Harra, C. C. 1920 A, 155.  
     Lower Miocene (Harrison); Nebraska.

**Temnocyon venator** Cook.

- Cook, H. J. 1909 D, 262, figs. 1, 2.  
     1912 D, 40.  
 O'Harra, C. C. 1920 A, 155.  
     Lower Miocene (Harrison); Nebraska.

**Temnocyon wallovianus** Cope.

- Hay, O. P. 1902 A, 773.  
 Cook, H. J. 1909 D, 264.  
 Matthew, W. D. 1909 C, 107.  
 Merriam, J. C. 1906 A, 5, 23, 29.  
 Merriam and Sinclair 1907 A, 184.  
 Schlosser, M. 1898 I, 515.  
 Trouessart, E. L. 1904 A, 218.  
     Upper Oligocene (John Day); Oregon.

**Temnocyon** sp. indet.

- Barbour and Cook 1917 A, 172. Pliocene (Snake Creek); Nebraska.

**EUOPLOCYON** Matthew. Type *E. prædator* Matthew.

Matthew, W. D. 1924 C, 103, 109, 122.

**Euoplocyon prædator** Matthew.

Matthew, W. D. 1924 C, 65, 71, 103, fig. 28.

1902 C, 285 ("Cyon?").

Upper Miocene (Lower Snake Creek); Nebraska.

**Euoplocyon magnus** (Thorpe).

Thorpe, M. R. 1922 E, 440, figs. 9-11 (*Ælurodon taxoides magnus*).

Matthew, W. D. 1924 C, 104 (To *Euoplocyon*).

Upper Miocene (Valentine); Nebraska.

**Euoplocyon** sp. indet.

Matthew, W. D. 1924 C, 71. Upper Miocene (Pawnee Creek); Colorado.

**ENHYDROCYON** Cope. Type *E. stenocephalus* Cope.

Hay, O. P. 1902 A, 770 (*Enhydrocyon*, *Hyænocyon*).

Beddard, F. E. 1902 A, 423.

Matthew, W. D. 1904 C, 249 (*Enhydrocyon*, *Hyænocyon*).

1907 A, 170, 174, 180, 181, 189, 190 (*Hyænocyon* a syn.).

1909 C, 111, 118.

1924 C, 103, 109, 119, 122, fig. 28.

1924 E, 748.

Merriam, J. C. 1906 A, 38, 58, 59 (*Enhydrocyon*, *Hyænocyon*).

O'Harra, C. C. 1910 A, 80, 130.

Osborn, H. F. 1909 D, 75.

1910 B, 230, 236, 529.

Palmer, T. S. 1904 A, 259, 824 (*Enhydrocyon*); 333, 824 (*Hyænocyon*).

Peterson, O. A. 1910 A, 260 (*Enhydrocyon*, *Hyænocyon*).

Pilgrim, G. E. 1912 A, 13.

Schlosser, M. 1902 A, 135, 137 (*Enhydrocyon*, *Hyænocyon*).

1902 B, 299.

Scott, W. B. 1913 A, 528, 530.

Seeley, H. G. 1886 A, 517.

Thorpe, M. R. 1922 D, 375.

Weber, M. 1904 A, 542 (*Enhydrocyon*, *Hyænocyon*).

Wortman, J. L. 1901 B, xi, 449 (*Enhydrocyon*, *Hyænocyon*).

Zittel and Schlosser 1911 A, 388.

1923 A, 469.

**Enhydrocyon basillatus** Cope.

Hay, O. P. 1902 A, 770 (*Hyænocyon*).

Matthew, W. D. 1907 A, 190.

1909 C, 107.

Merriam, J. C. 1906 A, 5 (*Hyænocyon*).

Merriam and Sinclair 1907 A, 184 (*Hyænocyon*).

Trouessart, E. L. 1904 A, 222 (*Hyænocyon*).

Oligocene (John Day); Oregon.

**Enhydrocyon crassidens** Matthew.

Matthew, W. D. 1907 A, 171, 190, figs. 6, 7.

1909 C, 112.

O'Harra, C. C. 1920 A, 155.

Thorpe, M. R. 1922 C, 175.

Miocene (Lower); South Dakota.

**Enhydrocyon oregonensis** Thorpe.

Thorpe, M. R. 1922 C, 173, figs. 4, 5.

Upper Oligocene (Middle John Day); Oregon.

**Enhydrocyon sectorius** Cope.

Hay, O. P. 1902 A, 770 (*Hyænocyon*).

Matthew, W. D. 1907 A, 189, 190.

1909 C, 107.

Merriam, J. C. 1906 A, 5 (*Hyænocyon*).

Merriam and Sinclair 1907 A, 184 (*Hyænocyon*).

Oligocene (Upper); Oregon.

**Enhydrocyon stenocephalus** Cope.

Hay, O. P. 1902 A, 770.

Matthew, W. D. 1907 A, 189.

1909 C, 107.

Merriam, J. C. 1906 A, 5.

Merriam and Sinclair 1907 A, 184.

Sternberg, C. 1881 C, 416.

1909 C, 189.

Thorpe, M. R. 1922 C, 174.

Trouessart, E. L. 1904 A, 221.

Oligocene (John Day); Oregon.

**ARÆOCYON** Thorpe. Type *Pliocyon marshi* Thorpe.

Thorpe, M. R. 1922 A, 97 (To replace *Pliocyon*, preoccupied).

Matthew, W. D. 1924 C, 102.

Merriam, Stock, Moody 1925 A, 47.

Thorpe, M. R. 1922 D, 371.

**Aræocyon marshi** Thorpe.

Thorpe, M. R. 1921 C, 477, figs. 1-3 (*Pliocyon*).

1922 A, 97.

1922 D, 371.

Pliocene (Rattlesnake); Oregon.

**PHILOTHRAX** Merriam, J. C. Type *P. condoni* Merriam.

Merriam, J. C. 1906 A, 30, 59.

Matthew, W. D. 1907 A, 181.

1909 C, 110.

1924 C, 109, 120.

Osborn, H. F. 1909 D, 68.

Peterson, O. A. 1910 A, 260.

Zittel and Schlosser 1911 A, 387 (*Philothrax*).

1923 A, 467 (*Philothrax*).

**Philotrox condoni** Merriam.

- Merriam, J. C. 1906 A, 4, 5, 30, figs. 12-14.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 184, 188, 189.

- Thevenin, A. 1907 A, 216 (*Philothrox condoni*).  
 Thorpe, M. R. 1922 C, 165.  
 Upper Oligocene (Middle John Day); Oregon.

## AMPHICYONINÆ.

- Arlt, T. 1912 A, 748.  
 Frick, C. 1926 A, 7, 13.  
 Matthew, W. D. 1907 A, 181.  
 1909 D, 401, 415, 416.  
 1915 A, 219.  
 1924 C, 115, 116, 122, fig. 28.

- Osborn, H. F. 1909 D, 77.  
 Trouessart, E. L. 1904 A, 218.  
 Weber and Abel 1928 A, 328.  
 Zittel, K. A. 1893 B, 635 (*Amphicyoninae*).  
 Zittel and Schlosser 1911 A, 387.  
 1923 A, 467, 668, 670.

PLIOCYN Matthew. Type *P. medius* Matthew.

- Matthew, W. D. 1918 A, 190.  
 Frick, C. 1926 A, 35 (Syn. of *Hemicyon*, in part).  
 Matthew, W. D. 1924 C, 106, 113, 114, 116, 122, 127, fig. 28.  
 Stock and Furlong 1926 A, 45.  
 Zittel and Schlosser 1923 A, 468, 679.  
**Pliocyon gidleyi** (Matthew).  
 Matthew, W. D. 1902 A, 130, figs. 1-4 (*Dinocyon*).  
 Gidley, J. W. 1903 C, 634 (*Dinocyon*).  
 Matthew, W. D. 1902 C, 290 (*Dinocyon*?, *Borophagus*?).  
 1909 C, 155 (*Dinocyon*).  
 1924 C, 105, 116 [*Pliocyon* (*Dinocyon*)].  
 Osborn, H. F. 1904 F, 22 (*Dinocyon*).  
 Stock and Furlong 1926 A, 45 (*Pliocyon*, *Dinocyon*).  
 Trouessart, E. L. 1904 A, 219 (*Dinocyon*).  
 Miocene (Clarendon); Texas.

- Pliocyon meandrinus** (Hatcher).  
 Hay, O. P. 1902 A, 774 (*Ælurodon*).  
 Gidley, J. W. 1903 C, 634 (*Dinocyon*).  
 Matthew, W. D. 1902 A, 130 (*Canis*); 132 (*Dinocyon*).  
 1902 C, 289 [*Dinocyon*? (*Borophagus*)].  
 1904 C, 252 (*Ælurodon*?).  
 1909 C, 115.  
 1924 C, 114 (*P. meandrinus*).  
 Merriam, J. C. 1917 A, 438 (*Dinocyon*).  
 Stock and Furlong 1926 A, 45, 49 (*Ælurodon*).  
 Trouessart, E. L. 1904 A (*Dinocyon*).  
 Miocene (Upper); Nebraska, Kansas, Texas.

**Pliocyon medius** Matthew.

- Matthew, W. D. 1918 A, 185, 192, fig. 2.  
 Frick, C. 1926 A, 42.  
 Matthew, W. D. 1924 C, 65, 106, 113, 114, 116.  
 Stock and Furlong 1926 A, 48.  
 Upper Miocene (Lower Snake Creek); Nebraska.

**Pliocyon** sp. indet.

- Matthew, W. D. 1918 A, 185 ("P. sp. max.").  
 Pliocene (Upper Snake Creek); Nebraska.  
 1924 C, 65.

HADROCYN Stock and Furlong. Type *H. mohavensis* Stock and Furlong.

- Stock and Furlong 1926 A, 45, 51.  
 Furlong, E. L. 1927 A, 174.

**Hadrocyon mohavensis** Stock and Furlong.

- Stock and Furlong 1926 A, 45, pls. vii, viii.  
 Stock, C. 1928 D, 43, pl. i, fig. a ("*Hadrocyon*").  
 Pliocene (Ricardo); California.

DAPHNODON Peterson. Type *Amphicyon superbus* Peterson.

- Peterson, O. A. 1909 B, 620.  
 Matthew, W. D. 1912 B, 182.  
 1918 A, 192, 194.  
 1924 C, 106, 114, 115, 122, fig. 28.  
 Moodie, R. L. 1916 E, 142.  
 1923 B, 246 (*Daphnodon*).  
 Osborn, H. F. 1910 B, 236, 529.  
 Peterson, O. A. 1910 A, 258.  
 Scott, W. B. 1913 A, 525, 526, 530.  
 Zittel and Schlosser 1911 A, 388 (Syn. of *Daphenus*).  
 1923 A, 468 (Syn. of *Daphenus*).

**Daphnodon periculosus** Cook.

- Cook, H. J. 1909 D, 268, fig. 4.  
 1912 D, 40.  
 O'Harra, C. C. 1920 A, 155.  
 Miocene (Lower Harrison); Nebraska.

**Daphnodon superbus** Peterson.

- Peterson, O. A. 1906 C, 51 (*Amphicyon*).  
 Barbour and Cook 1917 B, 180, figs. 9-11 (*Daphnodon*).  
 Cook, H. J. 1909 D, 268 (*D. superbus*).  
 1912 D, 40 (*Daphnodon superbus*).  
 Loomis, F. B. 1910 B, 298.  
 Lull, R. S. 1917 B, 637.

- O'Harra, C. C. 1920 A, 79, 155, pl. xxvi; text-figs. 23, 25.  
 Peterson, O. A. 1909 B, 620.  
 1910 A, 206, 207, pls. lxxiv-lxxxiv; text-figs. 2-5, 7-9, 11-55.

### HYÆNOGNATHUS Merriam. Type *H. pachyodon* Merriam.

- Merriam, J. C. 1903 B, 278.  
 Cook, H. J. 1922 B, 4 (*Hyænogmathus*, *Porthocyon*).  
 Freudenberg, W. 1910 A, 18.  
 Frick, C. 1926 A, 17.  
 Hay, O. P. 1923 A, 15.  
 Matthew, W. D. 1904 C, 249.  
 1924 C, 102, 122, fig. 28.  
 Matthew and Cook 1909 A, 372.  
 Merriam, J. C. 1915 E, 233.  
 1917 A.  
 1919 A, 538.  
 Scott, W. B. 1913 A, 522, 524, 530.  
 Thorpe, M. R. 1922 D, 377.  
 Winge, H. 1924 A, 177, 194, 243.  
 Zittel and Schlosser 1911 A, 388.  
 1923 A, 468, 680, 681.

### *Hyænogmathus cyonoides* Martin.

- Martin, H. T. 1928 A, 235, pl. xxi.  
 Pliocene; Kansas.

### *Hyænogmathus direptor* Matthew.

- Matthew, W. D. 1924 C, 65, 100, fig. 20.  
 Lower Pliocene (Upper Snake Creek); Nebraska.

### *Hyænogmathus? dubius* Merriam, J. C.

- Merriam, J. C. 1903 B, 283, pls. xxix, xxx, fig. 1 [H. ? (*Porthocyon*)].  
 Cook, H. J. 1922 B, 4 (*Porthocyon*).  
 Freudenberg, W. 1910 A, 18.

- Scott, W. B. 1913 A, 525, fig. 259.  
 Stock and Furlong 1926 A, 46.  
 Zittel and Schlosser 1923 A, 468 (*Daphænus superbus*).  
 Miocene (Lower Harrison); Nebraska.

### Freudenberg, W. 1921 A, 138.

- Merriam, J. C. 1919 A, 538 [H. (*Porthocyon*)].  
 Trouessart, E. L. 1904 A, 219 [H. (*Porthocyon*?)].  
 Late Pliocene (Contra Costa County); California.

### *Hyænogmathus matthewi* Freudenberg.

- Freudenberg, W. 1910 A, 17, pl. v, figs. 3, 4 [H. (*Porthocyon*)].  
 1922 A, 4 (H. *matthewi*).  
 Haug, E. 1911 A, 1887.  
 Pleistocene?; Mexico.

### *Hyænogmathus pachyodon* Merriam, J. C.

- Merriam, J. C. 1903 B, 278, pl. xxviii, figs. 1, 2; text-figs. 1, 3.  
 Cook, H. J. 1922 B, 4.  
 Freudenberg, W. 1910 A, 21.  
 Matthew, W. D. 1924 C, 102.  
 Matthew and Cook 1909 A, 37.  
 Merriam, J. C. 1917 A, 425.  
 Thorpe, M. R. 1922 D, 376.  
 Trouessart, E. L. 1904 A, 219.  
 Pliocene (Tulare ?); California.

### *Hyænogmathus pugnator* (Cook).

- Cook, H. J. 1922 B, 6, 18-20, 3 figs. (*Porthocyon*).  
 Matthew, W. D. 1924 C, 102 (*Porthocyon*, *Ælu-rodon*).  
 Pliocene (Snake Creek); Colorado.

### CYNARCTUS Matthew. Type *C. saxatilis* Matthew.

- Matthew, W. D. 1902 C, 281.  
 Barbour and Cook 1914 A, 225.  
 Gregory, W. K. 1910 A, 314.  
 Haug, E. 1911 A, 1705.  
 Matthew, W. D. 1912 B, 185.  
 Merriam, J. C. 1906 A, 59.  
 Osborn, H. F. 1909 D, 78.  
 Palmer, T. S. 1904 A, 209, 824.  
 Romer and Sutton 1927 A, 463.  
 Trouessart, E. L. 1904 A, 218.  
 Zittel and Schlosser 1911 A, 382.  
 1923 A, 472, 673.

### *Cynarctus acridens* Barbour and Cook.

- Barbour and Cook 1914 A, 226, pl. i, c.d.  
 Lower Miocene (Harrison); Nebraska.

### *Cynarctus crucidens* Barbour and Cook.

- Barbour and Cook 1914 A, 225, pl. i, a. b.  
 1917 A, 172.  
 Middle Miocene (Pawnee Creek); Colorado.

### *Cynarctus saxatilis* Matthew.

- Matthew, W. D. 1902 C, 281, fig. 1.  
 Barbour and Cook 1914 A, 226, fig. 1.  
 Matthew, W. D. 1909 C, 114.  
 Middle Miocene (Pawnee Creek); Colorado.

### TOMARCTUS Cope. Type *T. brevirostris* Cope.

- Hay, O. P. 1902 A, 775.  
 Matthew, W. D. 1909 C, 118.  
 1924 C, 70, 88, 118, 120, 122, fig. 28.  
 Palmer, T. S. 1904 A, 681, 833.  
 Weber and Abel 1928 A, 329.  
 See also *Tephrocyon*.

### *Tomarctus brevirostris* Cope.

- Hay, O. P. 1902 A, 775.  
 Barbour and Cook 1917 B, 180 (*Tephrocyon hippophagus*. This species ?).  
 Cook, H. J. 1912 D, 44 (*Tephrocyon hippophagus*).  
 1922 B, 5 (*Tephrocyon hippophagus*).  
 Cope and Matthew 1915 A, pl. cxix, fig. 4.

- Matthew, W. D. 1901 B, 359.  
1909 C, 114.  
1918 A, 185, 188 (Tephrocyon hippophagus).  
1924 C, 65, 71, 91, 122, figs. 11-16.
- Matthew and Cook 1909 A, 373, fig. 4 (Tephrocyon hippophagus).  
Merriam, J. C. 1913 D, 360, 361, 364, fig. 6 (Tephrocyon hippophagus).  
1917 A, 435 (Tephrocyon hippophagus).  
1919 A, 464 (Tephrocyon hippophagus).
- Sinclair, W. J. 1915 A, 76 (Tephrocyon hippophagus).
- Thorpe, M. R. 1922 E, 435 (Tephrocyon hippophagus).
- Trouessart, E. L. 1904 A, 226.  
Upper Miocene (Pawnee Creek); Colorado:  
(Lower Snake Creek); Nebraska.
- Tomarctus confertus** (Matthew).  
Matthew, W. D. 1918 A, 185, 188, 189, fig. 1 (Tephrocyon).  
Hay, O. P. 1924 A, 2 (Tephrocyon).  
Matthew, W. D. 1924 C, 65, 96, 123, figs. 17, 23.  
Upper Miocene (Lower Snake Creek); Nebraska.
- Tomarctus hippophagus** Matthew and Cook.  
Matthew and Cook 1909 A, 373, fig. 4.  
Barbour and Cook 1917 B, 180 (This species?).  
Cook, H. J. 1912 D, 44.  
Matthew, W. D. 1918 A, 185, 188.  
1924 C, 88 (Tephrocyon).  
Merriam, J. C. 1913 D, 360, 361, 364, fig. 6.  
1917 A, 435.  
Sinclair, W. J. 1915 A, 76.  
Pliocene (Snake Creek); Nebraska.

### AMPHICYON Lartet. Types A. major, A. minor Blainville.

- Lartet, E. 1886, Bull. Géol. Soc. France, VII, 219, 220.  
Abel, O. 1913 B, 717.  
Ameghino, F. 1906 A, 403.  
1912 B, 177.  
Ardt, T. 1907 D, 637.  
Boas, J. E. V. 1914 B, 530.  
Bose, P. N. 1880 A, 121.  
Bronn, H. G. 1838 A, 1275.  
1849 A, 721.  
Cahall, W. C. 1890 A, 231.  
Cope, E. D. 1880 U, 156, 157.  
Dall and Harris 1892 A, 296.  
Depéret, C. 1905 A, 1519.  
1907 B.  
1912 A, 709.  
Filhol, H. 1879 A, 75-106, pls. x-xvi.  
Frick, C. 1926 A, 16, 20.  
Gaudry, A. 1872 D, 1282.  
1891 C, 53, fig. 20.  
Gervais, P. 1852 A, 111, explan. pl. xxviii.  
1859 A, 214, pl. xxviii.  
Hatcher, J. B. 1902 F, 66.  
Haug, E. 1911 A, 1705.  
Hoernes, R. 1886 A, 695.  
Ihering, H. 1910 A, 158.  
Lockwood, S. 1884 A, 407.  
Lydekker, R. 1884 A, 246.

### Tomarctus marshi (Thorpe).

- Thorpe, M. R. 1922 E, 436, fig. 6 (Tephrocyon).  
Upper Miocene (Valentine); Nebraska.

### Tomarctus mortifer (Cook).

- Cook, H. J. 1914 B, 49, pls. i-iii (Tephrocyon).  
1922 B, 5 (Tephrocyon).  
Matthew, W. D. 1918 A, 185, 188 (Tephrocyon).  
1924 C, 65.  
Merriam, J. C. 1917 A, 436 (Tephrocyon).  
Sinclair, W. J. 1915 A, 76 (Tephrocyon).  
Thorpe, M. R. 1922 E, 436 (Tephrocyon).  
Miocene (Sheep Creek); Nebraska.

### Tomarctus optatus Matthew.

- Matthew, W. D. 1925 C, 65, 98, figs. 18, 19.  
Miocene (Sheep Creek); Nebraska.

### Tomarctus scitulus (Hay).

- Hay, O. P. 1924 A, 3, pl. i, figs. 2, 3 (Tephrocyon).  
Upper Miocene (Fleming); Texas.

### Tomarctus sp. indet.

- Barbour and Cook 1917 A, 172 (Tephrocyon).  
Pliocene (Devil's Gulch); Nebraska.  
1917 B, 180 (Tephrocyon). Pliocene (Valentine); Nebraska.
- Matthew and Cook 1909 A, 376, fig. 5 (Tephrocyon "sp. a"). Pliocene (Snake Creek); Nebraska.
- Merriam, J. C. 1913 D, 361 (Tephrocyon).  
Pliocene (Snake Creek); Nebraska.  
1917 A, 436 (Tephrocyon).
- Sinclair, W. J. 1915 A, 76 (Tephrocyon). Pliocene (Snake Creek); Nebraska.

- Mackie, S. J. 1863 D, 335.  
Matthew, W. D. 1902 C, 233, 284.  
1903 D, 913.  
1907 A, 179, 181, 194, 198.  
1909 C, 118.  
1909 D, 416.  
1918 A, 190.  
1924 C, 70, 104, 114, 119, 122, fig. 23.  
Matthew and Cook 1909 A, 366.  
Merriam, J. C. 1906 A, 59.  
Merriam, Stock, Moody 1925 A, 61.  
Osborn, H. F. 1905 I, 109.  
1909 D, 69, 72, 74, 77, 78, 83.  
1910 B, 605.  
1912 G, 247.  
Owen, R. 1880 E, 340.  
Palmer, T. S. 1904 A, 95, 823.  
Rütimeyer, L. 1862 C, 87.  
Schlosser, M. 1902 B, 297.  
1903 I, 219.  
1904 A, 496.  
1911 A.  
Scott, W. B. 1913 A, 524, 525, 530, 675.  
Seeley, H. G. 1878 A, 226.  
Serres, M. 1852 A, 119 (Amphycyon).  
Simpson, G. G. 1926 L, 174.  
Stromer, E. 1902 A, 240.  
1902 B, 554.

- Thorpe, M. R. 1922 D, 375.  
 Trouessart, E. L. 1904 A, 220.  
 Wallace, A. R. 1876 A, i, 118, 121, 134; ii, 559.  
 Weber, M. 1904 A, 534.  
 Weber and Abel 1928 A, xix, 328, 340.  
 Winge, H. 1924 A, 177, 195, 243.  
 Wortman, J. L. 1901 A, 200.  
 1906 A, 90.  
 Zittel and Schlosser 1911 A, 387.  
 1923 A, 468, 613.

***Amphicyon americanus* Wortman.**

- Wortman, J. L. 1901 A, 200, figs. A, B.  
 Hatcher, J. B. 1902 F, 99.  
 Matthew, W. D. 1902 C, 287.  
 1903 D, 913.  
 1918 A, 190.  
 1924 C, 105.  
 Peterson, O. A. 1910 A, 260.  
 Thorpe, M. R. 1922 E, 437.  
 Trouessart, E. L. 1904 A, 220.  
 Zittel and Schlosser 1911 A, 388.  
 1923 A, 468.  
 Miocene (Arikaree); Nebraska?

***Amphicyon frendens* Matthew.**

- Matthew, W. D. 1924 C, 111, fig. 26.  
 Cook, H. J. 1926 C, 30.  
 Frick, C. 1926 A, 14, 15, figs. 1a, 1b.  
 Miocene (Sheep Creek); Nebraska.

***Amphicyon ingens* Matthew.**

- Matthew, W. D. 1924 C, 65 (A. gigas); 111, fig. 24 (A. ingens).  
 Cook, H. J. 1926 C, 30.  
 Stock and Furlong 1926 A, 48.  
 Miocene (Snake Creek); Nebraska.

***Amphicyon idoneus* Matthew.**

- Matthew, W. D. 1924 C, 65, 113, fig. 25.  
 Frick, C. 1926 A, 43.  
 Miocene (Sheep Creek); Nebraska.

***Amphicyon reinheimeri* Cook.**

- Cook, H. J. 1926 C, 29, with 1 pl.  
 Miocene (Pawnee Creek); Colorado.

***Amphicyon sinapius* Matthew.**

- Matthew, W. D. 1902 C, 283, figs. 2-4.

- Cook, H. J. 1912 D, 43 (A. amnicola).  
 1915 A, 57, pl. i (A. amnicola).  
 1926 C, 30.

**Frick, C. 1926 A, 43.**

**Gregory and Hellman 1923 B, 523, fig. 11.**

**Matthew, W. D. 1909 C, 114.**

**1909 D, 426.**

**1918 A, 185 (Pliocyon amnicola).**

**1924 C, 65, 71, 109, figs. 21-23, 27.**

**Matthew and Cook 1909 A, 368 (A. sinapius, A. amnicola).**

**Merriam, J. C. 1917 A, 422 (Pliocyon amnicola?); 435 (A. amnicola).**

**Merriam, Stock, Moody 1925 A, 61 (A. sinapius, A. amnicola).**

**Sinclair, W. J. 1915 A, 76 (A. amnicola).**

**Stock, C. 1925 A, 18 (A. amnicola?).**

**Stock and Furlong 1926 A, 48.**

**Thorpe, M. R. 1922 E, 438, figs. 7, 8.**

**Miocene (Pawnee Creek); Colorado: (Snake Creek); Nebraska.**

***Amphicyon superbus* Peterson.**

**Peterson, O. A. 1906 C, 51, pl. xviii.**

**Loomis, F. B. 1923 A, 222.**

**Matthew, W. D. 1909 C, 112.**

**Peterson, O. A. 1909 B, 620.**

**Sternberg, A. 1913 A, 46.**

**Oligocene (Lower Harrison); Nebraska.**

***Amphicyon* sp. indet.**

**Cook, H. J. 1912 D, 43. Pliocene (Snake Creek); Nebraska.**

**Gidley, J. W. 1903 C, 627 (Borophagus?).**

**Pliocene (Blanco); Texas.**

**1906 A, 553 (This genus?). Pleistocene (Cave); California.**

**Lambe, L. M. 1905 D, 369.**

**Matthew, W. D. 1901 B, 445.**

**1909 C, 120. Pliocene (Blanco); Texas.**

**Matthew and Cook 1909 A, 370.**

**Merriam, J. C. 1917 A, 434 (This genus?). Pliocene (Blanco); Texas: 435 (This genus?).**

**Miocene (Snake Creek); Nebraska.**

**Merriam, Stock, Moody 1925 A, 60, fig. 10 (This genus or an ursid?). Pliocene (Rattlesnake); Oregon.**

**Sinclair, W. J. 1915 A, 76. Miocene (Snake Creek); Nebraska.**

**ISCHYROCYON Matthew. Type *I. hyænodus* Matthew.**

**Matthew, W. D. 1904 C, 246.**

**Haug, E. 1911 A, 1706.**

**Matthew, W. D. 1907 A, 181.**

**1909 C, 118.**

**Merriam, J. C. 1906 A, 59.**

**O'Harra, C. C. 1910 A, 80, 133.**

**Osborn, H. F. 1910 B, 301, 529.**

**Stock and Furlong 1926 A, 48.**

**Thorpe, M. R. 1922 D, 375.**

**Zittel and Schlosser 1911 A, 388.**

**1923 A, 468.**

***Ischyrocyon hyænodus* Matthew.**

**Matthew, W. D. 1904 C, 246, figs. 1, 2.**

**Gidley, J. W. 1904 A, 245.**

**Matthew, W. D. 1909 C, 115.**

**O'Harra, C. C. 1910 A, 81.**

**1920 A, 82.**

**Miocene (Arikaree); South Dakota.**

**DINO CYON Jourdan. Type *D. thenardi* Jourdan.**

**Jourdan, A. J. L. 1861, Comptes rend. Paris, LIII, 962, 963.**

**Baker, F. C. 1920 A, 209, 215, 398.**

**Bronn, H. G. 1862 A, 120.**

**Depéret, C. 1892 A, 37.**

**Frick, C. 1926 A, 5, 54.**

**Haug, E. 1911 A, 1706.**

**Lydekker, R. 1885 B, 150.**



- Matthew, W. D. 1902 A, 129.  
 1902 C, 284.  
 1902 F, 317 ("Dinocyon"?).  
 1905 D, 39, fig. 15.  
 1907 A, 181.  
 1909 C, 118.  
 1915 A, 219.  
 1918 A, 194.  
 1924 C, 105, 127.

Merriam, J. C. 1906 A, 59.

Osborn, H. F. 1904 R, 11.

- 1905 I, 106, 110.  
 1909 D, 80, 81, 86 (This genus?).  
 1910 B, 612.  
 1918 A, 26.

Palmer, T. S. 1904 A, 233, 824.

Pilgrim, G. E. 1912 A, 14.

Schuchert and Levene 1927 A, 336.

Scott, W. B. 1913 A, 524, 530.

Simpson, G. G. 1926 L, 174.

Thorpe, M. R. 1922 D, 375.

Trouessart, E. L. 1904 A, 219.

Winge, H. 1924 A, 177, 195, 243.

Zdansky, O. 1924 B, 4.

Zittel and Schlosser 1911 A, 388 (Syn. of *Borophagus*).

1923 A, 468, 673, 679 (Syn. of *Borophagus*).

### *Dinocyon ossifragus* Douglass.

Douglass, E. 1903 A, 154, 192, figs. 31, 32.

Matthew, W. D. 1909 C, 115.

1924 C, 106.

Lower Pliocene (Madison Valley); Montana.

### *Dinocyon* sp. indet.

Hay, O. P. 1914 A, 26 (This genus?). Pleistocene; Nebraska.

Matthew, W. D. 1902 F, 317 (This genus?). Compare *Dinartotherium*.

### BOROPHAGUS Cope. Type *B. diversidens* Cope.

Hay, O. P. 1902 A, 776.

Freudenberg, W. 1910 A, 22.

Frick, C. 1926 A, 69.

Haug, E. 1911 A, 1706.

Matthew, W. D. 1902 A, 132.

1918 A, 192.

Merriam, J. C. 1903 B, 280, 281.

1917 A.

1919 A, 531.

Osborn, H. F. 1907 G, 141, fig. 99.

1909 D, 80, 83, 86.

1910 B, 302, 366, 529.

Palmer, T. S. 1904 A, 140, 823.

Scott, W. B. 1913 A, 524, 530.

Zittel and Schlosser 1911 A, 388 (*Dinocyon* a syn.).

1923 A, 468, 680.

### *Borophagus diversidens* Cope.

Hay, O. P. 1902 A, 776.

Dumble, E. T. 1894 A, 559.

Freudenberg, W. 1910 A, 22 (To *Hyæognathus*).

Frick, C. 1926 A, 93.

Gidley, J. W. 1903 C, 627.

Matthew, W. D. 1902 A, 130.

1902 C, 290 (*Dinocyon*?)

1909 C, 120.

Merriam, J. C. 1903 B, 281, text-figs. 2, 4, 5.

1917 A, 434.

Montgomery, T. H. 1904 A, 58.

Trouessart, E. L. 1904 A, 219 [*Dinocyon* (*Borophagus*)].

Pliocene (Blanco); Texas.

### BOROCCYON Peterson. Type *B. robustus* Peterson.

Peterson, O. A. 1910 A, 263.

Matthew, W. D. 1918 A, 92.

### *Borocyon robustus* Peterson.

Peterson, O. A. 1910 A, 263, figs. 58-61 (*B. robustum*).

Cook, H. J. 1912 D, 42 (*B. robustum*).

O'Harra, C. C. 1920 A, 155 (*B. robustum*).

Miocene (Harrison); Nebraska.

### HEMICYONINÆ Frick.

Frick, C. 1926 A, 12.

Simpson, G. G. 1926 L, 174.

### HEMICYON Lartet. Type *H. sansaniensis* Lartet.

Lartet, E. 1851 A, 16.

Filhol, H. 1891 A.

Frick, C. 1926 A, 1-119.

1926 C, 446.

Gervais, P. 1853 C, 232.

Lydekker, R. 1884 A, 202 (*Dinocyon*, *Hemicyon*).

1885 B, 150, 156 (*Dinocyon*).

Matthew, W. D. 1928 B, 971, 974, fig. 13.

Romer and Sutton 1927 A, 458.

Schlosser, M. 1899 B, 83.

Simpson, G. G. 1926 L, 174.

Weber, M. 1904 A, 535.

Woodward, A. S. 1898 B, 394.

Zittel, K. A. 1893 B, 637, fig. 533.

Zittel and Schlosser 1911 A, 389.

1923 A, 469.

The systematic position of this genus is in some doubt.

### *Hemicyon barstowensis* Frick.

Frick, C. 1926 A, 14, 15, 21, 27, 30, tab. I, figs. 1a, 1b, 3, 6-8, 11, 12.

Miocene (Barstow); California.

### *Hemicyon californicus* Frick.

Frick, C. 1926 A, 21, 29, 31, 33, 34, tab. I, fig. 12.

Miocene (Barstow); California.

**Hemicyon? ursinus (Cope).**

- Hay, O. P. 1902 A, 774 (*Ælurodon*).  
 Baird, S. F. 1876 A, cxx (*Canis*).  
 Frick, C. 1926 A, 21, 31, 35, 43, tab. 1, figs. 4, 5, 9, 10, 13-15 [*Hemicyon (Canis)*].  
 Matthew, W. D. 1902 A, 130 [*Canis (Ælurodon)*].  
 1902 C, 290 (*Amphicyon?*).

- Matthew, W. D. 1904 C, 252 (*Ælurodon?*).  
 1909 C, 115 (*Dinocyon?*).  
 1924 C, 113 (*Pliocyon*).  
 Merriam, J. C. 1919 A, 536 (*Canis?*).  
 Merrill, G. P. 1907 A, 28 (*Canis*).  
 Simpson, G. G. 1926 L, 174.  
 Stock and Furlong 1926 A, 49 (*Canis, Pliocyon*).  
 Trouessart, E. L. 1904 A, 220 (*Amphicyon*).  
 Miocene (Santa Fe); New Mexico.

**PROCYONIDÆ Bonaparte.**

- Bonaparte, C. L.* 1850, *Consp. Syst. Mamm.*  
 Hay, O. P. 1902 A, 764 (*Procyonidæ, Procyoninæ*).  
 Abel, O. 1912 F, 501.  
 1913 B, 716.  
 1914 A, 78.  
 1919 A, 746.  
 Ameghino, F. 1905 B, 194.  
 1912 A, 59.  
 1912 B, 177 ("procyonidés").  
 Arldt, T. 1907 B, 449 ("procyoniden").  
 1907 D, 676.  
 1912 A, 702 (*Procyonidæ, Procyoninæ*).  
 Bardenheeth, K. S. 1913 A, 104.  
 Beddard, F. E. 1902 A, 426.  
 Behlen, H. 1907 A ("procyoniden").  
 Boas, J. E. V. 1914 B, 580 ("procyoniden").  
 Brown, A. E. 1904 B, 94.  
 Carlson, A. 1921 A, 71.  
 Case, E. C. 1899 B, 180.  
 Chandler, A. C. 1914 B, 134.  
 Chardin, T. 1915 A, 141, 155.  
 1922 A, 104 ("procyonidés").  
 Doran, A. H. G. 1878 A, 393, 397, 407.  
 Ehrenberg, K. 1926 A, 56 ("procyoniden").  
 Elliot, D. G. 1901 A, 315.  
 Flower, W. H. 1869 B, 15-37.  
 Gidley, J. W. 1923 C, 241.  
 Gill, T. 1885 B, 21.  
 Grant, M. 1904 B, 193, 205.  
 Gregory, W. K. 1921 A, 60.  
 Hildeheimer, M. 1913 A, 566.  
 Hollister, N. 1915 A, 143.  
 Huxley, T. H. 1880 C, 4.  
 1880 D, 423, 429.  
 Ihering, H. 1910 A, 164.  
 Joleaud, L. 1919 A, 710, 712, fig. 7.  
 Kampfen, P. N. 1905 A, 530.  
 Lobley, J. L. 1908 A, 194, 200, 204.  
 Lockwood, S. 1884 A, 355 (*Bassarididæ*); 357 (*Procyonidæ*).  
 Lull, R. S. 1917 B, 338, 504.  
 Lydekker, R. 1910 E, 352 ("raccoons").  
 Matthew, W. D. 1901 A, 7.  
 Matthew, W. D. 1905 D, 37.  
 1907 A, 179.  
 1909 C, 112, 116, 118.  
 1909 D, 330, 401.  
 1910 G, 158.  
 1912 B, 184.  
 1913 B, 291.  
 1915 A, 196, 197, 220, fig. 10.  
 1915 K, 445.  
 1924 C, 138, 144.  
 1928 B, 974, fig. 13.  
 Miller, G. S. 1912 B, 88.  
 1920 B, 190.  
 Osborn, H. F. 1905 I, 106.  
 1909 D, 134.  
 1910 B, 288, 301, 529.  
 Palmer, T. S. 1904 A, 765, 836.  
 Pocock, R. I. 1914 B, 913.  
 1921 B, 389, 421 (*Procyonidæ*); 389, 422 (*Procyoninæ*).  
 Pohl, L. 1909 A, 382 ("procyoniden").  
 1911 A, 122.  
 Romer and Sutton 1927 A, 460, 463.  
 Scharff, R. F. 1911 A, 151, 181, 249.  
 Schlosser, M. 1902 A, 134, 138.  
 Scott, W. B. 1913 A, 238, 517, 546, 552.  
 1915 A, 117 ("raccoons").  
 Seton, E. T. 1909 A, 1010, map 54.  
 Shufeldt, R. W. 1915 E, 691 (*Procyonidæ, Procyonoidæ*).  
 Sokolowsky, A. 1919 A, 238.  
 Stromer, E. 1902 A.  
 Trouessart, E. L. 1904 A, 183 (*Procyonidæ*); 184 (*Procyoninæ*).  
 Turner, H. N. 1848 A, 86 (*Procyonina*).  
 Wallace, A. R. 1876 A, i, 144; ii, 200.  
 1894 A, 435.  
 Weber, M. 1904 A, 536.  
 Weber and Abel 1928 A, 308, 318, 331.  
 Winge, H. 1896 A, 126, 127.  
 1924 A, 178, 192, 198, 199, 243 (*Procyonidæ*).  
 Wortman, J. L. 1920 A, 17 ("raccoons").  
 Zittel and Schlosser 1911 A, 391.  
 1923 A, 472, 482.

**ALETOCYON Romer and Sutton. Type *A. multicuspis* Romer and Sutton.**

*Romer and Sutton* 1927 A, 460.

**Aletocyon multicuspis Romer and Sutton.**

*Romer and Sutton* 1927 A, 460, figs. 1, 2.

Lower Miocene (Lower Harrison); Wyoming.

PHLAOCYON Matthew. Type *P. leucosteus* Matthew.

- Hay, O. P. 1902 A, 765.  
 Abel, O. 1913 B, 716.  
 Ameghino, F. 1912 A, 59.  
 Chardin, T. 1915 A, 141, 155.  
 Frick, C. 1926 A, 8, 47.  
 Gregory, W. K. 1920 A, 150, fig. 84.  
 Ihering, H. 1910 A, 159, 184.  
 Joleaud, L. 1919 A, 710, 712, fig. 7.  
 Kraglievich, L. 1925 A, 190.  
 Matthew, W. D. 1901 A, 17.  
     1901 B, 365, 370, 373, 398.  
     1905 D, 37, figs. 13, 14.  
     1907 A, 179.  
     1909 C, 118.  
     1912 B, 182.  
     1915 A, 197, 221.  
     1924 C, 138, 144.  
 Osborn, H. F. 1905 H, 221.  
     1905 I, 106.  
     1907 G, 140, fig. 98.  
     1912 G, 249.  
 Palmer, T. S. 1904 A, 531, 837.  
 Romer and Sutton 1927 A, 458, 460.  
 Scharff, R. F. 1911 A, 151.  
 Schlosser, M. 1916 A, 29.  
 Scott, W. B. 1913 A, 238, 547.  
 Stromer, E. 1902 A, 256.

- Trouessart, E. L. 1904 A, 185.  
 Weber, M. 1904 A, 536, 542.  
 Weber and Abel 1928 A, 331.  
 Winge, H. 1924 A, 178, 198, 243.  
 Zittel and Schlosser 1911 A, 392.  
     1923 A, 472, 672.

**Phlaocyon leucosteus** Matthew.

- Hay, O. P. 1902 A, 765.  
 Abel, O. 1914 A, 79, fig. 44.  
 Joleaud, L. 1919 D, 412 (Phlaocyon).  
 Matthew, W. D. 1901 B, 357, 381, text-fig. 7.  
     1909 C, 112.  
     1924 C, 138.  
 Peterson, O. A. 1924 B, 301.  
 Romer and Sutton 1927 A, 460, 462.  
 Schlosser, M. 1902 A, 138, fig.  
 Stromer, E. 1912 A, 13, fig. 16.  
 Trouessart, E. L. 1904 A, 185.  
 Zittel and Schlosser 1911 A, 392, fig. 557.  
     1923 A, 472, fig. 596.  
     Lower Miocene (Harrison); Colorado.

**Phlaocyon willistoni** Peterson.

- Peterson, O. A. 1924 B, 300, figs. 1, 2.  
     Lower Miocene (Brown's Park); Colorado.

PROCYON Storr. Type *Ursus lotor* Linnæus.

- Hay, O. P. 1902 A, 764.  
 Allen, J. A. 1892 A.  
 Ameghino, F. 1889 A, 1023.  
     1902 D, 423.  
     1905 C, 449, fig. 94.  
     1912 B, 179.  
 Anderson, R. J. 1901 A, 682.  
 Arldt, T. 1907 D, 117.  
 Bärthold, — 1904 A, 367.  
 Baird, S. F. 1876 A, ccviii ("raccoon").  
 Bardenfleth, K. S. 1913 A, 104.  
 Beddard, F. E. 1902 A, 427.  
 Behlen, H. 1907 A.  
 Boas, J. E. V. 1909 A, 530.  
 Brauer, A. 1914 A, 282.  
 Chardin, T. 1915 A, 155.  
 Cope, E. D. 1880 U, 188.  
 Cuvier, G. 1805 A.  
     1825 A, rv, 253, pl. xviii.  
 Eggeling, H. 1904 A, 97.  
 Elliot, D. G. 1901 A, 317.  
 Fischer, J. B. 1829 A, 146.  
 Frech, F. 1907 A, 315 ("waschbär").  
 Frick, C. 1926 A, 8, 9, 16, 40, 47.  
 Gidley, J. W. 1923 C, 241.  
 Giebel, C. G. 1855 A, 36, pl. xiv.  
     1878 C, 854.  
 Grant, M. 1904 B, 205.  
 Gregory, W. K. 1920 A, 150, fig. 85.  
 Heilprin, A. 1887 A, 390.  
 Hollister, N. 1915 A, 145, 146, pl. xxxix, fig.  
 Huxley, T. H. 1880 D, 428, fig. 14.  
 Ihering, H. 1910 A, 165.  
 Joleaud, L. 1919 A, 710, fig. 7.  
 Kampfen, P. N. 1905 A, 536.  
 Köstlin, O. 1844 A.  
 Kraglievich, L. 1925 A, 183.

- Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 199.  
 Lockington, W. N. 1884 A, 409.  
 Lockwood, S. 1884 A, 357.  
 Matthew, W. D. 1907 A, 179.  
     1915 A, 197, 220.  
     1915 K, 402.  
     1924 C, 141.  
     1928 B, 974, fig. 13.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 60.  
 Miller, G. S. 1912 B, 89.  
     1924 C, 108.  
 Osborn, H. F. 1909 D, 90.  
     1910 B, 472, 488, 529.  
 Owen, R. 1845 B, 500.  
 Palmer, T. S. 1904 A, 568, 837.  
 Pander and Alton 1822 A, 9 (Procion).  
 Faulli, S. 1900 B, 496.  
 Pocock, R. I. 1921 B, 389, 399, 407, 415.  
 Pohl, L. 1911 A, 124, pl. viii, fig. 51.  
 Retzius, A. 1849 A, 620.  
 Röse, C. 1892 F, 401.  
 Scharff, R. F. 1911 A, 152, 181.  
 Schlosser, M. 1899 I, 349.  
 Schwalbe, G. 1904 A, 207.  
 Scott, W. B. 1913 A, 546, 688.  
     1917 A, 32, 134, 140 ("raccoons").  
 Seton, E. T. 1909 A, 1010.  
 Shufeldt, R. W. 1915 E, 691.  
 Sokolowsky, A. 1919 A, 243.  
 Stromer, E. 1902 A.  
     1902 B, 537.  
 Taylor, W. P. 1916 A, 467.  
 Terra, P. 1911 A, 279.  
 Tornier, G. 1889 A, 176.  
     1891 A, 122, 144.

- Trouessart, E. L. 1904 A, 186.  
 Turner, H. N. 1948 A, 80.  
 Wallace, A. R. 1876 A, i, 130; ii, 200.  
 Weber, M. 1904 A, 536.  
 Wiegmann, F. R. 1838 B, 262.  
 Winge, H. 1896 A, 127.  
 1924 A, 178, 243, 248.  
 Wilder, B. 1872 B, 319.  
 Zittel and Schlosser 1911 A, 392.  
 1923 A, 472, 679, 681.

**Procyon lotor (Linnaeus).**

- Hay, O. P. 1902 A, 764.  
 Anderson, R. J. 1902 A, 1120, fig. 10.  
 Baker, F. C. 1920 A, 374.  
 Bangs, O. 1898 A, 219 (P. l. elucus).  
 Brown, B. 1908 A, 183.  
 Cope, E. D. 1895 F, 447.  
 1895 G, 596.  
 Doran, A. H. G. 1878 A, 397, pl. lix.  
 Elliot, D. G. 1901 A, 317, fig. 62.  
 Fischer, J. B. 1829 A, 147.  
 Foote, J. S. 1916 A, 142, pl. xx.  
 Frech and Geinitz 1903 A, 36.  
 Frick, C. 1926 A, 14, 15, figs. 1a, 1b.  
 Furlong, E. L. 1904 A, 55 (This species?).  
 1906 A, 245.  
 Gidley, J. W. 1927 E, 274.  
 Giebel, C. G. 1883 A, pls. xvii, lxxii, lxxviii.  
 Hay, O. P. 1914 A, 32.  
 1917 E, 46.  
 1920 B, 95.  
 1923 A, 494.  
 1924 D, 252.  
 1927 D, 214.  
 Holmes, F. S. 1859 A, 184 ("raccoon").  
 1860 A, iv, vii ("raccoon").  
 Leidy, J. 1859 J, 184 ("raccoon").  
 1859 H, 18.  
 Lockwood, S. 1884 A, 357, fig. 174.  
 Mercer, H. C. 1894 A, 98 ("raccoon").  
 Miller, G. S. 1912 B, 89.  
 1924 C, 108.  
 Miller, L. H. 1912 A, 73 (This species?).  
 Osborn, H. F. 1910 B, 488.  
 Owen, R. 1845 B, 500, pl. cxxix, fig. 7.  
 1868 A, 903.  
 Pocock, R. I. 1921 B, 392, 412, figs. 1, 3, 4.

**BASSARISCIDÆ Gray.**

- Gray, J. E. 1869 A, 246.  
 Gill, T. 1872 B, 7, 59, 67.  
 Hall, E. R. 1927 A, 435, 444 (Bassariscinæ).  
 Hollister, N. 1915 A, 144.

**BASSARISCUS Coues. Type *Bassaris astuta* Licht.**

- Coues, E. 1887, Science, ix, 516 (To replace *Bassaris* Licht., preoccupied).  
 Hay, O. P. 1902 A, 764.  
 Allen, J. A. 1892 A.  
 Bardenfleth, K. S. 1913 A, 103 (Bassaris).  
 Beddard, F. E. 1902 A, 428.  
 Doran, A. H. G. 1878 A, 398, pl. lix.  
 Elliot, D. G. 1901 A, 316.  
 Giebel, C. G. 1885 A, 31 (Bassaris).  
 Grant, M. 1904 B, 194, 205.  
 Gregory, W. K. 1921 A, 196.  
 Hall, E. R. 1927 A, 439, 444.

- Pohl, L. 1911 A, 124, pl. viii, figs. 48-50.  
 Rhoads, S. N. 1903 A, 228.  
 Scharff, R. F. 1911 A, 151, 249.  
 Schmidt, E. 1872 A, 251.  
 Scott, W. B. 1913 A, 166, 547, figs. 80, 273.  
 Sellards, E. H. 1916 C, 152, 158 (This species?).  
 1916 E, 16, 17.  
 1916 F, 9 (P. sp.).  
 Seton, E. T. 1909 A, 1010, pls. lxxxvi-lxxxvii; text-figs. 234-235, map 54.  
 Stock, C. 1925 A, 113 (This species?).  
 Recent; Central and North America:  
 Pleistocene; New Jersey, Pennsylvania, Arkansas, California, Florida, West Virginia.

**Procyon priscus Le Conte.**

- Hay, O. P. 1902 A, 765.  
 Baker, F. C. 1920 A, 354, 360, 398.  
 Gervais, P. 1859 A, 365.  
 Hay, O. P. 1914 A, 38.  
 1923 A, 494.  
 Mackie, S. J. 1863 D, 334.  
 Whitney, J. D. 1862 A, 136.  
 Pleistocene; Illinois.

**Procyon psora Gray.**

- Gray, J. E. 1842, Ann. Mag. Nat. Hist., x, 261.  
 Hay, O. P. 1927 D, 223.  
 Miller, G. S. 1912 B, 90.  
 1924 C, 109.  
 Stock, C. 1918 A, 468, 470.  
 1925 A, 113.  
 Recent; California and Washington:  
 Pleistocene; California.

**Procyon simus Gidley.**

- Gidley, J. W. 1906 A, 553, pl. xii.  
 Hay, O. P. 1927 D, 213.  
 Scharff, R. F. 1911 A, 152 (P. sinus).  
 Pleistocene; California.

**Procyon sp. indet.**

- Cooke, C. W. 1926 A, 445 ("raccoon"). Pleistocene; Florida.  
 Matthew, W. D. 1925 A, 97. Pleistocene (Early); Florida.  
 Sellards, E. H. 1916 D, 617. Pleistocene (Early); Florida.

- Miller, G. S. 1924 C, 112.  
 Pocock, R. I. 1921 B, 421 (Bassariscinæ).  
 Shufeldt, R. W. 1915 E, 692 (Bassariscinæ).

- Merriam, C. H. 1892 A, 61.  
 Merriam, J. C. 1911 B, 205-207, 214, 246, 248  
 (Probassariscus, type *P. antiquus* Merriam).  
 Miller, G. S. 1912 B, 88.  
 1924 C, 112.  
 Osborn, H. F. 1909 D, 89.  
 1910 B, 356, 477, 529.  
 Palmer, T. S. 1904 A, 133, 336.  
 Pocock, R. I. 1921 B, 390, 399, 406, 415, 421.  
 Scharff, R. F. 1911 A, 201, 249.  
 Scott, W. B. 1913 A, 517, 546, 547.  
 Shufeldt, R. 1915 E, 691 (Bassariscus).  
 Stromer, E. 1902 A.  
 Turner, H. N. 1848 A, 80 (Bassariscus).  
 Wallace, A. R. 1876 A, II, 200 (Bassariscus).  
 Weber, M. 1904 A, 536 (Bassariscus).  
 Weber and Abel 1928 A, 332.  
 Winge, H. 1924 A, 198, 243, 248.  
 Zittel and Schlosser 1911 A, 392.

**Bassariscus antiquus** Matthew and Cook.

- Matthew and Cook 1909 A, 377, fig. 6.  
 Cook, H. J. 1912 D, 44.  
 Hall, E. R. 1927 A, 437, pl. lxiv, figs. a, b.  
 Matthew, W. D. 1918 A, 185 (Probassariscus).  
 1924 C, 65 (Probassariscus).  
 Merriam, J. C. 1911 B, 248 (Probassariscus).  
 1917 A, 436.  
 Sinclair, W. J. 1915 A, 76.  
 Upper Miocene (Lower Snake Creek);  
 Nebraska.

**Bassariscus antiquus matthewi** (Merriam).

- Merriam, J. C. 1911 B, 214, 246, 248, fig. 21  
 (Probassariscus).  
 Miocene (Virgin Valley); Nevada.

**Bassariscus astutus** (Licht.).

- Hay, O. P. 1902 A, 764.  
 Bardenfleth, K. S. 1913 A, 103, fig. 7 (Bassariscus).  
 Beddard, F. E. 1902 A, 429, fig. 215.  
 Elliot, D. G. 1901 A, 316.  
 Giebel, C. G. 1883 A, pl. xiii (Bassariscus).  
 Hay, O. P. 1923 A, 314.  
 Miller, G. S. 1912 B, 88.  
 1924 C, 112.  
 Owen, R. 1866 B, 510 (Bassariscus).  
 Stromer, E. 1902 A, 139, pl. iii, fig. 3.  
 Recent; Mexico to Oregon: Pleistocene;  
 Pennsylvania.

**Bassariscus astutus raptor** (Baird).

- Baird, S. F. 1859, Mamm. Mex. Bound., 19  
 (Bassariscus).  
 Doran, A. H. G. 1878 A, 398, pl. lix, fig. 15  
 (Bassariscus).  
 Elliot, D. G. 1901 A, 316, pl. xxxv.  
 Gregory, W. K. 1920 A, 150, fig. 83.  
 Hall, E. R. 1927 A, 444.  
 Hay, O. P. 1927 D, 215.  
 Lockwood, S. 1884 A, 355, fig. 173 (Bassariscus).  
 Merriam, C. H. 1897 A, 186 (B. raptor).  
 Merriam and Stock 1925 A, 10.  
 Miller, G. S. 1924 C, 113 (B. a. oregonus).  
 Miller, L. H. 1912 A, 70 (B. raptor).  
 1912 B, 88 (B. astutus oregonus).  
 Osborn, H. F. 1910 B, 477 (B. raptor).  
 Pocock, R. I. 1921 B, 393, figs. 1, 3, 6, 13.  
 Sinclair, W. J. 1908 A, 711 (B. raptor).  
 1904 A, 17 (B. raptor).  
 Stock, C. 1925 A, 113.  
 Turner, H. N. 1848 A, 80 (Bassariscus).  
 Pleistocene (Potter Creek cave); California.

**Bassariscus parvus** Hall.

- Hall, E. R. 1927 A, 440, 443.  
 Merriam, J. C. 1916 A, 175, fig. 10 (B.  
 nevadensis, not of G. S. Miller, 1913).  
 Upper Miocene (Cedar Mountain); Nevada.

**BASSARISCOPS** Peterson. Type *B. willistoni* Peterson.

- Peterson, O. A. 1928 A, 96.

**Bassariscops willistoni** Peterson.

- Peterson, O. A. 1928 A, 96, text-figs. 1-7.  
 Miocene or Pliocene (Brown's Park);  
 Colorado.

**MIXOPHAGUS** Cope. Type *M. spelæus* Cope.

- Hay, O. P. 1902 A, 765 (Myxophagus, *errore*).  
 Wallace, A. R. 1876 A, 130 (Myxophagus).

**Mixophagus spelæus** Cope.

- Hay, O. P. 1902 A, 765.  
 1923 A, 353 (Myxophagus).  
 Pleistocene (Caves); Virginia.

**URSIDÆ** Gray.

- Gray, J. E. 1825 B, 339.  
 Hay, O. P. 1902 A, 762.  
 Abel, O. 1912 D, 600 ("bären").  
 1913 B, 716.  
 1919 A, 743.  
 Ameghino, F. 1889 A, 1027.  
 1902 D, 423 ("ursidés").  
 1905 C, 446.  
 1906 A, 397 ("ursidés").  
 Anderson, R. J. 1901 A, 682.

- Anderson, R. J. 1909 A, 744.  
 Anthony, R. 1912 A.  
 Arldt, T. 1907 B, 449 ("ursiden").  
 1907 D, 687.  
 1912 A, 748 (Ursinæ).  
 Bayer, F. 1897 A, 147.  
 Beddard, F. E. 1902 A, 442.  
 Behlen, H. 1907 A, ("ursiden").  
 Birula, A. A. 1913 A, 277.  
 Boas, J. E. V. 1914 B, 580 ("ursiden").

- Bolk, L. 1914 A, 88 ("ursiden").  
 Bonaparte, C. L. 1832 A, 286 (Ursina).  
 Boule, M. 1905 A, 1663 ("ours").  
 Boule and Thevenin 1920 A, 231.  
 Bradley, O. C. 1899 B, 180.  
 Brandt and Woldrich 1887 A, 46 (Ursina).  
 Brown, A. E. 1904 B, 95 ("bears").  
 Carlson, A. 1921 A, 71.  
 Carus, V. 1875 A, 180 (Ursida).  
 Case, E. C. 1899 B, 180.  
 Chandler, A. C. 1914 B, 134.  
 Chardin, T. 1922 A, 104 ("ursidés").  
 Cleland, J. 1863 B, 297 ("bears").  
 Condon, T. 1906 A, 13 ("bears").  
 Cope, E. D. 1885 EEE, 606 ("bears").  
 1891 N, 76 ("bears").  
 Cuvier, F. 1807 A, 128 ("ours").  
 1825 A, 109 ("ours").  
 Depéret, C. 1905 A, 1513 ("ursidés").  
 1905 B, 22 ("ursidés").  
 1906 B, 1122 ("ursidés").  
 1907 B ("ursidés").  
 Doran, A. H. G. 1873 A, 398, 407, pl. lix.  
 Ehrenberg, K. 1926 A, 54 ("bären").  
 Elmer, G. H. T. 1901 A, 256 ("bären").  
 Elliot, D. G. 1901 A, 309.  
 Frassetto, F. 1903 A, 177.  
 Frech, F. 1906 A, 497 ("bären").  
 Freund, L. 1911 A, 389.  
 Friek, C. 1926 A, 5 (Ursidæ, Ursinæ, Tremarctinæ).  
 Gaillard, C. 1898 A, 1237 ("ursidés").  
 Gervais, P. 1859 A, 203 ("ursidés").  
 Ghigi, A. 1900 B, 99 ("orsi").  
 Gidley, J. W. 1915 B, 333 ("bears").  
 1923 C, 241 ("bears").  
 Giebel, C. G. 1855 A, 36 (Ursinæ).  
 1883 A, ("bären").  
 Grant, M. 1904 B, 191, 205.  
 Gray, J. E. 1821 A, 301 (Ursinidæ).  
 Gregory, W. K. 1920 A, 151.  
 Hay, O. P. 1912 D, 769.  
 1914 A, 474.  
 1923 A, 312.  
 1927 E, 77 ("bears").  
 Hilzheimer, M. 1913 A, 506.  
 Hoernes, R. 1886 A, 692.  
 Huxley, T. H. 1856 A, 53.  
 1880 C, 4.  
 Jaeger, G. F. 1842 A, 436 ("bären").  
 Kampfen, P. N. 1905 A, 526.  
 Kellogg, R. 1922 A, 96.  
 Koken, E. 1901 B, 220 ("ursiden").  
 Lalay, L. 1907 A, 587 ("ursidés").  
 Leunis and Ludwig 1833 A, 198.  
 Lobley, J. L. 1908 A, 200, 204.  
 Lockwood, S. 1884 A, 369.  
 Lönnberg, E. 1923 A, 85 ("bears").  
 Lull, R. S. 1917 B, 563.  
 Lydekker, R. 1903 D, 124.  
 Mackie, S. J. 1863 D, 332.  
 Martins, C. 1857 A, 68 ("ours").  
 Matthew, W. D. 1901 A, 8, 17.  
 1902 C, 284.  
 1905 D, 87.  
 Matthew, W. D. 1907 A, 181.  
 1909 D, 330, 401, 414, 415.  
 1910 G, 158.  
 1912 B, 185.  
 1913 B, 291.  
 1915 A, 197, 221, fig. 11.  
 1915 K, 445, fig. 17.  
 1924 C, 109, 115, 121.  
 1928 B, 974, fig. 13.  
 Meckel, J. F. 1825 A ("bären").  
 Merriam, J. C. 1921 B, 183 ("bears").  
 Merriam and Stock 1925 A, 4.  
 Merriam, Stock and Moody 1916 A, 87.  
 Miller, G. S. 1912 B, 73.  
 1924 C, 90.  
 Neuville, H. 1915 A, 6 ("ursidés").  
 Osborn, H. F. 1905 I, 106.  
 1909 D, 137.  
 1910 B, 255, 431, 529.  
 Owen, R. 1868 A, 913.  
 Palmer, T. S. 1904 A, 775, 837.  
 Pocock, R. I. 1914 B, 929.  
 1921 B, 389, 415, 420.  
 Pohl, L. 1909 A, 382 ("ursiden").  
 1911 A, 118.  
 Pohle, H. 1923 A, 266 ("bären").  
 Reynolds, S. H. 1897 A, 452, 477, 502, 526.  
 1906 A, 1, pls. i-iv.  
 Scharff, R. F. 1911 A, 350.  
 Schlosser, M. 1900 F, 142.  
 1902 B, 300.  
 1902 J, 150, 256 ("ursiden").  
 Schwarz, E. 1924 A, 420 ("bears").  
 Scott, W. B. 1896 D, 54 ("bears").  
 1913 A, 517, 518, 548.  
 1917 A, 173 ("bears").  
 Seeley, H. G. 1878 A, 226 ("bears").  
 Serres, M. 1860 A, 307 ("ours").  
 Seton, E. T. 1909 A, 1030.  
 Steinmann, G. 1907 A, 472.  
 Stromer, E. 1902 A.  
 1902 B, 554 ("ursiden").  
 Terra, P. 1911 A, 280.  
 Tornier, G. 1888 A, 255 (Ursina).  
 Trouessart, E. L. 1904 A, 177 (Ursidæ, Ursinæ).  
 Vallois, H. V. 1921 B, 975 ("ursidés").  
 Vieq-d'Azyr, F. 1819 A, 75 (Ursini).  
 Virchow, H. 1913 A, 41 ("bären").  
 Wagner, R. 1843 A ("bären").  
 Wallace, A. R. 1876 A, i, 135, 144; ii, 201.  
 1894 A, 435.  
 Weber and Abel 1928 A, 308, 318, 329, 340.  
 Weidenreich, F. 1922 B, 133 ("ursiden").  
 Wiegmann, F. R. 1838 B, 258 ("bären").  
 Wilkie, H. C. 1926 A, 819.  
 Winge, H. 1898 A, 126, 127.  
 1924 A, 177, 192, 197, 243 (Ursini).  
 Woodward, A. S. 1915 A, 425.  
 1923 C, 22.  
 Wortman, J. L. 1901 B, xi, 337, 338.  
 1906 A, 90 ("bears").  
 Wright, J. F. 1911 B, 436 ("bears").  
 Zittel and Schlosser 1911 A, 390.  
 1923 A, 470, 482, fig. 595.

URSAVUS Schlosser. Type *U. brevirohinus* Hofmann.

Schlosser, M. 1899 B, 99, 103, 108.

Frick, C. 1926 A, 94.

Königswald, R. 1925 A, 16.

Matthew, W. D. 1902 C, 283, 285.

1924 C, 109, 121.

1928 B, 971.

Merriam, Stock, Moody 1925 A, 61.

Romer and Sutton 1927 A, 458, 463.

Schlosser, M. 1899 B.

1900 A, 261.

Simpson, G. G. 1926 L, 174.

Weber and Abel 1928 A, xix, 331, 340.

Zittel and Schlosser 1911 A, 391.

1923 A, 471.

**Ursavus pawniensis** Frick.

Frick, C. 1926 A, 106, 110, tab. 3, figs. 49, 56

(This genus?).

Matthew, W. D. 1902 C, 285 (This genus?).

Miocene (Pawnee Creek); Colorado.

PLIONARCTOS Frick. Type *P. edensis* Frick.

Frick, C. 1926 A, 111, 114.

**Plionarctos edensis** Frick.

Frick, C. 1926 A, 114, figs. 56, 57, 61, 62.

1926 C, 441.

Pliocene (Eden); California.

URSUS Linnæus. Type *U. arctos* Linnæus.

Hay, O. P. 1902 A, 763.

Abel, O. 1912 F, 706.

Allen, J. A. 1892 A.

1903 A.

Altmann, F. 1925 A, 108.

Ameghino, F. 1889 A, 1027.

1905 C, 446, fig. 92.

1912 B, 178 ("ours").

Anderson, R. J. 1901 A, 681.

1902 A, 1120, fig. 12.

1902 B, 318, figs.

1903 A, 651.

1905 A, 328, figs. 20, 23.

Anthony, R. 1912 A ("ours").

Arlt, T. 1907 D, 687.

Bardleben, K. 1889 A, 107.

Bardenheath, K. S. 1913 A, 106.

Beddard, F. E. 1902 A, 442.

Birula, A. A. 1913 A, 277.

Boas, J. E. V. 1909 A, 529, fig. 6.

1914 B, 580.

Bonsdorff, E. J. 1871 A, 318.

Bradley, O. C. 1905 B, 471.

Brandt and Woldrich 1887 A, 46.

Brauer, A. 1914 A, 282.

Bronn, H. G. 1848 B, 9344.

1849 A, 723.

Broom, R. 1905 A, 98.

Brown, A. E. 1904 B, 94.

Cleland, J. 1863 B, 298.

Cope, E. D. 1895 G, 596.

Cuvier, F. 1825 A, 109, pl. xxxvii ("ours").

Cuvier, G. 1805 A.

1825 A, iv, 255, 311, pl. xviii; pls. xx-

xxvii ("ours").

Depéret, C. 1909 A, 141.

DeStefani, C. 1921 A, 257.

Diener, C. 1912 A, 206.

Doran, A. H. G. 1878 A, 399.

Edinger, T. 1923 A, 385, figs. 4, 5.

Eggeling, H. 1904 A, 97.

Ehrenberg, K. 1925 A, 48.

1926 A, 54.

1927 A, 240.

Elliot, D. G. 1901 A, 309.

Falconer, H. 1863 A, 63.

Fischer, J. B. 1829 A, 141.

Foote, J. S. 1918 A, 106.

Frassetto, F. 1903 A, 177, 182, 221, 246.

Frech, F. 1908 A, 483.

Frech and Geinitz 1903 A, 36.

Freund, L. 1911 A, 389.

Frick, C. 1921 A, 341.

1926 A, 8, 16.

Gaillard, C. 1898 A, 1238.

Gaudry, A. 1891 C, 55, fig. 22.

Geikie, J. 1914 A, 319 ("bears").

Geinitz, E. 1903 A.

1904 A.

Gervais, P. 1852 A, 104.

1859 A, 203.

Gidley, J. W. 1912 C, 20.

1913 B, 96.

Giebel, C. G. 1855 A, 37, pls. xvi, xvii.

1878 C, 854 ("bären").

1883 A, pl. xviii, lviii, lxxii, lxxix, lxxxvi.

Grant, M. 1904 B, 191, 205.

Hasse and Schwarck 1870 A, 103.

Hatschek, B. 1889 A, 87, fig. 3.

Hay, O. P. 1909 G, 893.

1912 B, 14.

1912 D, 770.

1914 A, 475.

Heilprin, A. 1837 A, 389.

Hensel, R. 1879 A.

Hermann, R. 1907 A, 196, figs. 2, 5.

Hoyer and Babik 1924 A, 450, pl. xxxiii, figs.

1, 2, 5 ("bären").

Hrdlička, A. 1920 A, 463.

Hue, E. 1907 A, pls. xxiv, xxv, lxxiv, lxxx,

xciv, cviii, cxlii, cxxlii, cxlvi, clx, clxxvi.

Hull, E. 1914 A, 613, 616.

Huxley, T. H. 1856 B, 191 ("bear").

Jaekel, O. 1926 E, 60.

Kampfen, P. N. 1905 A, 527, fig. 51.

Köstlin, O. 1844 A.

Leche, W. 1887 A.

Le Damany, P. 1906 B, 164 ("ours").

Leunis and Ludwig 1883 A, 200.

Lönnerberg, E. 1923 A, 85.

Lydekker, R. 1910 E, 252 ("bears").

Mackie, S. G. 1863 D, 232.

Major, C. J. F. 1899 A, 508.

Martins, C. 1872 A, 208 ("ours").

- Matthew, W. D. 1909 D, 324, text-fig. 3.  
1915 K, 402.
- Mead, C. S. 1909 A, 195.
- Meekel, J. F. 1825 A.
- Merriam, J. C. 1892 A, 62.  
1912 A, 40.  
1921 B, 184 ("true bears").
- Merriam and Stock 1925 A, 4, 12.
- Merriam, Stock, Moody 1916 A.
- Miller, G. S. 1912 B, 73.  
1924 C, 92.
- Mysberg, W. A. 1917 A, 655.
- Nehring, A. 1880 A.
- Neuville, H. 1915 A, 7.
- Newton, E. T. 1913 A, 251.
- Osborn, H. F. 1909 D, 87-90.  
1910 B, 438, 455, 460, 467.  
1916 B, 545.
- Owen, R. 1845 B, 501, pl. cxxx.  
1845 E, 122.  
1866 B, 289, fig. 174.  
1868 A, 913, fig. 263.
- Palmer, T. S. 1904 A, 703, 888.
- Pander and Alton 1822 A, 7, pls. iii, viii ("bären").
- Paulli, S. 1900 B, 494, figs. 8, 9.
- Pilgrim, G. E. 1914 A, 233.
- Pocock, R. I. 1921 B, 406 (Ursus).
- Pohl, L. 1911 A, 119, pl. viii, fig. 56.
- Pohle, H. 1921 A, 118 ("bären").  
1923 A, 266, figs. 1, 2 ("bären").
- Retzius, A. 1849 A, 619.
- Reynolds, H. 1897 A, 436, 439, 534, figs. 84, 85 (Ursus, "bears").  
1906 A, 1, pls. i-viii.
- Rudolf, G. de M. 1922 A, 138, fig. 3.
- Rusconi, C. 1927 A, 282.
- Scharff, R. F. 1895 A, 450.  
1911 A, 80, 352.
- Schlösser, M. 1900 A, 261.  
1900 F, 144.  
1903 I, 21, 209.  
1924 A, 8.
- Schwalbe, G. 1904 A, 207.
- Selater, P. L. 1875 A, 219.
- Scott, W. B. 1913 A, 549.
- Serres, M. 1852 B, 183 ("ours").  
1860 A, 303.
- Seton, E. T. 1909 A, 1030.
- Strecker, C. 1887 A, 318.
- Stromer, E. 1902 A.  
1902 B, 554.
- Taschenberg, O. 1899 A, 4099.
- Terra, P. 1911 A, 283, fig. 104.
- Tims, H. W. M. 1903 A, 140.
- Toldt, C. 1905 A, 319, figs.
- Turner, G. 1889 A, 177.  
1891 A, 122, 157.
- Trouessart, E. L. 1904 A, 178.
- Vicq-d'Asy, F. 1819 A, 75.
- Virchow, H. 1907 A, 46.  
1909 A, 421.  
1913 A, 41.  
1917 B, 323 ("bär").
- Wagner, R. 1843 A.
- Wallace, A. R. 1876 A, i, 112, 121.
- Weber, M. 1904 A, 535, 542, fig. 399.
- Weber and Abel 1928 A, 329, figs. 203, 204.
- Wiegman, F. R. 1838 B, 262.
- Wilder, B. 1872 B, 319.
- Winge, H. 1924 A, 177, 197, 243, 248.
- Woodward, A. S. 1898 D, 334.  
1922 A, 750.
- Wortman, J. L. 1902 A, xiii, 120.
- Zittel and Schlosser 1911 A, 391.  
1923 A, 471.
- Ursus amplidens** Leidy.  
Hay, O. P. 1902 A, 763.  
Foster, J. W. 1869 A, 253.  
1873 A, 91.
- Freudenberg, W. 1910 A, 13.
- Hay, O. P. 1923 A, 498.  
1928 C, 428.
- Shimek, B. 1902 A, 285.
- Trouessart, E. L. 1904 A, 180.
- Usher, W. 1854 A, 349 ("Ursus").  
Pleistocene (Middle); Mississippi, Virginia.
- Ursus procerus** Miller.  
Hay, O. P. 1902 A, 763.  
Freudenberg, W. 1910 A, 13.  
Hay, O. P. 1912 D, 772, text-figs. 71-73.  
1923 A, 329.
- Merrill, G. P. 1907 A, 62.
- Trouessart, E. L. 1904 A, 180.  
Pleistocene; Ohio.
- Ursus vitabilis** Gidley.  
Gidley, J. W. 1913 B, 96, fig. 1 [U. (Euarcetos)].  
Hay, O. P. 1923 A, 350.  
Pleistocene; Maryland.
- Ursus sp. indet.**  
Freudenberg, W. 1922 A, 4. Pleistocene; Mexico.
- Gilmore, C. W. 1908 A, 18. Pleistocene; Alaska.
- Hartnagel and Bishop 1921 A, 81. Pleistocene (Wisconsin); New York.
- Hay, O. P. 1923 A, 498. Pleistocene (Late); Tennessee.  
1927 D, 313 (Ursus); 56, 107, 115 ("bear").  
Pleistocene; Arizona, California.
- Lucas, F. A. 1898 E, 718 (This genus?). St. Paul Island, Bering Sea.
- McConnell, R. G. 1905 A, 29. Pleistocene; Klondike.
- McCornack, E. C. 1920 A, 23. Pleistocene (Caves); California.
- Merriam, J. C. 1911 B, 214 (This genus?). Pliocene (Thousand Creek); Nevada.  
1912 A, 40, figs. 1, 2. Pleistocene (La Brea); California.  
1917 A, 429 (This genus?). Pliocene (1000 Creek); Nevada: 439. Pleistocene? (Dunellon); Florida.
- Merriam and Stock 1925 A, 10.
- Miller, L. H. 1912 A, 70, 73, 81. Pleistocene (Potter Creek and Samwel caves); California: (Fossil Lake); Oregon.
- Osborn, H. F. 1925 D, 531. Pleistocene (La Brea); California.
- Quackenbush, L. S. 1909 A, 127. Pleistocene; Alaska and Klondike.



- Sellards, E. H. 1916 C, 158 ("Ursus indt."). Pleistocene; Florida.  
 1916 E, 17. Pleistocene; Florida.  
 Sinclair, W. J. 1903 A, 711 ("sp. nov.").  
 1904 A, 17 ("Ursus n. sp."); 20 ("Ursus sp. indet."). Pleistocene (Fossil Lake); Oregon.

- Stock, C. 1925 A, 30, 113, 195. Pleistocene (La Brea, caves); California: (Christmas Lake); Oregon.  
 Swarth, H. S. 1915 A, 18. Pleistocene (La Brea); California.

#### EUARCTOS Gray. Type *Ursus americanus* Pallas.

- Gray, J. E. 1884, Proc. Zool. Soc. Lond., 692.  
 Lockwood, S. 1884 A, 376 (Ursus).  
 Miller, G. S. 1912 B, 74 (As subgenus).  
 1924 C, 90.  
 1927 A, 10.

#### *Euarctos americanus* (Pallas).

Unless otherwise indicated, the authors cited use the generic name *Ursus* for this species.

- Hay, O. P. 1902 A, 763.  
 Anderson, R. J. 1902 B, 368.  
 1909 A, 745.  
 Baker, F. C. 1920 A, 474.  
 Brown, A. E. 1904 B, 96.  
 Brown, B. 1908 A, 183.  
 Calvin, S. 1911 A, 209, pl. xviii ("bear").  
 Carruccio, A. 1913 B, 174.  
 Cleland, J. 1863 B, 298.  
 Coleman, A. P. 1913 B, 18, 29 ("large bear." This species?).  
 1914 A, 443 ("bear").  
 Collett, J. 1883 A, 73 ("bear").  
 Cope, E. D. 1895 G, 596 (U. arctos).  
 Cuvier, G. 1825 A, iv, 318, 333, 336 ("ours noir").  
 Ehrenberg, K. 1926 A, 55.  
 Elliot, D. G. 1901 A, 313, pl. xxxiv.  
 Foote, J. S. 1916 A, 106, pl. xii.  
 Foster, J. W. 1869 A, 253.  
 1873 A, 91.  
 Frassetto, F. 1903 A, 177.  
 Frech and Geinitz 1903 A, 36.  
 Freudenberg, W. 1910 A, 12, pl. iv, fig. 3 (fig. 1?).  
 1921 A, 138.  
 1922 A, 4.  
 Frick, C. 1926 A, 17, 110, 119.  
 Furlong, E. L. 1904 A, 54.  
 1906 A, 243.  
 Gidley, J. W. 1913 B, 96 [U. (Euarctos). This species?].  
 Goddard, P. E. 1927 A, 68 ("bear").  
 Grant, M. 1904 B, 192.  
 Gregory, W. K. 1920 A, 149, fig. 82.  
 Harlan, R. 1835 C, 329, pl. xiv, fig. 26.  
 Hartnagel and Bishop 1921 A, 81, pl. xix.  
 Hasse and Schwarck 1870 A, 103.  
 Haug, E. 1911 A, 1873, 1887.  
 Hay, O. P. 1912 D, 770.  
 1914 A, 26, 32, 475, pl. lxxiii, fig. 7.  
 1920 B, 106, 117, 141.  
 1923 A, 498.  
 1924 D, 247, 252, 296.  
 1927 D, 214 (Ursus).  
 1928 C, 425, 428, 429 (Ursus).  
 Holland, W. J. 1912 B, 750.  
 Hrdlička, A. 1903 A, 360, fig. 34 ("black bear").  
 Leidy, J. 1889 H, 18.

- Leighton, M. M. 1921 A, 513.  
 Lockwood, S. 1884 A, 376 (Ursus).  
 Lydekker, R. 1884 A, 208.  
 Merriam and Stock 1925 A, 18 (Ursus).  
 Miller, G. S. 1912 B, 75.  
 Miller, L. H. 1912 A, 73 (Ursus; subg. Euarctos).  
 1924 C, 90 (Euarctos).  
 Newton, E. T. 1913 A, 253 ("american black bear").  
 Osborn, H. F. 1910 B, 467, 469, 477, 478, 488, 490 (This species?).  
 Peterson, O. A. 1926 A, 292 (Ursus).  
 Pocock, R. J. 1914 B, 930, text-figs. 10, 13.  
 1921 B, 405, fig. 8 (Euarctos).  
 Rhoads, S. N. 1903 A, 228.  
 Scharff, R. F. 1911 A, 28.  
 Schmidt, E. 1872 A, 245.  
 Scott, W. B. 1913 A, 548, fig. 274.  
 Seton, E. T. 1909 A, 1052, pls. xcii, xcvi; text-figs. 242-247, maps 55, 56.  
 Shimek, B. 1902 A, 285.  
 1910 B, 334 ("Ursus." This species?).  
 Smallwood, W. M. 1903 A, 26.  
 Smith, B. 1914 B, 65, pl. i.  
 Stromer, E. 1902 A, 145.  
 Tornier, G. 1910 A, 558, fig. 8.  
 Usher, W. 1854 A, 349 ("Ursus").  
 Van Deinsse, A. B. 1912 A, 348.  
 Virchow, H. 1909 A, 421.  
 1910 A, 10.  
 1913 A, 41, 52, fig. 4.  
 Weidenreich, F. 1922 B, 133, fig. 28.  
 Whittlesey, C. 1866 A, 16 ("bear." This species?).  
 Zdansky, O. 1928 A, 33, 40 (Ursus).  
 Pleistocene; Iowa, Maryland, Illinois, Texas, Mexico.

#### *Euarctos floridanus* (Merriam).

Unless otherwise indicated, the authors, as cited, use for this species the generic name *Ursus*.

- Merriam, C. H. 1896 A, 81.  
 Baker, F. C. 1920 A, 474.  
 Bangs, O. 1898 A, 221.  
 Elliot, D. G. 1901 A, 314.  
 Gidley, J. W. 1927 E, 274 (This species?).  
 Grant, M. 1904 B, 192.  
 Hay, O. P. 1917 E, 46.  
 1920 B, 94, pl. iii, figs. 17-20.  
 1923 A, 382, 395.  
 1927 D, 274.  
 Merriam, C. H. 1896 A, 66.  
 Miller, G. S. 1912 B, 76.  
 Trouessart, E. L. 1904 A, 181.  
 Recent: Florida: Pleistocene; Florida: Tennessee.

THALARCTOS Gray. Type *Ursus maritimus* Phipps.

- Gray, J. E. 1825 A, 62.  
 Miller, G. S. 1924 C, 106.  
 Stejneger, L. 1928 A, 157.  
 Weber and Abel 1928 A, 331 (Ursus).

**Thalarctos maritimus** (Phipps).

Phipps, C. J. 1744, Voyage toward North Pole,  
 185 (Ursus).

- Elliot, D. G. 1901 A, 310, pl. xxxii [Ursus  
 (Thalassactes)].  
 Lucas, F. A. 1898 E, 718 ("bear").  
 Miller, G. S. 1912 A, 298, figs. 54-57.  
 Preble, E. A. 1923 A, 103.

Recent; Arctic regions: Pleistocene?; St.  
 Paul's Island, Bering Sea.

ARCTOTHERIUM Bravard. Species *A. latidens*, *A. angustidens* Bravard.

- Bravard, A. 1857, Observ. Géol. sur le bassin  
 de la Plaine.  
 Hay, O. P. 1902 A, 763 (Arctodus, in part).  
 Chardin, T. 1922 A, 25.  
 Ameghino, C. 1916 A, 285.  
 Ameghino, F. 1885 A, 20, 146, 204.  
 1889 A, 1006.  
 1902 C, 226.  
 1904 B, 30.  
 1905 C, 448, fig. 93 (Arctotherium); 447  
 (Arctotheriinae).  
 1906 A, 397.  
 1912 A, 60.  
 1912 B, 177 (Arctotherium); 178 (Arcto-  
 theriinae).  
 Barbour, E. H. 1916 A, 352.  
 Beddard, F. E. 1902 A, 445.  
 Boule and Thevenin 1920 A, 231.  
 Burmeister, H. 1866 B, 144 (Ursus).  
 1879 B, 169 (Ursus).  
 Cope, E. D. 1880 U, 158.  
 1899 A, 221 (Tremarctos).  
 Flower and Lydekker 1891 A, 561, fig. 257.  
 Frech and Geinitz 1903 A, 36, 39.  
 Freudenberg, W. 1910 A, 6.  
 Frick, C. 1921 A, 841.  
 1926 A, 18, 47, 78.  
 Gervais, P. 1855 A, 7, pl. iv, figs. 1-3 (Ursus).  
 1855 B, 332, pl. v, fig. 1 ("grands ours").  
 1859 A, 189.  
 1873 B, 16, 41, pl. xxv (Ursus, Arcto-  
 therium).  
 Gidley, J. W. 1912 C, 19.  
 1928 A, 430.  
 Giebel, C. G. 1878 C, 854.  
 1883 A, 124 (Arctodon).  
 Gill, T. 1881 A, 387.  
 Hay, O. P. 1912 B, 14 (Arctodus).  
 1925 D, 245.  
 Hailprin, A. 1887 A, 389.  
 Ihering, H. 1910 A, 175.  
 Kraglievich, L. 1926 A, 2.  
 Lambe, L. M. 1911 A, 21.  
 Lockwood, S. 1884 A, 378.  
 Lydekker, R. 1885 B, 157.  
 Matthew, W. D. 1910 G, 155, 159.  
 1915 A, 198.  
 1915 K, 402.  
 1924 C, 121.  
 1924 E, 748.  
 1928 B, 971.  
 Merriam, J. C. 1911 A, 163 (Arctodus).  
 1912 A, 40.  
 1915 G, 101.  
 1921 B, 184 ("arctotheres").  
 1924 A, 352.

- Merriam and Stock 1925 A, 3-35, fig. 1.  
 1927 A, 43.  
 Merriam, Stock, Moody 1916 A.  
 1925 A, 62.  
 Miller, L. H. 1915 B, 71.  
 Neuville, H. 1915 A, 9 (Arctotherium).  
 Osborn, H. F. 1909 D, 87, 89.  
 1910 B, 606.  
 Palmer, T. S. 1904 A, 119, 837.  
 Peterson, O. A. 1926 A, 286.  
 Pilgrim, G. E. 1914 A, 228.  
 Roth, S. 1908 A, 138 ("arctotherien").  
 Rusconi, C. 1927 A, 279, figs. 1-4.  
 Scharff, R. F. 1911 A, 351.  
 Scott, W. B. 1913 A, 205, 549, 622, 676.  
 1916 A, 119 ("short-faced bears").  
 Simpson, G. G. 1926 L, 174.  
 Stock and Furlong 1926 A, 46.  
 Trouessart, E. L. 1904 A, 181 (Syn. of Tre-  
 marctos).  
 Winge, H. 1895 B, 31, pl. vi, figs. 1-4; pl. vii  
 (Ursus).  
 1896 A, 118 (Ursus).  
 1924 A, 187.  
 Woodward, A. S. 1900 G, 75.  
 1902 A, 326.  
 Zittel and Schlosser 1911 A, 391 (Arctodus).  
 1923 A, 472, 680, 681.

**Arctotherium californicum** Merriam.

- Merriam, J. C. 1911 A, 184, figs. 1-3.  
 Abel, O. 1926 B, 237.  
 Gidley, J. W. 1928 A, 431.  
 Hay, O. P. 1927 D, 184, 191, 213.  
 Kraglievich, L. 1926 A, 8, 13, fig. 1 (Tremarcto-  
 therium).  
 Merriam, J. C. 1912 A, 39.  
 Merriam and Stock 1925 A, 7, 15, 19, 23, 24,  
 31, pl. iii; pl. iv, figs. 1, 2; pl. v, fig. 2;  
 pl. vi, figs. 2-9; pl. vii; pl. viii, figs. 1-9;  
 pls. ix, x; text-figs. 1-6.  
 Miller, L. H. 1912 A, 78.  
 Osborn, H. F. 1925 D, 529, 531.  
 Rusconi, C. 1927 A, 282 (Arctotherium); 286,  
 289 (Tremarctotherium).  
 Stock, C. 1925 A, 30.  
 Wyman, L. E. 1922 A, 23 ("Arctotherium").  
 Pleistocene (La Brea); California.

**Arctotherium sinum** Cope.

- Hay, O. P. 1902 A, 763 (Arctodus).  
 Ameghino, F. 1885 A, 148.  
 1889 A, 320.  
 Freudenberg, W. 1910 A, 7, pl. i, fig. 1; pl. iii,  
 fig. 1; pl. iv, fig. 2; text-fig. 1.  
 1921 A, 137, 138.

Freudenberg, W. 1922 A, 4.  
 Gidley, J. W. 1928 A, 431.  
 Gill, T. 1881 A, 387.  
 Hay, O. P. 1918 B, 26.  
 1927 D, 197, 215.  
 Kraglievich, L. 1926 A, 8, 13.  
 Le Conte, J. 1882 B, 8 ("bear").  
 Lockwood, S. 1884 A, 407.  
 Merriam, J. C. 1912 A, 41, fig. 3.  
 Merriam and Stock 1921 A, 567 (This species?).  
 1925 A, 3, 7, 10, 11, 13, 19, 24, pls. i, ii;  
 pl. iv, fig. 3; pl. v, fig. 6; pl. vi, fig. 1;  
 pl. viii, fig. 3; text-fig. 6.  
 Merriam, Stock, and Moody 1916 A, 95.  
 1925 A, 64.  
 Miller, L. H. 1912 A, 70.  
 Osborn, H. F. 1910 B, 477 ("Arctotherium").  
 1925 D, 533.  
 Rusconi, C. 1927 A, 286, 289 (Tremarctotherium).  
 Sinclair, W. J. 1908 A, 708, 711.

#### TREMARCTOS Gervais. Type *Ursus ornatus* F. Cuvier.

Gervais, P. 1855, Nat. Hist. Mamm., II, 20-21, text-fig.  
 Ameghino, F. 1885 A, 150.  
 Cope, E. D. 1899 A, 221.  
 Gidley, J. W. 1928 A, 430 (Tremarctos, Tremarctinae).

Sinclair, W. J. 1904 A, 17.  
 Stock, C. 1925 A, 113.  
 Swarth, H. S. 1915 A, 18 ("Arctotherium").  
 Yates, L. G. 1903 A, 118.  
 Pleistocene (Potter Creek cave); California; Mexico.

#### Arctotherium yukonense Lambe.

Lambe, L. M. 1911 A, 24, pls. i-iii.  
 Abel, O. 1914 A, 77, fig. 43.  
 Gidley, J. W. 1928 A, 431.  
 Kraglievich, L. 1926 A, 16 (To Tremarctotherium).  
 Lambe, L. M. 1911 B, 271 (A. sumini).  
 1912 A, 14.  
 Merriam and Stock 1925 A, 7, 9.  
 Pleistocene; Yukon.

#### Arctotherium sp. indet.

Matthew, W. D. 1918 A, 226, 229 (This genus?).  
 Pleistocene (Sheridan); Nebraska.

Kraglievich, L. 1926 A, 2, 3.  
 Peterson, O. A. 1926 A, 287.

#### Tremarctos sp. indet.

Gidley, J. W. 1925 A, x.  
 1927 E, 274.  
 Pleistocene; Florida.

#### INDARCTUS Pilgrim. Type *I. salmontanus* Pilgrim.

Pilgrim, G. E. 1913 A, 290.  
 Frick, C. 1926 A, *passim* (Indarctos).  
 Kraglievich, L. 1926 A, 2 (Indarctos).  
 Matthew, W. D. 1928 B, 971 (Indarctos).  
 Merriam, J. C. 1917 A, 428, 443 (Indarctos).  
 1924 C, 115 (Indarctos).  
 Merriam and Stock 1925 A, 5, 12 (Indarctos).  
 1925 B, 64 (Indarctos).  
 Merriam, Stock, Moody 1916 A, 93 (Indarctos).  
 1925 A, 64 (Indarctos).  
 Osborn, H. F. 1918 A, 24, 33 (Indarctos).  
 Pilgrim, G. E. 1914 A, 225, pl. xx.  
 Rusconi, C. 1927 A, 282 (Indarctos).  
 Zdansky, O. 1924 B, 16 (Indarctos).  
 Zittel and Schlosser 1923 A, 471, 680 (Indarctos).

#### Indarctus? oregonensis Merriam, Stock and Moody.

Merriam, Stock, Moody 1916 A, 90, figs. 1-4, 8, 9, 13, 15-22 (Indarctos).  
 Frick, C. 1921 A, 341, 345, 346 (Indarctos).

Frick, C. 1926 A, 44, 77, 81, 89, tab. 2, figs. 26, 30 (Indarctos).  
 Kraglievich, L. 1926 A, 8 (Indarctos).  
 Merriam, J. C. 1917 A, 428 (Indarctos?).  
 Merriam and Stock 1925 A, 6, 11, pl. v, figs. 3, 4; text-fig. 1 (Indarctos).  
 1927 A, 43, pl. i (Indarctos near oregonensis).  
 Merriam, Stock, and Moody 1925 A, 58, 61, figs. 11-16 (Indarctos).  
 Rusconi, C. 1927 A, 282.  
 Stock, C. 1925 A, 18 (Indarctos. This genus?).  
 Stock and Furlong 1926 A, 46 (Indarctos?).  
 Zdansky, O. 1924 B, 22, 23 (Indarctos).  
 Pliocene (Rattlesnake); Oregon.

#### Indarctus sp. indet.

Matthew, W. D. 1918 A, 185 (Indarctos).  
 Miocene (Snake Creek); Nebraska.  
 Merriam, Stock, Moody 1925 A, 58, 65, fig. 17 (This genus?). Pliocene (Rattlesnake); Oregon.

#### ARCTODUS Leidy. Type *A. pristinus* Leidy.

Leidy, J. 1854 C, 90.  
 Hay, O. P. 1902 A, 763.  
 Freudenberg, W. 1901 A, 6.  
 Gidley, J. W. 1928 A, 430.  
 Kraglievich, L. 1926 A, 14.  
 Merriam and Stock 1925 A, 7.  
 Palmer, T. S. 1904 A, 118, 837.  
 Peterson, O. A. 1926 A, 286.  
 Trouessart, E. L. 1904 A, 181.

Wallace, A. R. 1876 A, II, 202.  
 Weber and Abel 1928 A, 340.  
 Zittel and Schlosser 1911 A, 391.  
 1923 A, 472.

#### Arctodus floridanus Gidley.

Gidley, J. W. 1928 A, 432.  
 Early Pleistocene; Florida.

**Arctodus haplodon (Cope).**

- Hay, O. P. 1902 A, 763.  
 Baker, F. C. 1920 A, 208, 214, 397.  
 Cope, E. D. 1895 F, 446 (Arctotherium pristinum).  
 Frech and Geinitz 1903 A, 36 (Ursus).  
 Freudenberg, W. 1910 A, 9 (Syn. ? of Arctodus pristinus).  
 Gidley, J. W. 1928 A, 431.  
 Haug, E. 1911 A, 1886 (Arctotherium).  
 Hay, O. P. 1923 A, 479 (Arctotherium).  
 Holland, W. J. 1908 A, 231.  
 1912 B, 750.  
 Kraglievich, L. 1926 A, 15 ("haplodon").  
 Merriam and Stock 1925 A, 5, 7 (Arctotherium).  
 1927 A, 43 (Arctotherium).

Osborn, H. F. 1910 B, 469, 471.

Peterson, O. A. 1926 A, 288, pls. xxiv, xxv (Arctotherium).

Rhoads, S. N. 1903 A, 228 (Arctotherium).

Schlosser, M. 1899 M, 362 (Ursus).

1902 H, 141 (Ursus).

Pleistocene (Port Kennedy and Frankstown caves); Pennsylvania.

**Arctodus pristinus Leidy.**

- Hay, O. P. 1902 A, 763.  
 Freudenberg, W. 1910 A, 9 (Arctotherium).  
 Hay, O. P. 1923 A, 363.  
 Kraglievich, L. 1926 A, 14.  
 Merriam and Stock 1925 A, 7.  
 Pleistocene; South Carolina, Mexico?

**AGRIOTHERIUM Wagner. Type *Ursus sivalensis* Falconer and Cautley.**

- Wagner, A. 1837, Gelehrte Anz. Bayer. Akad., v, 335.  
 Ameghino, F. 1885 A, 150 (Hyænarctos).  
 Arldt, T. 1907 D, 659 (Hyænarctos).  
 Blainville, H. M. 1864 A (1841) ix, fasc. ix, 96, 100 (Amphiarctos); 113 (Sivalarctos).  
 Bose, P. N. 1880 A, 119 (Hyænarctos).  
 Cautley and Falconer 1836 A, 192 (Ursus).  
 Falconer, H. 1868 A, i, 321, 551, pl. xxvi and explan. [Ursus (Hyænarctos)].  
 Falconer and Cautley 1845, in Owen, R. 1845 B, pt. iii, 504, 505 (Hyænarctos).  
 1846 A, 131 [Ursus (Hyænarctos)].  
 Falconer and Murchison 1867 A, 131 [Ursus (Hyænarctos)].  
 Flower, W. H. 1877 A, 534, 2 figs. (Hyænarctos).  
 Freudenberg, W. 1910 A, 13 (Hyænarctos).  
 Frick, C. 1926 A, 5, 7, 17, 59, 64, 70, figs. 1, 19-41 (Hyænarctos).  
 Gaillard, C. 1898 A, 1239 (Hyænarctos).  
 Gaudry, A. 1891 C, 53, fig. 21 (Hyænarctos).  
 Gervais, P. 1853 C, 229, pl. xii (Hyænarctos).  
 1859 A, 207, pl. lxxx (Hyænarctos).  
 Hoernes, R. 1886 A, 693 (Hyænarctos).  
 Kraglievich, L. 1926 A, 2 (Hyænarctos).  
 Lockwood, S. 1884 A, 407 (Hyænarctos).  
 Lydekker, R. 1884 A, 219, pls. xxix-xxxi (Hyænarctos).  
 1885 B, 150 (Hyænarctos).  
 Matthew, W. D. 1924 C, 108, 115, 121 (Hyænarctos, Hyænarctus); 115 (Agriotherium).  
 1928 B, 971, 974, fig. 13 (Hyænarctos).  
 Merriam, J. C. 1917 A, 433 (Hyænarctos).  
 Owen, R. 1845 B, 505, pl. cxxxi (Hyænarctos).  
 Romer and Sutton 1927 A, 458 (Hyænarctos).  
 Sellards, E. H. 1916 B, 98.  
 Stehlin, H. G. 1907 A, 219 (Hyænarctos).  
 Weber and Abel 1928 A, 340 (Hyænarctos).

**Agriotherium gregoryi (Frick).**

- Frick, C. 1921 A, 342, figs. 49-51 (Hyænarctos).  
 1926 A, 30, 65, 74, 81, 83, tab. 2, figs. 19, 27, 35 (Hyænarctos gregoryi).  
 1926 C, 441 (Hyænarctos gregoryi).  
 Gregory and Hellman 1923 B, 523, figs. 11-13 (Hyænarctos).  
 Kraglievich, L. 1926 A, 8 (Hyænarctos).  
 Merriam and Stock 1925 A, 8, 13 (Hyænarctos).  
 Stock, C. 1925 A, 21 (Hyænarctos).  
 Lower Pliocene (Eden); California.

**Agriotherium schneideri Sellards.**

- Sellards, E. H. 1916 B, 98, pl. xii, figs. 1, 2.  
 Frick, C. 1921 A, 341.  
 1926 A, 63, 75, 81, 84, tab. 2, figs. 26, 28, 36 (Hyænarctos).  
 Hay, O. P. 1923 A, 380.  
 Merriam, J. C. 1917 A, 439.  
 Merriam and Stock 1925 A, 18, 20, pl. v, fig. 7.  
 Pliocene (Bone Valley); Florida.

**Agriotherium sp. indet.**

- Freudenberg, W. 1910 A, 13, pl. ii, fig. 2; pl. iii, fig. 3; text-fig. 3 (Hyænarctos). Pliocene?; Mexico.  
 1921 A, 131 (Hyænarctos). Miocene; Mexico.  
 1922 A, 4 (Hyænarctos). Pliocene; Mexico.  
 Frick, C. 1926 A, 65, 85, tab. 2, figs. 29, 38 (Hyænarctos). Pliocene; Mexico; 80, 81 (Hyænarctos). Pliocene (Upper Snake Creek); Nebraska.  
 Matthew, W. D. 1923 A, 12 (Hyænarctos). Lower Pliocene (Upper Snake Creek); Nebraska.  
 1924 C, 65 (Hyænarctus); 116 (Hyænarctos). Lower Pliocene (Upper Snake Creek); Nebraska.

**DINARCTOTHERIUM Barbour.**

- Barbour, E. H. 1916 A, 349, 353 (Dinarctotherium; Gigantofelis, an alternative name).  
 Rusconi, C. 1927 A, 282.  
 A genus of somewhat uncertain position.

**Dinarctotherium merriami Barbour.**

- Barbour, E. H. 1916 A, 349, figs. 1-6.  
 Frick, C. 1921 A, 342.  
 Rusconi, C. 1927 A, 283, 286.  
 Pleistocene; Nebraska.

## MUSTELIDÆ Swainson.

- Swainson, W. 1835, Nat. Hist. and Class. Quad., vii, 102, 361.  
 Hay, O. P. 1902 A, 785.  
 Abel, O. 1912 F, 501.  
 1913 B, 716.  
 1914 A, 77.  
 1919 A, 743.  
 Ameghino, F. 1889 A, 1019.  
 1906 C, 41 ("mustélidés").  
 Anthony, R. 1905 A, 834 ("mustélidés").  
 1912 A.  
 Arldt, T. 1907 D, 666.  
 1912 A, 702.  
 Bayer, F. 1897 A, 147.  
 Beddard, F. E. 1902 A, 431.  
 Behlen, H. 1907 A ("musteliden").  
 Birula, A. A. 1910 A, 318.  
 1913 A, 274.  
 Boas, J. E. V. 1914 B, 580 ("musteliden").  
 Bonaparte, C. L. 1832 A, 287 (Mustelina).  
 Brandt and Woldrich 1887 A, 49 (Mustelina).  
 Carlson, A. 1921 A, 71.  
 Carus, V. 1875 A, 127 (Mustelida).  
 Case, E. C. 1899 B, 180.  
 Chandler, A. C. 1914 B, 134.  
 Depéret, C. 1906 A, 619.  
 1906 B, 1121 ("mustélidés").  
 1907 B ("mustélidés").  
 1908 A, 306.  
 1912 A, 708 ("mustélidés").  
 Doran, A. H. G. 1878 A, 395, 406.  
 Elliot, D. G. 1901 A, 319.  
 Frassetto, F. 1903 A, 222.  
 Fuchs, H. 1906 A, 12 ("musteliden").  
 Gervais, P. 1859 A, 243 ("mustélidés").  
 Gebel, C. G. 1878 C, 854 ("mustelinen").  
 1883 A ("mustelinen").  
 Grant, M. 1904 B, 193, 205.  
 Gray, J. E. 1821 A, 301 (Mustelladæ).  
 Gregory, W. K. 1920 A, 156.  
 Hay, O. P. 1914 A, 479.  
 1923 A, 312.  
 Hilzheimer, M. 1913 A, 566.  
 Hoernes, R. 1886 A, 693.  
 Ihering, H. 1910 A, 168.  
 Jaeger, G. F. 1842 A, 435 ("mustelen").  
 Kampfen, P. N. 1905 A, 532.  
 Leche, W. 1887 A.  
 1910 A, 450.  
 1915 A, 322.  
 Leunis and Ludwig 1883 A, 194.  
 Lobleby, J. L. 1908 A, 194, 200, 204.  
 Lockwood, S. 1884 A, 385.  
 Lydekker, R. 1903 D, 124 ("wensel-tribe").  
 Mackie, S. J. 1863 D, 340.  
 Matthew, W. D. 1901 A, 7.  
 1905 D, 40.  
 1907 A, 179, 193, 194, 198, 199.  
 1909 C, 103, 105, 107, 110, 112, 114, 116, 118, 120.  
 1909 D, 330, 414.  
 1915 A, 221.  
 1915 K, 445, fig. 17.  
 1924 C, 128.  
 1928 B, 973, 974, fig. 13.  
 Matthew and Granger 1924 A, 6.  
 Mead, C. S. 1906 A, 481.  
 Meckel, J. F. 1825 A ("mustelen").  
 Miller, G. S. 1912 A, 340.  
 1912 B, 92.  
 1923 A, 13.  
 1924 C, 114.  
 Neuville, H. 1915 A, 9 ("mustélidés").  
 O'Harra, C. C. 1910 A, 84, 130, 133.  
 1920 A, 87.  
 Osborn, H. F. 1905 I, 103, 106.  
 1909 D, 130.  
 1910 B, 624.  
 Owen, R. 1868 A, 894.  
 Palmer, T. S. 1904 A, 755, 830.  
 Perna, G. 1906 A, 122 (Mustelina).  
 Pilgrim, G. E. 1913 A, 290.  
 Pocock, R. I. 1914 B, 913.  
 1918 B, 307.  
 1921 A, 803, 829.  
 Pohl, L. 1909 A, 381 ("musteliden").  
 1911 A, 126.  
 Rehs, J. 1914 A, 56.  
 Retterer, E. 1916 A, 765 ("mustélidés").  
 Reynolds, S. H. 1912 A, 1, 12, pls. i-viii.  
 Römer, F. 1907 A, 72 ("musteliden").  
 Schlosser, M. 1902 J, 256 ("musteliden").  
 Schwalbe, G. 1904 A, 207 ("musteliden").  
 Scott, W. B. 1913 A, 517, 518, 550, 686.  
 Seton, E. T. 1909 A, 817.  
 Steinmann, G. 1907 A, 473.  
 Stromer, E. 1902 A.  
 Taschenberg, O. 1899 A, 4635.  
 Terra, P. 1911 A, 282.  
 Trouessart, E. L. 1904 A, 187.  
 Vicq-d'Azyr, F. 1792 A, civ (Mustelini).  
 Wallace, A. R. 1876 A, i, 144; ii, 198.  
 1894 A, 435.  
 Weber, M. 1904 A, 536.  
 Weber and Abel 1928 A, 308, 318, 332.  
 Winge, H. 1896 A, 126, 127.  
 1924 A, 178, 192, 200, 204, 243.  
 Wortman, J. L. 1901 B, xii, 143.  
 1920 A, 17 ("mustelinen").  
 Zittel and Schlosser 1911 A, 392.  
 1923 A, 472, 482, 670.

## MUSTELINÆ Gill.

- Gill, T. 1872 B, 6, 64.  
 Hay, O. P. 1902 A, 766.  
 Arldt, T. 1907 B, 449 ("mustelinen").  
 Beddard, F. E. 1902 A, 433.  
 Birula, A. 1910 A, 320.  
 Coues, E. 1877 A, 9, 33.  
 Elliot, D. G. 1901 A, 333.  
 Gebel, C. G. 1855 A, 32.  
 Gray, J. E. 1869 A, 81 (Mustelina).  
 Hensel, R. 1879 A, 540 ("mustelinen").  
 Ihering, H. 1910 A, 168.  
 Leche, W. 1910 A, 450 (Mustelini).  
 Lydekker, R. 1884 A, 178.  
 1912 B, 222.  
 Miller, G. S. 1912 A, 364 (Mustelinæ).  
 1912 B, 92.

Miller, G. S. 1924 C, 114.  
 Osborn, H. F. 1910 B, 530.  
 Palmer, T. S. 1904 A, 755, 830 (Mustelini).  
 Pocock, R. I. 1921 A, 803, 832 (Mustelinae, Martine).  
 Steenstrup and Sundevall 1860 A, 272 ("mustelinen").  
 Trouessart, E. L. 1904 A, 197.

**BUNÆLURUS** Cope. Type *B. lagophagus* Cope.

Hay, O. P. 1902 A, 767.  
 Chardin, T. 1915 A, 181 (Bunailurus).  
 Depéret, C. 1912 A, 708.  
 Haug, E. 1911 A, 1528.  
 Leche, W. 1915 A, 345.  
 Matthew, W. D. 1902 B, 137.  
 1905 D, 41, fig. 16.  
 1909 C, 110.  
 1915 K, 420.  
 1924 C, 130.  
 Matthew and Granger 1924 A, 6.  
 1924 B, 8, fig. 6.  
 Osborn, H. F. 1907 G, 141, fig. 101.  
 1909 D, 63.  
 1910 B, 214, 530.  
 Palmer, T. S. 1904 A, 147, 830.  
 Scott, W. B. 1913 A, 551.  
 Wallace, A. R. 1876 A, i, 134.

Weber and Abel 1928 A, 333.  
 Winge, H. 1924 A, 178, 200, 204 (Mustelini).  
 Zdansky, O. 1924 B, 31 (Martina); 28 (Putoriine).  
 Zittel and Schlosser 1911 A, 392, 394 (Putoriine, Martine).  
 1923 A, 474 (Martina, Putoriine).

Wortman, J. L. 1901 B, xii, 145.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 473.

**Bunælurus infelix** Matthew.

Matthew, W. D. 1903 B, 210.  
 1909 C, 103.  
 Oligocene (Lower); Montana.

**Bunælurus lagophagus** Cope.

Hay, O. P. 1902 A, 767.  
 Matthew, W. D. 1901 B, 357.  
 1902 A, 137, figs. 1-3.  
 1909 C, 105.  
 Trouessart, E. L. 1904 A, 201.  
 Zittel and Schlosser 1911 A, 393, fig. 559.  
 1923 A, 473, fig. 508.  
 Oligocene (White River); Colorado.

**OLIGOBNIS** Cope. Type *O. crassivultus* Cope.

Hay, O. P. 1902 A, 770.  
 Hellprin, A. 1887 A, 388.  
 Lydekker, R. 1908 A, 507.  
 Matthew, W. D. 1907 A, 174, 181, 193, 190.  
 1909 C, 110, 118.  
 1924 C, 120.  
 Merriam, J. C. 1906 A, 33, 59.  
 Osborn, H. F. 1909 D, 66, 75.  
 1910 B, 230, 288, 530.  
 1912 G, 249.  
 Palmer, T. S. 1904 A, 473, 825.  
 Peterson, O. A. 1910 A, 275.  
 Pilgrim, G. E. 1912 A, 13.  
 Schlosser, M. 1902 A, 137.  
 Scott, W. B. 1913 A, 551.  
 Studer, Th. 1906 A, 56 (Oligobunus).  
 Weber, M. 1904 A, 542.  
 Wortman, J. L. 1901 B, xi, 449.  
 Zittel and Schlosser 1911 A, 394.  
 1923 A, 474, 672.

**Oligobunis crassivultus** Cope.

Hay, O. P. 1902 A, 770.  
 Matthew, W. D. 1907 A, 193.  
 1909 C, 107.  
 Merriam, J. C. 1906 A, 5.

Merriam and Sinclair 1907 A, 181.  
 Thorpe, M. R. 1921 C, 482.  
 Trouessart, E. L. 1904 A, 222.  
 Oligocene (John Day); Oregon.

**Oligobunis darbyi** Thorpe.

Thorpe, M. R. 1921 C, 480, figs. 4, 5.  
 Lower Miocene (Lower Harrison); Nebraska.

**Oligobunis lepidus** Matthew.

Matthew, W. D. 1907 A, 172, 194, figs. 8, 9.  
 Cook, H. J. 1909 D, 270, fig. 6 (This species?).  
 1912 D, 40 (This species?).  
 Leche, W. 1915 A, 346.  
 Matthew, W. D. 1909 C, 112 (O. lepidus; 193 (var. robustus).  
 O'Hara, C. C. 1920 A, 155.  
 Peterson, O. A. 1910 A, 276.  
 Thorpe, M. R. 1921 C, 483 (var. robustus).  
 Lower Miocene (Upper Reedland; South Dakota; Lower Harrison); Nebraska.

**Oligobunis** sp. indet.

Matthew, W. D. 1909 C, 105 (This genus?).  
 Oligocene (Brule); South Dakota, etc.

**PAROLIGOBNIS** Peterson. Type *Brachypsalis simplicidens* Peterson.

Peterson, O. A. 1910 A, 269, 275.  
 Matthew, W. D. 1924 C, 129.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474.

**Paroligobnis simplicidens** Peterson.

Peterson, O. A. 1906 C, 35, 44, fig. 10 (Brachypsalis).  
 Cook, H. J. 1912 D, 40.  
 Matthew, W. D. 1909 C, 112 (Brachypsalis?).  
 O'Hara, C. C. 1920 A, 155 (Paroligobnis, Brachypsalis?).  
 Peterson, O. A. 1910 A, 269, figs. 64-68.  
 Lower Miocene (Upper Reedland; South Dakota; Lower Harrison); Nebraska.

PARICTIS Scott. Type *P. primævus* Scott.

Hay, O. P. 1902 A, 767.  
Matthew, W. D. 1924 C, 130.

**Parictis primævus** Scott.

Hay, O. P. 1902 A, 767.  
Matthew, W. D. 1909 C, 107.  
Merriam and Sinclair 1907 A, 184.  
Upper Oligocene (John Day); Oregon.

ÆLUROCYON Peterson. Type *A. brevifacies* Peterson.

Peterson, O. A. 1906 C, 68.  
Matthew, W. D. 1907 A, 179, 203.  
1909 C, 118.  
1924 C, 130.  
Moodie, R. L. 1918 D, 506, 508, fig. 37 (Æleurocyon).  
1923 B, 126, pl. xxiii.  
Osborn, H. F. 1909 D, 74.  
1910 B, 280, 530.  
1912 G, 249.  
Peterson, O. A. 1910 A, 278.

Scott, W. B. 1913 A, 551.  
Zittel and Schlosser 1911 A, 393.  
1923 A, 474, 672.

**Ælurocyon brevifacies** Peterson.

Peterson, O. A. 1906 C, 68, figs. 17-19.  
Cook, H. J. 1912 D, 42 (*A. brevifacies*).  
Matthew, W. D. 1909 C, 112.  
O'Harra, C. C. 1920 A, 155.  
Miocene (Lower); Nebraska.

BRACHYPSALIS Cope. Type *B. pachycephalus* Cope.

Cope, E. D. 1890 I, 951.  
Hay, O. P. 1902 A, 768 (*Pomatotherium, errore*).  
Matthew, W. D. 1909 C, 118.  
1924 C, 129, 131.  
Osborn, H. F. 1909 D, 74, 80.  
1910 B, 530.  
Palmer, T. S. 1904 A, 143, 830.  
Scott, W. B. 1913 A, 517.  
Zittel and Schlosser 1911 A, 394.  
1923 A, 474.

**Brachypsalis marshalli** Martin.

Martin, H. T. 1928 A, 233, pl. xx.  
Pliocene; Kansas.

**Brachypsalis? matutinus** Matthew.

Matthew, W. D. 1924 C, 65, 133, figs. 32, 33.  
Upper Miocene (Sheep Creek); Nebraska.

**Brachypsalis modicus** Matthew.

Matthew, W. D. 1918 A, 185, 195, figs. 4, 5.  
1924 C, 65, 131, figs. 30, 31.  
Thorpe, M. R. 1922 E, 443.  
Miocene (Upper Snake Creek); Nebraska.

**Brachypsalis obliquidens** Sinclair.

Sinclair, W. J. 1915 A, 76, 79, fig. 3.  
Matthew, W. D. 1918 A, 185, 196.  
1924 C, 65, 131.  
Merriam, J. C. 1917 A, 436.  
Thorpe, M. R. 1922 E, 443.  
Miocene (Lower Snake Creek); Nebraska.

**Brachypsalis pachycephalus** Cope.

Hay, O. P. 1902 A, 768 (*Pomatotherium, errore*).  
Matthew, W. D. 1904 C, 245.  
1909 C, 116.  
1924 C, 131, 133.  
Merriam, J. C. 1917 A, 436.  
Peterson, O. A. 1910 A, 277, fig. 69.  
Sinclair, W. J. 1915 A, 76.  
Thorpe, M. R. 1922 E, 443.  
Miocene? (Arikaree); Nebraska: (Ogallala); Kansas.

**Brachypsalis** sp. indet.

Matthew, W. D. 1923 A, 12. Pliocene (Upper Snake Creek); Nebraska.

MEGALICTIS Matthew. Type *M. ferox* Matthew.

Matthew, W. D. 1907 A, 172, 179, 195, 199, 203.  
1909 C, 118.  
1909 D, 415.  
Osborn, H. F. 1909 D, 75.  
1912 G, 249.  
Scott, W. B. 1913 A, 551.  
Zittel and Schlosser 1911 A, 393.  
1923 A, 474, 672.

**Megalictis ferox** Matthew.

Matthew, W. D. 1907 A, 172, 196, 197, 203, figs. 10-16.  
1909 C, 112.  
O'Harra, C. C. 1910 A, 84, 130.  
1920 A, 155.  
Miocene (Upper Rosebud); South Dakota.

MARTES Pinel. Type *M. foina* Erxleben.

Pinel, — 1792, Actes Soc. d'Hist. Nat., Paris, I, 55.

Chardin, T. 1915 A, 181.  
Cuvier, F. 1807 A, 120 ("martes").

- Cuvier, F. 1825 A, 86, pls. xxvi, xxvii ("martes").  
 Cuvier, G. 1825 A, iv, 239, pl. xvii.  
 Doran, A. H. G. 1878 A, 396, pl. lix.  
 Fischer, J. B. 1829 A, 214.  
 Gervais, P. 1852 A, 117.  
 1859 A, 247.  
 Gidley, J. W. 1927 C, 240.  
 Haase and Schwarcz 1870 A, 96.  
 Hensel, R. 1853 A, 16.  
 Küstlin, O. 1844 A.  
 Meckel, J. F. 1825 A.  
 Merriam, J. C. 1915 F, 259 ("marten").  
 Miller, G. S. 1912 A, 363.  
 1924 C, 114.  
 1927 A, 12.  
 Palmer, T. S. 1904 A, 400, 832.  
 Pocock, R. I. 1918 B, 309, fig. d.  
 Retzius, A. 1849 A, 624.  
 Reynolds, S. H. 1912 A, 3, pl. ii (Mustela).  
 Schlosser, M. 1924 A, 14.  
 Scott, W. B. 1913 A, 551.  
 Seton, E. T. 1909 A, 901.  
 Wallace, A. R. 1876 A, ii, 198.  
 Weber and Abel 1928 A, 333.

### **Martes americana (Turton).**

- Turton, W. 1806, Syst. Nat., i, 60 (Mustela).  
 Hay, O. P. 1902 A, 767 (Mustela).  
 Elliot, D. G. 1901 A, 334, fig. 66 (Mustela).  
 Miller, G. S. 1912 B, 92.  
 1924 C, 114.  
 Osborn, H. F. 1909 D, 90 (Mustela).  
 Seton, E. T. 1909 A, 901, pls. lxxix, lxxxi;  
 text-figs. 216-221, map 49.  
 Sinclair, W. J. 1915 A, 80.

Recent; eastern North America: Late Pleistocene?; caves at Carlisle, Pennsylvania.

### **PLIONICTIS Matthew. Type *P. ogygia* Matthew.**

- Matthew, W. D. 1924 C, 138.

### **Plionictis glarea (Sinclair).**

- Sinclair, W. J. 1915 A, 76, 80, fig. 4 (Martes).  
 Matthew, W. D. 1918 A, 185, 195 (Martes).  
 1924 C, 65, 71 (Plionictis); 135 (M.).  
 Merriam, J. C. 1917 A, 436 (Martes).  
 Upper Miocene (Lower Snake Creek); Nebraska.

### **Plionictis ogygia (Matthew).**

- Matthew, W. D. 1901 B, 353, 374, 383, text-figs. 8, 9 (Mustela).  
 1905 D, 41, fig. 17 (Mustela).  
 1909 C, 114 (Mustela).  
 1924 C, 71, 135 (Mustela, Plionictis).

### **MUSTELA Linnaeus. Type *M. martes* Linnaeus.**

- Hay, O. P. 1902 A, 767.  
 Allen, J. A. 1892 A.  
 1903 A.  
 Ameghino, F. 1906 C, 42, figs. 1, 2.  
 Ardit, T. 1907 D, 255.  
 Beddard, F. E. 1902 A, 435.  
 Birula, A. 1910 A, 232.  
 Brauer, A. 1914 A, 232.  
 Braun, M. 1906 A, 574, fig. 1.  
 Brunn, H. G. 1848 A, 760.

### **Martes caurina nobilis Hall.**

- Hall, E. R. 1926 A, 127, pl. xiv.  
 Hay, O. P. 1927 D, 214, 215.  
 Miller, G. S. 1924 C, 115 (M. caurina).  
 Pleistocene (caves); California.

### **Martes kingseyi Gidley.**

- Gidley, J. W. 1927 C, 239, fig. 1.  
 Miocene (Madison Valley); Montana.

### **Martes pennanti Erxleben.**

- Hay, O. P. 1902 A, 767 (Mustela).  
 Brown, B. 1908 A, 179 (Mustela).  
 Elliot, D. G. 1901 A, 337 (Mustela).  
 Haug, E. 1911 A, 1887 (Mustela).  
 Hay, O. P. 1914 A, 32.  
 1924 D, 252.  
 Lockwood, S. 1884 A, 404 (Mustela).  
 Matthew, W. D. 1915 K, 402.  
 Miller, G. S. 1912 B, 94.  
 1924 C, 116.  
 Osborn, H. F. 1910 B, 488 (Mustela).  
 Seton, E. T. 1909 A, 926, text-figs. 222, 223, map 50.  
 Recent; northern North America: Pleistocene? (Lato); Pennsylvania.

### **Martes sp. indet.**

- Gidley, J. W. 1920 B, 233 ("martens"). Pleistocene (Middle); Maryland.  
 Stock, C. 1925 A, 20. Lower Pliocene (Pinole-Orinda-Siesta); California.

- Sinclair, W. J. 1915 A, 80 (Martes).  
 Trouessart, E. L. 1904 A, 204 (Mustela).  
 Middle Miocene (Pawnee Creek); Colorado.

### **Plionictis parviloba (Cope).**

- Cope, E. D. 1890, in Scott and Osborn 1890 B, 71 (Mustela parviloba. To replace *Neurodon mustelinus* preoccupied).  
 Hay, O. P. 1902 A, 767 (Mustela).  
 Matthew, W. D. 1901 B, 353 (Mustela).  
 1909 C, 114 (Mustela).  
 1924 C, 65, 71, 136, fig. 35 (Plionictis); 135 (M.).  
 Sinclair, W. J. 1915 A, 81 (Martes).  
 Upper Miocene (Pawnee Creek); Colorado.

- Bronn, H. G. 1849 A, 722.  
 Carus and Engelmann 1861 A, 1772.  
 Cope, E. D. 1880 U, 168.  
 Cuvier, G. 1803 A.  
 Depéret, C. 1913 A, 709.  
 Dieterich, K. 1841 A, 77.  
 Doran, A. H. G. 1878 A, 396.  
 Eimer, G. H. T. 1901 A, 360.  
 Elliot, D. G. 1901 A, 332.  
 Fischer, J. B. 1829 A, 214.



- Frey, H. 1911 A, 412.  
 Fuchs, H. 1912 C, 507.  
 Gegenbaur, C. 1864 C, 187.  
 1865 C, 559.  
 Geinitz, E. 1903 A.  
 1904 A.  
 Gervais, P. 1852 A, 115, 118, explan. pl. xxiii.  
 1859 A, 247, pl. xxiii (Martes).  
 Gidley, J. W. 1927 C, 241.  
 Giebel, C. G. 1855 A, 32, pls. xii-xiv.  
 1883 A, pls. xiv, xv, lxxx, lxxxv.  
 Gottheb, H. 1914 A, 189.  
 Grant, M. 1904 B, 205.  
 Gregory, W. K. 1920 A, 155, fig. 95.  
 Hasse and Schwarck 1870 A, 95, figs. 29-31.  
 Heilprin, A. 1887 A, 390.  
 Hensel, R. 1879 A, 540.  
 Hollister, N. 1913 A, 471 [M. (Lutreola)].  
 Kampfen, P. N. 1905 A, 535.  
 Köstlin, O. 1844 A.  
 Leche, W. 1910 A, 450.  
 Leunis and Ludwig 1883 A, 194.  
 Lockwood, S. 1834 A, 398, 404.  
 Lull, R. S. 1922 C, 603.  
 Mackie, S. J. 1863 D, 340.  
 Martins, C. 1857 A, 90.  
 Matthew, W. D. 1909 C, 118.  
 1909 D, 324, text-fig. 3.  
 1915 K, 402.  
 1924 C, 130.  
 1928 B, 974, fig. 13.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 62.  
 Merriam, J. C. 1911 B, 216.  
 Miller, G. S. 1912 A, 381.  
 1912 B, 95.  
 1924 C, 116.  
 1927 A, 12.  
 Nehring, A. 1880 A.  
 Osborn, H. F. 1907 G, 141, fig. 100.  
 1909 D, 80, 90.  
 1910 B, 624.  
 Owen, R. 1845 B, 497.  
 Palmer, T. S. 1904 A, 436, 832.  
 Pander and Alton 1822 A, 7 ("wiesel").  
 Paulli, S. 1900 B, 497, fig. 11.  
 Pictet, F. J. 1853 A, 216, pl. iv, fig. 6.  
 Pocock, R. I. 1921 A, 804.  
 Pohl, L. 1909 A, 388, fig. 6.  
 Rehs, J. 1914 A, 56.  
 Römer, F. 1907 A, 72.  
 Scharff, R. F. 1895 A, 442.  
 Schlosser, M. 1924 A, 14.  
 Schmidt, O. 1886 A, 275.  
 Schwalbe, G. 1904 A, 207.  
 Slater, P. L. 1875 A, 219.  
 Scott, W. B. 1913 A, 517, 551.  
 Seton, E. T. 1909 A, 872 (Putorius).  
 Stromer, E. 1902 A.  
 1902 B, 557.  
 Taschenberg, O. 1899 A, 4635.  
 Terra, P. 1911 A, 282.  
 Trouessart, E. L. 1904 A, 204.  
 Turner, H. N. 1847 A, 111.  
 Van den Broeck, A. J. P. 1912 A, 788.  
 Wallace, A. R. 1876 A, i, 115, 118, 146; ii, 198.  
 Wallisch, W. 1906 A, 308.  
 Weber, M. 1904 A, 536, 542.  
 Weber and Abel 1928 A, 333.  
 Wiegmann, F. R. 1838 B, 265, 271, 278.  
 Wilder, B. 1872 B, 319.  
 Winge, H. 1896 A, 130.  
 1924 A, 178, 200.  
 Zdansky, O. 1924 B, 30.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474, 673.
- Mustela arizonensis (Mearns).**  
*Mearns, E. A.* 1891, Bull. Amer. Mus. Nat. Hist., iii, 234 (Putorius).  
*Elliot, D. G.* 1901 A, 349 (Putorius).  
*Furlong, E. L.* 1904 A, 54 (Putorius).  
 1906 A, 243 (Putorius).  
*Merriam, C. H.* 1896 B, 22, figs. 12-14 (Putorius).  
*Merriam and Stock* 1925 A, 10.  
*Miller, G. S.* 1912 B, 99.  
 1924 C, 122.  
*Miller, L. H.* 1912 A, 70, 73 (Putorius).  
*Sinclair, W. J.* 1903 A, 711 (Putorius).  
 1904 A, 17 (Putorius).  
*Stock, C.* 1925 A, 113.  
 Recent; western North America: Pleistocene (Caves); California.
- Mustela? buwaldi Merriam, J. C.**  
*Merriam, J. C.* 1919 A, 525, 527, 542, fig. 154.  
 1917 A, 430 (No description).  
 Lower Pliocene (Ricardo); California.
- Mustela cicognanii angustidens Brown.**  
*Brown, B.* 1908 A, 181, pl. xvii.  
*Hay, O. P.* 1914 A, 32.  
 1924 D, 252.  
*Merriam, C. H.* 1896 A, 10, pl. ii, figs. 3, 4 (Putorius cicognanii).  
*Osborn, H. F.* 1910 B, 488 ("weasel").  
*Seton, E. T.* 1909 A, 840, text-figs. 204-206 (Putorius cicognanii).  
 Pleistocene (Middle); Arkansas.
- Mustela diluviana Cope.**  
*Hay, O. P.* 1902 A, 767.  
*Baker, F. C.* 1920 A, 208, 215, 397.  
*Hay, O. P.* 1923 A, 312, 314.  
*Rhoads, S. N.* 1903 A, 229.  
*Schlosser, M.* 1902 H, 141.  
*Trouessart, E. L.* 1904 A, 204.  
 Pleistocene (Early); Pennsylvania.
- Mustela furlongi Merriam.**  
*Merriam, J. C.* 1911 B, 211, 213, 214, 249, fig. 22.  
 1917 A, 429.  
*Sinclair, W. J.* 1915 A, 81 (Martes).  
 Pliocene (Thousand Creek); Nevada.
- Mustela gracilis (Brown, B.).**  
*Brown, B.* 1908 A, 182, pl. xvii (Putorius).  
*Hay, O. P.* 1914 A, 32.  
 1924 D, 252.  
 Pleistocene (Middle); Arkansas.
- Mustela macrodon (Prentiss).**  
*Prentiss, D. W.* 1903 A, 887, fig. a (Lutreola).  
*Hardy, M.* 1903 A, 125 ("extinct mink").  
*Hollister, N.* 1913 A, 478.

Loomis, F. B. 1911 A, 227, figs. 1-3 (*Lutreola vison antiquus*).

Loomis and Young 1912 A, 27.

Recent or Pleistocene (Shell-heaps); Maine.

### ***Mustela minor* Douglass.**

Douglass, E. 1903 A, 154, 192, fig. 30 (This genus?).

Matthew, W. D. 1909 C, 116.

Sinclair, W. J. 1915 A, 81 (Martes).

Miocene (Arikaree); Montana.

### ***Mustela noveboracensis* (Emmons).**

Emmons, E. 1840, Rep. Quadr., Massachusetts, 45 (Putorius).

Hay, O. P. 1902 A, 768 (Putorius erminius).

Baird, S. F. 1857 A, 166, pl. xxxvi, fig. 3 (Putorius).

Bangs, O. 1896 A, 13, pl. i, fig. 2; pl. ii, fig. 2; pl. iii, fig. 3 (Putorius).

Coues, E. 1877 A, 109, pl. vi, figs. 1, 3, 5-7 (Putorius erminea).

Elliot, D. G. 1901 A, 346 (Putorius).

Hay, O. P. 1923 A, 310.

Leidy, J. 1889 H, 5 (Putorius ermineus).

Merriam, H. C. 1894 A, 98 ("weasel").

Merriam, C. H. 1896 B, 16, pl. iv, figs. 1, 2; pl. v, fig. 3 (Putorius).

Miller, G. S. 1912 B, 97.

1924 C, 120.

Rhodes, S. N. 1903 A, 229 (Putorius).

Scharff, R. F. 1907 A, 24 (Putorius erminea).

Recent; Maine to North Carolina and Illinois; Pleistocene?; Pennsylvania.

### ***Mustela vison* Schreber.**

Schreber, J. C. D. 1777, Säugethiere, pl. 127b.

Hay, O. P. 1902 A, 768 (Putorius).

Brown, B. 1908 A, 180, pl. xvii (Putorius).

Doran, A. H. G. 1878 A, 396.

Elliot, D. G. 1901 A, 338 (Putorius).

Gidley, J. W. 1913 B, 96 (This species?).

Haug, E. 1911 A, 1887 (Putorius).

Hay, O. P. 1914 A, 32.

1923 A, 350.

1924 D, 252.

Hollister, N. 1913 A, 472.

Lockwood, S. 1884 A, 398 (Putorius).

Matthew, W. D. 1915 K, 402 (*Lutreola*).

Miller, G. S. 1912 B, 101.

1924 C, 125.

Osborn, H. F. 1910 B, 488 (Putorius).

Osborn and Anthony 1922 A, 226 (Putorius); 227 (*Lutreola*).

Seton, E. T. 1909 A, 872, pl. lxxviii, map 48.

Recent; North America: Pleistocene (Early, Middle); Pennsylvania, Maryland, Arkansas, Canada.

### ***Mustela* sp. indet.**

Furlong, E. L. 1904 A, 55. Pleistocene (Samuel Cave); California.

1908 A, 245. Pleistocene (Samuel Cave); California.

Hay, O. P. 1927 D, 184, 191. Pleistocene; California.

Merriam, J. C. 1917 A, 428. Pliocene (Rattlesnake); Oregon.

Merriam and Stock 1925 A, 10.

Merriam, Stock, Moody 1925 A, 58, 67, figs. 18, 19 (M. n. sp.). Pliocene (Rattlesnake); Oregon.

Miller, L. H. 1912 A, 73. Pleistocene (Samuel Cave); California.

Osborn, H. F. 1925 D, 531. Pleistocene (La Brea); California.

Stock, C. 1925 A, 30, 113. Pleistocene (La Brea and caves); California: Lower Pliocene (Rattlesnake); Oregon.

## **PUTORIUS Cuvier. Type *Mustela putorius* Linnaeus.**

Hay, O. P. 1902 A, 768.

Allen, J. A. 1892 A.

1903 A.

Bärthold, 1904 A, 367.

Bangs, O. 1896 A, 2.

Beddard, F. E. 1902 A, 435.

Beer, G. R. 1926 A, 329, figs. 105, 106.

Birula, A. 1910 A, 322.

Brandt and Woldrich 1887 A, 5, 54.

Bronn, H. G. 1848 B, 1064.

1849 A, 722.

Butterworth, E. M. 1916 A, 22 (Martes).

Chardin, T. 1915 A, 181.

Cuvier, F. 1807 A, 120 ("putois").

Elliot, D. G. 1901 A, 338.

Foots, J. S. 1916 A, 94, 117, pls. ix, xiv.

Frech, F. 1906 A, 453.

Fuchs, H. 1912 C, 507.

Gervais, P. 1859 A, 251.

Giebel, C. G. 1883 A, pls. xv, xvi.

Grant, M. 1904 B, 205.

Heilprin, A. 1887 A, 390.

Hollister, N. 1913 A, 471 (*Lutreola*).

Hue, E. 1907 A, pls. xxviii, lxxv, lxxix, xcv, cxxi, cxxiii, clxiv.

Ihering, H. 1910 A, 168.

Kampfen, P. N. 1905 A, 532.

1907 A, 695, fig.

Leche, W. 1912 A, 74.

1915 A, 330.

Leunis and Ludwig 1883 A, 195.

Lockwood, S. 1884 A, 398.

Mackie, S. J. 1863 D, 341.

Matthew, W. D. 1909 C, 118.

1924 C, 130.

Merriam, C. H. 1892 A, 62.

1896 B, 7.

Miller, G. S. 1912 A, 418.

Osborn, H. F. 1909 D, 80, 89, 90.

1910 B, 301, 488, 530.

Owen, R. 1845 B, 497.

1868 A, 904.

Palmer, T. H. 1904 A, 596, 833.

Pictet, F. J. 1853 A, 218.

Pocock, R. I. 1913 B, 308.

1921 A, 804, 832.

Pohl, L. 1909 A, 390, fig. 9.

Rehs, J. 1914 A, 56.

Römer, F. 1907 A, 72.

Scharff, R. W. 1907 A, 24.

Scott, W. B. 1913 A, 152, fig. 60 (*Lutreola*).  
 Schwalbe, G. 1904 A, 207.  
 Stromer, E. 1902 A.  
 Taschenberg, O. 1899 A, 4663.  
 Trouessart, E. L. 1904 A, 205.  
 Voit, M. 1923 A, 74, fig. 3 ("wiesel").  
 Wiegmann, F. R. 1838 B, 265, 271, 278.  
 Wilder, B. 1872 B, 319.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474.

### ***Putorius nambianus* (Cope).**

Cope, E. D. 1874 U, 147 (Martes).  
 Hay, O. P. 1902 A, 768.  
 Matthew, W. D. 1909 C, 116.  
 Merrill, G. P. 1907 A, 44 (Martes); 49 (Musetela); 59 (Putorius).  
 Sinclair, W. J. 1915 A, 81 (Martes).  
 Miocene (Santa Fe); New Mexico.

### ***Putorius* sp. indet.**

Miller, L. H. 1912 A, 78. Pleistocene (La Brea); California.

## **CANIMARTES Cope. Type *C. cummingsii* Cope.**

Hay, O. P. 1902 A, 774.  
 Haug, E. 1911 A, 1706.  
 Hay, O. P. 1923 A, 2.  
 Matthew, W. D. 1924 C, 129.  
 Osborn, H. F. 1909 D, 83.  
 1910 B, 366, 530.  
 Palmer, T. S. 1904 A, 157, 823.  
 Scott, W. B. 1913 A, 517.

### ***Canimartes cummingsii* Cope.**

Hay, O. P. 1902 A, 774.  
 Dumble, E. T. 1894 A, 559.  
 Gidley, J. W. 1903 C, 627.  
 Matthew, W. D. 1909 C, 120.  
 Merriam, J. C. 1917 A, 434.  
 Montgomery, T. H. 1904 A, 58.  
 Osborn, H. F. 1910 B, 366.  
 Upper Pliocene (Blanco); Texas.

## **GULONINÆ.**

Ardt, T. 1912 A, 748 (*Guloneæ*).  
 Gray, J. E. 1825 A, 339 (*Gulonina*).  
 Miller, G. S. 1912 A, 432 (*Guloninæ*).  
 1924 C, 128.

Palmer, T. S. 1904 A, 743, 830 (*Gulonini*).  
 Pocock, R. I. 1921 A, 833.  
 Zittel and Schlosser 1923 A, 474 (*Gulnæ*).

## ***Gulo* Pallas. Type *Ursus gulo* Linnæus.**

Pallas, P. S. 1780, Spicil. Zool., fasc. 14, 25.  
 Hay, O. P. 1902 A, 768.  
 Allen, J. A. 1892 A.  
 1903 A.  
 Ardt, T. 1907 D, 311.  
 Bardeleben, K. 1885 B, 86.  
 Beddard, F. E. 1902 A, 435.  
 Birula, A. 1910 A, 321.  
 Boas, J. E. V. 1909 A, 529, fig. 10.  
 Bonsdorff, E. J. 1871 A, 318.  
 Bronn, H. G. 1848 A, 558.  
 1849 A, 723.  
 Cope, E. D. 1880 U, 156.  
 Coues, E. 1877 A, 32.  
 Cuvier, F. 1807 A, 120, 122 ("gloutons").  
 1825 A, 88, pl. xxxii ("gloutons").  
 Doran, A. H. G. 1878 A, 397.  
 Emmer, G. H. T. 1901 A, 139, 216.  
 Elliot, D. G. 1901 A, 333.  
 Fischer, J. B. 1829 A, 154.  
 Frech, F. 1907 A, 315 ("vielfras").  
 Frick, C. 1926 A, 47.  
 Gervais, P. 1852 A, 117.  
 1853 B, 40 ("glouton").  
 1859 A, 247.  
 Giebel, C. G. 1855 A, 33, pl. xii, fig. 13.  
 1878 C, 854 ("vielfrasse").  
 1883 A, pls. xiv, xlix, lviii, lxxii, lxxix.  
 lxxxv, lxxxix.  
 Heilprin, A. 1887 A, 390.  
 Hensel, R. 1879 A, 554.  
 Hue, E. 1907 A, pls. xxvii, lxxiv, lxxx, xcv, cix, cxlii, cxxlii, cxlvi, cxliv, clxxvi.  
 Kampfen, P. N. 1905 A, 535.  
 Köstlin, O. 1844 A.

Leche, W. 1915 A, 326.  
 Le Damany, P. 1903 D, 351, fig. 1 ("glouton").  
 1906 B, 164 ("gloutons").  
 Leunis and Ludwig 1883 A, 196.  
 Lobley, J. L. 1908 A, 195.  
 Lockwood, S. 1884 A, 395.  
 Lydekker, R. 1884 A, 178.  
 Mackie, S. J. 1863 D, 340.  
 Matschie, P. 1896 A, 250, 252 ("vielfras").  
 1901 A, 308, 315.  
 1918 A, 141, pls. i-v.  
 Matthew, W. D. 1924 C, 130.  
 Merriam, C. H. 1892 A, 62.  
 Miller, G. S. 1912 A, 433.  
 1912 B, 94.  
 Moreau, L. J. 1900 A, 115 ("glouton").  
 Nehring, A. 1880 A.  
 Neuville, H. 1915 A, 9 ("glouton").  
 Owen, R. 1845 B, 495, 497, pl. cxxviii, figs. 7-9.  
 1866 B, 501.  
 Palmer, T. S. 1904 A, 302, 831.  
 Pander and Alton 1822 A, 10, pl. v.  
 Pictet, F. J. 1853 A, 214, pl. iv, figs. 4, 5 ("gloutons").  
 Pohl, L. 1909 A, 385, fig. 3.  
 Scott, W. B. 1917 A, 131 ("wolverines").  
 Serres, M. 1852 A, 119.  
 Seton, E. T. 1909 A, 945.  
 Stromer, E. 1902 A.  
 Terra, P. 1911 A, 283, fig. 105.  
 Trouessart, E. L. 1904 A, 197.  
 Wallace, A. R. 1876 A, ii, 199.  
 Weber and Abel 1928 A, 334.  
 Wiegmann, F. R. 1838 B, 258, 272.  
 Winge, H. 1896 A, 127.

- Winge, H. 1924 A, 178, 201, 243.  
 Zdansky, O. 1924 B, 39.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474.

**Gulo luscus (Linnæus).**

- Hay, O. P. 1902 A, 768.  
 Arldt, T. 1907 D, 605.  
 Baker, F. C. 1920 A, 208, 215, 397.  
 Beddard, F. E. 1902 A, 435.  
 Brandt and Woldrich 1887 A, 50 (G. borealis).  
 Coues, E. 1877 A, 34, pl. i.  
 Cuvier, G. 1825 A, iv, 241, 477, pls. xvii, xxxviii.  
 Doran, A. H. G. 1878 A, 395, pl. lviii.  
 Elliot, D. G. 1901 A, 333, pl. xxxvi.  
 Fischer, J. B. 1829 A, 154 (G. arcticus).  
 Foote, J. S. 1916 A, 134, pl. xviii.  
 Frech, F. 1906 A, 481, 484 ("vielfras").  
 Frech and Geinitz 1903 A, 36.  
 Gidley, J. W. 1920 B, 282 ("wolverine." This species?).

- Hay, O. P. 1923 A, 486.  
 Leche, W. 1915 A, 326, figs. 85-88.  
 Lockwood, S. 1884 A, 395, fig. 183.  
 Matschie, P. 1918 A, 154.  
 Miller, G. S. 1912 B, 94.  
 Newton, E. T. 1882 A, 17, pl. vi, figs. 1, 1a.  
 1891 A, 11.  
 Pocock, R. I. 1918 B, 308.  
 Reynolds, S. H. 1912 A, 7, text-figs. 1, 2.  
 Rhoads, S. N. 1903 A, 229.  
 Römer, F. 1907 A, 66. ✓  
 Scharff, R. F. 1911 A, 27, 85.  
 Seton, E. T. 1909 A, 945, text-fig. 224, map 51.  
 Stromer, E. 1902 A, 173.  
 Weber, M. 1904 A, 537.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474.  
 Recent; Canadian zone from Atlantic to Pacific: Pleistocene; Pennsylvania.

GRISONINÆ.

- Miller, G. S. 1924 C, 132.

**GRISON Oken. Type *Viverra vittata* Schreber.**

Unless otherwise indicated the authors, as quoted, employ for this genus the name *Galictis*.

- Oken, L. 1816, Lehrs. d. Naturgesch. pt. 3, ii, 1000 (Grison).  
 Hay, O. P. 1902 A, 767.  
 Ameghino, F. 1889 A, 1013.  
 Beddard, F. E. 1902 A, 433.  
 Bell, T. 1841 A, 201.  
 Birula, A. 1910 A, 322.  
 Bronn, H. G. 1849 A, 722.  
 Frech and Geinitz 1903 A, 36.  
 Giebel, C. G. 1855 A, 34, pl. xii.  
 1883 A, pls. xv, xvi.  
 Heilprin, A. 1887 A, 90.  
 Hensel, R. 1879 A, 549.  
 Kampfen, P. N. 1905 A, 533.  
 Leche, W. 1915 A, 326.  
 Leunis and Ludwig 1883 A, 196.  
 Lockwood, S. 1884 A, 397 (Galictis).  
 Lydekker, R. 1912 B, 222, fig. 31.  
 Matthew, W. D. 1924 C, 130 (Galictis).  
 Miller, G. S. 1912 B, 103 (Grison).  
 1924 C, 132.

- Owen, R. 1845 B, 491, 494, pl. cxxviii, figs. 1-3.  
 Palmer, T. S. 1904 A, 230, 831 (Galictis); 300, 831 (Grison).  
 Pictet, F. J. 1853 A, 215.  
 Pocock, R. I. 1918 B, 311, figs. a-c (Grison).  
 Stromer, E. 1902 A.  
 Weber, M. 1904 A, 537 (Galera).  
 Weber and Abel 1928 A, 334.  
 Wiegmann, F. R. 1838 B, 272, 276, 278.  
 Winge, H. 1895 B, 38, pl. viii.  
 1896 A, 121.  
 1924 A, 178, 201, 202, 243.  
 Zittel and Schlosser 1911 A, 393.  
 1923 A, 474.

**Grison macrodon (Cope).**

- Hay, O. P. 1902 A, 767 (Galictis).  
 Cope, E. D. 1867 F, 138 ("Galera"; no description).  
 Hay, O. P. 1919 D, 367.  
 1923 A, 220, 347.  
 Merrill, G. P. 1907 A, 44 (Lutreola).  
 Trouessart, E. L. 1904 A, 197 (Galictis).  
 Pleistocene; Maryland.

MEPHITINÆ Gill.

- Gill, T. 1872 B, 6, 65.  
 Hay, O. P. 1902 A, 765 (Mephitis).  
 Allen, J. A. 1901 C, 325.  
 1902 D, 59.  
 Arldt, T. 1912 A, 748 (Mephitis).

- Gray, J. E. 1869 A, 133 (Mephitina).  
 Howell, A. H. 1902 A, 1.  
 Lockwood, S. 1884 A, 389.  
 Miller, G. S. 1924 C, 132.  
 Taschberg, O. 1899 A, 4621.

**BRACHYPROTOMA B. Brown. Type *B. pristina* Brown.**

- Brown, B. 1908 A, 178.  
 1905 A, 300 (No description).  
 Matthew, W. D. 1915 K, 402.  
 Osborn, H. F. 1909 D, 90.  
 1910 B, 488, 531.  
**Brachyprotoma fossidens (Cope).**  
 Hay, O. P. 1902 A, 766 (Mephitis).  
 Baker, F. C. 1920 A, 208, 214, 397 (Mephitis).

- Brown, B. 1908 A, 178.  
 Hay, O. P. 1923 A, 312 (Mephitis).  
 Howell, A. H. 1901 A, 16 (Mephitis).  
 Rhoads, S. N. 1903 A, 230 (Mephitis).  
 Schlosser, M. 1899 M, 362 (Mephitis fodiens).  
 1902 H, 142 (Mephitis).  
 Pleistocene (Early, Middle); Pennsylvania, Arkansas.

**Brachyprotoma leptops** (Cope).

- Hay, O. P. 1902 A, 766 (Mephitis).  
 Baker, F. C. 1920 A, 208, 215, 297 (Mephitis).  
 Brown, B. 1908 A, 166.  
 Hay, O. P. 1923 A, 312 (Mephitis).  
 Howell, A. H. 1901 A, 17 (Mephitis).  
 Rhoads, S. N. 1903 A, 230 (Mephitis).  
 Schlosser, M. 1902 H, 142 (Mephitis).  
 Trouessart, E. L. 1904 A, 192 (Mephitis).  
 Pleistocene (Early); Pennsylvania.

**Brachyprotoma obtusata** (Cope).

- Hay, O. P. 1902 A, 766 (Mephitis).  
 Baker, F. C. 1920 A, 208, 215, 397 (Mephitis).  
 Brown, B. 1908 A, 166 (B. obtusatus).

OSMOTHERIUM Cope. Type *O. spelæum* Cope.

- Hay, O. P. 1902 A, 766.  
 Frech and Geinitz 1903 A, 36.  
 Palmer, T. S. 1904 A, 486, 832.  
 Trouessart, E. L. 1904 A, 191.

- Hay, O. P. 1923 A, 312 (Mephitis).  
 Howell, A. H. 1901 A, 19 (Mephitis).  
 Peterson, O. A. 1926 A, 285, fig. 7.  
 Rhoads, S. N. 1903 A, 230 (Mephitis).  
 Schlosser, M. 1902 H, 142 (Mephitis).  
 Pleistocene (Early); Pennsylvania.

**Brachyprotoma pristina** Brown.

- Brown, B. 1908 A, 177, pl. xvi.  
 Hay, O. P. 1914 A, 32.  
 Pleistocene (Middle); Arkansas.

**Brachyprotoma spelæa** Brown.

- Brown, B. 1908 A, 179, pl. xvi.  
 Hay, O. P. 1914 A, 32.  
 Pleistocene (Middle); Arkansas.

**Osmotherium spelæum** Cope.

- Hay, O. P. 1902 A, 766.  
 1923 A, 312.  
 Rhoads, S. N. 1903 A, 230.  
 Schlosser, M. 1899 M, 362.  
 1902 H, 141.  
 Trouessart, E. L. 1904 A, 191.  
 Pleistocene (Early); Pennsylvania.

## MEPHITIS Cuvier.

- Hay, O. P. 1902 A, 766.  
 Allen, J. A. 1892 A.  
 1902 D, 59.  
 Ameghino, F. 1889 A, 1017.  
 Baker, F. C. 1920 A, 208.  
 Bangs, O. 1896 C, 139.  
 Beddard, F. E. 1902 A, 439.  
 Birula, A. 1910 A, 325.  
 Boas, J. E. V. 1909 A, 530.  
 Bronn, H. G. 1848 A, 721.  
 1849 A, 722.  
 Cuvier, F. 1807 A, 122 ("mouffettes").  
 1825 A, 89, pl. xxviii ("mouffettes").  
 Cuvier, G. 1805 A.  
 1825 A, iv, 241, 467, pls. xviii, xxxviii.  
 Elliot, D. C. 1901 A, 322.  
 Fischer, J. B. 1829 A, 159.  
 Foote, J. S. 1916 A, 117, pl. xiv.  
 Frech, F. 1907 A, 315.  
 Frech and Geinitz 1903 A, 36, 40.  
 Giebel, C. G. 1855 A, 34, pl. xiii, figs. 7, 10.  
 1878 C, 854.  
 1883 A, pl. xvi.  
 Grant, M. 1904 B, 193, 205.  
 Hay, O. P. 1914 A, 480.  
 Heilprin, A. 1887 A, 390.  
 Hensel, R. 1879 A, 350.  
 Howell, A. H. 1901 A, 14, 20 (Chincha).  
 1902 A, 1.  
 Ihering, H. 1910 A, 174.  
 Kampfen, P. N. 1905 A, 532.  
 Leche, W. 1915 A, 332.  
 Leunis and Ludwig 1883 A, 197.  
 Lockwood, S. 1884 A, 390.  
 Lydekker, R. 1884 A, 178.  
 Mackie, S. J. 1883 D, 340.  
 Matthew, W. D. 1915 K, 402.  
 1924 C, 130, 145.  
 Merriam, C. H. 1892 A, 61.

- Miller, G. S. 1912 B, 107.  
 1924 C, 136.  
 Osborn, H. F. 1909 D, 89, 90.  
 1910 B, 469, 531.  
 Owen, R. 1845 B, 495, 497, pl. cxxviii, fig. 11.  
 Palmer, T. S. 1904 A, 410, 832.  
 Pictet, F. J. 1853 A, 215.  
 Pocock, R. I. 1921 A, 809.  
 Schlosser, M. 1924 A, 11.  
 Scott, W. B. 1913 A, 153, 167, 517, 552.  
 1917 A, 134 ("skunks").  
 Seton, E. T. 1909 A, 966, pls. lxxx-lxxxiii,  
 map 52.  
 Stromer, E. 1902 A.  
 1902 B, 555.  
 Taschenberg, O. 1889 A, 4621.  
 Taylor, W. P. 1916 A, 468.  
 Tornier, G. 1891 A, 151.  
 Trouessart, E. L. 1904 A, 191.  
 Wallace, A. R. 1876 A, i, 144.  
 Weber, M. 1904 A, 537.  
 Weber and Abel 1928 A, 334, 335.  
 Wiegmann, F. R. 1838 B, 263, 271, 278.  
 Wilder, B. 1872 B, 319.  
 Winge, H. 1896 A, 128.  
 1924 A, 178, 202, 243.  
 Zdansky, O. 1924 B, 23.  
 Zittel and Schlosser 1911 A, 395.  
 1923 A, 475.

**Mephitis elongata** (Bangs).

- Bangs, O. 1895, Proc. Boston Soc. Nat. Hist.,  
 xxvi, 531 (M. mephitis elongata).  
 1896, Proc. Biol. Soc. Wash., x, 142.  
 Miller, G. S. 1924 C, 137.  
 Simpson, G. G. 1928 H, 2.  
 Recent; southeastern United States: Pleisto-  
 cene (Early); Florida.

***Mephitis frontata* Coues.**

Hay, O. P. 1902 A, 766.

Howell, A. H. 1901 A, 16.

Pleistocene? (Early); Pennsylvania.

***Mephitis mesomelas avia* Bangs.**

Bangs, O. 1898, Proc. Biol. Soc. Wash., XII, 32 (M. avia).

Hay, O. P. 1902 A, 766 (M. mephitis, in part).

Calvin, S. 1909 B, 342 (M. mephitis).

Chamberlin, T. C. 1894 A, 759 (M. mephiticus).

Elliot, D. G. 1901 A, 327 (M. avia).

Hay, O. P. 1914 A, 480 (M. mesomelas); 481 (M. mephitis).

1923 A, 310, 311 (M. mephitis).

Howell, A. H. 1901 A, 30 (Chincha).

Leverett, F. 1899 A, 42, 124 (M. mephitis).

McGee, W. J. 1891 A, 495.

Miller, G. S. 1912 B, 108.

1924 C, 137.

Trouessart, E. L. 1904 A, 192.

Upham, W. 1895 B, 282 ("common skunk").

The identification is provisional.

Recent; western Indiana, Illinois and eastern Iowa; Pleistocene (Yarmouth); Iowa.

***Mephitis mesomelas newtonensis* (Brown).**

Brown, B. 1908 A, 175, pl. xv (M. mephitis newtonensis).

Hay, O. P. 1914 A, 32 (M. mephitis newtonensis).

1924 D, 252.

Pleistocene (Middle); Arkansas.

***Mephitis nigra* (Peale and Beauvois).**

Peale and Beauvois 1796, Catal. Peale's Mus., Philadelphia, 37.

Baker, F. C. 1920 A, 248, 283, 397 (M. mephitis).

Bangs, O. 1896 C, 140 (M. mephitis).

Hay, O. P. 1923 A, 490 (M. putida).

1924 D, 283 (M. putida).

Howell, A. H. 1901 A, 25, pls. i, v (Chincha putida).

Leidy, J. 1889 H, 18 (M. mephitis).

Mercer, H. C. 1894 A, 97 ("skunk").

Miller, G. S. 1912 B, 107 (M. putida).

Peterson, O. A. 1926 A, 284, fig. 6 (M. mephitis).

Rhoads, S. N. 1904 A, 230 (M. mephitis putida).

Trouessart, E. L. 1904 A, 192 (M. putida).

Recent; New England to Virginia and Indiana; Pleistocene; caves of Pennsylvania.

***Mephitis occidentalis* Baird.**

Baird, S. F. 1857 A, 94.

Elliot, D. G. 1901 A, 324.

Furlong, E. L. 1904 A, 55.

1906 A, 245.

Hay, O. P. 1927 D, 184, 215, 223.

Howell, A. H. 1901 A, 35, pls. iii, vii (Chincha).

Miller, G. S. 1924 C, 138.

Miller, L. H. 1912 A, 70, 73.

Osborn, H. F. 1925 D, 531.

Sinclair, W. J. 1903 A, 711.

1904 A, 17.

Stock, C. 1925 A, 113 ("new subsp.?").

Pleistocene (Caves); California.

***Mephitis orthostica* Cope.**

Hay, O. P. 1902 A, 766 (M. orthostica).

Baker, F. C. 1920 A, 208, 215, 397 (M. orthostichus).

Hay, O. P. 1923 A, 312.

Howell, A. H. 1901 A, 19.

Rhoads, S. N. 1903 A, 230 (M. orthostichus).

Schlosser, M. 1899 M, 362.

1902 H, 142 (M. orthostichus).

Pleistocene (Early); Pennsylvania.

***Mephitis* sp. indet.**

Hay, O. P. 1923 A, 321. Pleistocene?; Pennsylvania.

1927 D, 184, 191. Pleistocene; California.

Miller, L. H. 1912 A, 78. Pleistocene (Rancho La Brea); California.

Stock, C. 1927 A, 156. Pleistocene; California.

**PERYCICTIS Cope. Type *P. lobulatus* Cope.**

Hay, O. P. 1902 A, 766.

Frech and Geinitz 1903 A, 36.

Palmer, T. S. 1904 A, 521, 832.

Trouessart, E. L. 1904 A, 191.

***Perycictis lobulatus* Cope.**

Hay, O. P. 1902 A, 766.

1923 A, 312.

Rhoads, S. N. 1903 A, 231.

Schlosser, M. 1899 M, 362.

1902 H, 142.

Trouessart, E. L. 1904 A, 191.

Pleistocene (Early); Pennsylvania.

**SPILOGALE Gray. Type *Mephitis interrupta* Rafinesque.**

Hay, O. P. 1903 A, 766.

Birula, A. 1910 A, 322 (Galera).

Elliot, D. G. 1901 A, 327.

Frech, F. 1907 A, 315.

Gregory, W. K. 1920 A, 155, fig. 97.

Howell, A. H. 1906 A.

Matthew, W. D. 1915 K, 402.

1924 C, 180.

Merriam, C. H. 1890 A, 1, pl. i; text-figs. 1, 2. 1892 A, 61.

Miller, G. S. 1924 C, 132.

Miller, L. H. 1912 A, 70 (Spilogale, n. sp.).

Osborn, H. F. 1909 D, 89, 90.

Pocock, R. I. 1921 A, 809.

Taylor, W. P. 1916 A, 457.

Winge, H. 1924 A, 202.

**Spilogale ambarvalis** Bangs.

Bangs, O. 1898 A, 222.

Coues, E. 1875 A, 12 (S. putorius, part).

1877 A, 239 [Mephitis (Spilogale) putorius].

Howell, A. H. 1906 A, 14, pl. iv, fig. 1; pl. v, figs. 1-3.

Merriam, C. H. 1890 A, 7, table (S. putorius).

Miller, G. S. 1912 B, 103.

1924 C, 132.

Recent; eastern Florida: Pleistocene (Middle?); Florida.

Specimen in U. S. Nat. Mus. from Vero, St. Lucie County, Florida.

**Spilogale interrupta** (Rafinesque).

Rafinesque, C. S. 1820, Annals of Nature, i, 3 (Mephitis).

Brown, B. 1908 A, 176 (This species?).

Coues, E. 1877 A, 239 (Mephitis putorius, part).

Elliot, D. G. 1901 A, 328.

Hay, O. P. 1914 A, 32.

1924 D, 252.

Howell, A. H. 1906 A, 18, 36, pls. i, ii.

Merriam, C. H. 1890 A, 8, table.

Miller, G. S. 1912 B, 104.

1924 C, 133.

Recent; southwestern Minnesota to central Texas: Pleistocene (Middle); Arkansas.

**Spilogale putorius** (Linnaeus).

Linnaeus, C. 1758 A, 44 (Viverra).

Hay, O. P. 1902 A, 766 (S. perdicada).

Cope, E. D. 1896 F, 387 (Mephitis. S. perdicada a syn.).

Coues, E. 1877 A, 239, pls. xii-xiv (Mephitis).

Hay, O. P. 1923 A, 322, 353.

Miller, G. S. 1912 B, 103.

Schlosser, M. 1899 M, 362 (Mephitis. S. perdicada a syn.).

Recent; south Atlantic states, north in mountains to northern Virginia: Pleistocene (Middle?); Virginia.

**Spilogale** sp. indet.

Hay, O. P. 1927 D, 184, 191, 215. Pleistocene; California.

Merriam and Stock 1925 A, 10. Pleistocene (Potter Creek cave); California.

Osborn, H. F. 1925 D, 531. Pleistocene (La Brea); California.

Sinclair, W. J. 1903 A, 711 (Spilogale sp. nov.).

Pleistocene (Potter Creek Cave); California.

1904 A, 17 (Spilogale n. sp.). Pleistocene (Potter Creek Cave); California.

Stock, C. 1925 A, 30. Lower Pliocene (Rattlesnake); Oregon.

## TAXIDEINÆ.

Miller, G. S. 1924 C, 142 (Taxidiinæ).

Hay, O. P. 1902 A, 765 (Melinæ).

Ameghino, F. 1905 B, 193 (Meles).

Arlt, T. 1907 B, 449 ("melinen").

1907 D, 295 (Melinæ).

Baird, S. F. 1857 A, 190 (Melinæ).

Beddard, F. E. 1902 A, 432 (Melinæ).

Birula, A. 1910 A, 320 (Melinæ).

Cuvier, F. 1807 A, 120 ("blaireaux").

Elliot, D. G. 1901 A, 319 (Melinæ).

Fuchs, H. 1906 A, 30 (Meles).

Gervais, P. 1852 A, 116, explan. pl. xxiv (Meles).

1859 A, 246 (Meles).

Hay, O. P. 1914 A, 480 (Melinæ).

Hue, E. 1907 A, pls. xxvi, lxxv, lxxix, xciv, cix, cxxii, cxxxii, cxlvi (Meles).

Ihering, H. 1910 A, 172 (Melinæ).

Meckel, J. F. 1825 A ("dachse").

Owen, R. 1845 B, 498 (Melidæ).

Trouessart, E. L. 1904 A, 187 (Melinæ).

Weber, M. 1904 A, 537 (Melinæ).

Wilkie, H. C. 1926 A, 815, figs. 1, 3-5 (Meles).

Winge, H. 1924 A, 178, 202, 205 (Melinæ).

Zittel and Schlosser 1911 A, 394 (Melinæ).

1923 A, 475 (Melinæ).

TAXIDEA Waterhouse. Type *Ursus taxus* Schreber.

Waterhouse, G. R. Proc. Zool. Soc. Lond., 1838, 153.

Hay, O. P. 1902 A, 765.

Allen, J. A. 1892 A.

Anderson, R. J. 1902 B, 368, fig. (Meles).

Beddard, F. E. 1902 A, 438.

Birula, A. 1910 A, 326.

Bronn, H. G. 1848 A, 719 (Meles).

1849 A, 723 (Meles).

Butterworth, E. M. 1916 A, 22.

Coues, E. 1877 A, 261.

Cuvier, F. 1825 A, 93, pl. xxx ("blaireaux").

Cuvier, G. 1805 A (Taxus).

Dieterich, K. 1841 A, 76 (Meles).

Eimer, G. H. T. 1901 A, 138, 216.

Elliot, D. G. 1901 A, 319.

Frech, F. 1906 A, 481.

1907 A, 315.

Gervais, P. 1859 A, 246 (Meles).

Giebel, C. G. 1878 C, 854 ("dachse").

Grant, M. 1904 B, 193, 205.

Gregory, W. K. 1920 A, 154, fig. 94.

Gregory, W. K. 1921 A, 77.

Heilprin, A. 1887 A, 390.

Hensel, R. 1879 A, 550.

Kampfen, P. N. 1905 A, 535.

Leche, W. 1915 A, 335, fig. 108.

Le Damany, P. 1903 G, 330, fig. 18 ("blaireau").

Leunis and Ludwig 1883 A, 198.

Lockwood, S. 1884 A, 394.

Lönnberg, E. 1910 A, 120.

Lydekker, R. 1884 A, 178.

Martins, C. 1857 A, 90 ("blaireau").

Matthew, W. D. 1907 A, 198.

1924 C, 131, 144.

Merriam, C. H. 1892 A, 61.

Miller, G. S. 1912 B, 112.

1924 C, 142.

Osborn, H. F. 1905 I, 110.

1909 D, 89.

1910 B, 439, 454, 470, 531.

Owen, R. 1845 B, 498.

1868 A, 333, 790.

Palmer, T. S. 1904 A, 665, 833.

- Pander and Alton 1822 A, 8, pl. vii (Meles).  
 Pocock, R. I. 1920 B, 423-436.  
     1921 A, 804.  
 Scott, W. B. 1913 A, 153, 162, 168, 517.  
 Seton, E. T. 1906 A, 995.  
 Stromer, E. 1902 A (Meles).  
 Trouessart, E. L. 1904 A, 187.  
 Waterhouse, G. R. 1841 A, 343 (Meles).  
 Weber, M. 1904 A, 537.  
 Weber and Abel 1928 A, 334.  
 Weber and Burlet 1927 A, 113, fig. 86.  
 Winge, H. 1896 A, 128.  
     1924 A, 178, 203, 243.  
 Worthmann, F. 1922 A, 307, fig. 1 ("dachs").  
 Zdansky, O. 1924 B, 48.  
 Zittel and Schlosser 1911 A, 395.  
     1923 A, 475.

### **Taxidea nevadensis** Butterworth.

- Butterworth, E. M. 1916 A, 21, fig. 1.  
 Merriam, J. C. 1917 A, 429.  
 Zdansky, O. 1924 B, 51, 52 (Parataxidea).  
     Pliocene (Thousand Creek); Nevada.

### **Taxidea robusta** Hay.

- Hay, O. P. 1921 A, 631, pl. cxix, figs. 3-5.  
     1923 A, 9.  
     Pleistocene (Nebraskan?); Arizona.

### **Taxidea taxus** (Schreber).

- Schreber, J. C. D. 1778, Säugethiere, III, 520 (Ursus).  
 Hay, O. P. 1902 A, 765 (T. taxus, T. sulcata).  
 Baker, F. C. 1920 A, 214, 397.  
 Carruccio, A. 1913 B, 176 (Taxidea).  
 Coues, E. 1877 A, 263, pl. xvi (T. americana).  
 Dall and Harris 1892 A, 228 (T. sulcata).  
 Doran, A. H. G. 1878 A, 397 (T. americana).  
 Elliot, D. G. 1901 A, 320, fig. 63 (T. americana).  
 Foote, J. S. 1916 A, 145, pl. xx (T. americana).  
 Frech and Geinitz 1903 A, 38 (T. americana).  
 Gervais, P. 1859 A, 246, pl. xxiv, fig. 1 (Meles).  
 Hay, O. P. 1921 A, 631, pl. cxix, figs. 1, 2.  
     1923 A, 312.  
     1924 D, 169 ("badger"); 270 (Taxidea).  
     1927 D, 251.

### **LEPTARCTUS** Leidy. Type *L. primus* Leidy.

- Hay, O. P. 1902 A, 764.  
 Ameghino, F. 1912 A, 59.  
 Beddard, F. E. 1902 A, 431.  
 Ihering, H. 1910 A, 159.  
 Joleaud, L. 1919 A, 710, fig. 7.  
 Kraglievich, L. 1925 A, 189.  
 Matthew, W. D. 1909 C, 118.  
     1915 A, 197, 219.  
     1924 C, 87, 131, 138, 142.  
 Osborn, H. F. 1909 D, 80.  
 Palmer, T. S. 1904 A, 370, 386.  
 Scott, W. B. 1913 A, 517, 547.  
 Wallace, A. R. 1876 A, 1, 135.  
 Zittel and Schlosser 1911 A, 392.  
     1923 A, 472.

- Baird, S. F. 1857 A, 183.  
 Hay, O. P. 1902 A, 768.

- Lockwood, S. 1884 A, 394 (T. americana).  
 Mackie, S. J. 1863 D, 334 (Meles).  
 Matthew, W. D. 1902 F, 321 (T. sulcata a syn.).  
 Miller, G. S. 1912 B, 112.  
     1924 C, 142.  
 Owen, R. 1845 B, 498, pl. cxvi, figs. 1, 2.  
 Pocock, R. I. 1920 B, 425, figs. 19, 20, 22-25 (T. americana).  
 Reynolds, S. H. 1912 A, 8, pls. iii-vii; text-figs. 3-5 (Meles).  
 Rhoads, S. N. 1903 A, 231.  
 Römer, F. 1907 A, 73 (Meles).  
 Scharff, R. F. 1907 A, 23, fig. 5.  
 Seton, E. T. 1909 A, 995, pl. lxxxiv; text-figs. 231-232, map 53.  
 Shufeldt, R. W. 1922 A, 173, pl. x.  
 Stock, C. 1925 A, 199 (T. sulcata).  
 Stromer, E. 1902 A, 183, pl. iii, fig. 16 (Meles).  
 Taylor, W. P. 1911 B, 296.  
 Waterhouse, G. R. 1841 A, 343, pl. lix (Meles labradoria).  
 Winge, H. 1896 A, 128.  
     Pleistocene; Pennsylvania, Washington, Kansas.

### **Taxidea** sp. indet.

- Anonymous 1871 A, 130. Pleistocene (La Brea); California.  
 Gidley, J. W. 1920 B, 283 ("badger"). Pleistocene (Middle); Maryland.  
 Hay, O. P. 1923 A, 350. Pleistocene (Middle); Maryland.  
     1927 D, 184, 191, 215. Pleistocene; California.  
 Merriam and Stock 1925 A, 10, 11 (Potter Creek Cave); California.  
 Miller, L. H. 1912 A, 70. Pleistocene (Potter Creek Cave); California.  
 Osborn, H. F. 1925 D, 531. Pleistocene (La Brea); California.  
 Sinclair, W. J. 1903 A, 711 (T. ? sp. nov.).  
     1904 A, 17 (T. sp. ?).  
 Stock, C. 1925 A, 30, 113. Lower Pliocene (Rattlesnake); Oregon; Pleistocene (La Brea and caves); California.

### **Leptarctus primus** Leidy.

- Hay, O. P. 1902 A, 764.  
 Beddard, F. E. 1902 A, 431 (L. primævus).  
 Dall and Harris 1892 A, 292.  
 Joleaud, L. 1919 D, 412 (Leptarctus primævus).  
 Matthew, W. D. 1909 C, 116.  
     1921 G, 661 ("Leptarctus").  
     1924 C, 65, 71, 88, 139, figs. 37, 38.  
     Upper Miocene (Lower Snake Creek); Nebraska, South Dakota?.

### **Leptarctus wortmani** Matthew.

- Matthew, W. D. 1924 C, 142.  
 Wortman, J. L. 1894 B, 229 (L. primus).  
     Lower Pliocene (Valentine); Nebraska.

### **LUTRINÆ** Baird.

- Ardt, T. 1907 B, 449 ("lutrinæ").  
     1907 D, 295, 385.



- Ardt, T. 1912 A, 748.  
 Beddard, F. E. 1902 A, 439.  
 Birula, A. 1910 A, 320.  
 Carus, J. V. 1875 A, 128 (Lutrina).  
 Depéret, C. 1908 A, 306.  
 Elliot, D. G. 1901 A, 351.  
 Giebel, C. G. 1883 A ("otter").  
 Gill, T. 1872 B, 6, 65.  
 Gray, J. E. 1825 B, 337 (Lutrinæ).  
 1869 A, 100 (Lutrina).  
 Ihering, H. 1910 A, 168.  
 Lucae, J. P. 1872 A, 285 ("otter").  
 1875 A, 369 ("otter").

#### POTAMOTHERIUM E. Geoffroy.

- Hay, O. P. 1902 A, 768 (Potamotherium, *errore*).  
 Depéret, C. 1906 A, 620.  
 Filhol, H. 1879 A, 59, pls. vii-ix (Lutra).  
 Gervais, P. 1859 A, 244.  
 Haug, E. 1911 A, 1706.  
 Kellogg, R. 1922 A, 86.  
 Leche, W. 1915 A, 339.  
 Luthé, W. 1924 A, 128, pl. vii.  
 Mackie, S. J. 1863 D, 242.  
 Matthew, W. D. 1904 C, 253.  
 1924 C, 130.  
 1928 B, 974, fig. 13.  
 Osborn, H. F. 1910 B, 192, 289, 301, 531.  
 Palmer, T. S. 1904 A, 559, 832.  
 Peterson, O. A. 1910 A, 276.  
 Pictet, F. J. 1853 A, 220, pl. iv, fig. 10.  
 Schlosser, M. 1911 A, 82.

#### STHENICTIS Peterson. Type *Stenogale robusta* Cope.

- Peterson, O. A. 1910 A, 277 (Brachygale; replaced by *Sthenictis* on introduced slip).  
 Matthew, W. D. 1924 C, 129, 134.

#### *Sthenictis dolichops* Matthew.

- Matthew, W. D. 1924 C, 65, 135, fig. 34.  
 Upper Miocene (Lower Snake Creek); Nebraska.

#### *Sthenictis lycopotamica* (Cope).

- Hay, O. P. 1902 A, 769 (Lutricitis).  
 Cope and Matthew 1915 A, pl. cxix C, fig. 5 (Lutra, *Sthenictis*?).  
 Matthew, W. D. 1904 C, 254 (Potamotherium).  
 1909 C, 114 (Potamotherium).  
 Merriam and Sinclair 1907 A, 195 (Lutricitis).

#### MIONICTIS Matthew. Type *M. incertus* Matthew.

- Matthew, W. D. 1924 C, 130, 136.

#### *Mionictis elegans* Matthew.

- Matthew, W. D. 1924 C, 67, 137.  
 Upper Miocene (Lower Snake Creek); Nebraska.

#### LUTRA Brisson. Type *Mustela lutra* Linnæus.

- Hay, O. P. 1902 A, 768.  
 Abel, O. 1912 F, 185.  
 Allen, J. A. 1892 A.  
 1903 A, 178.  
 Ameghino, F. 1889 A, 1017.

- Luthé, W. 1924 A, 59 ("fischottern").  
 Miller, G. S. 1912 A, 354.  
 Osborn, H. F. 1910 B, 192, 193, 531.  
 Pilgrim, G. E. 1913 A, 291 (Lutridæ).  
 Pocock, R. I. 1921 A, 803, 830.  
 Stromer, E. 1902 A.  
 Trouessart, E. L. 1904 A, 212.  
 Weber, M. 1904 A, 538.  
 Weber and Abel 1928 A, 332, 335.  
 Winge, H. 1924 A, 178, 203, 205 (Lutrinæ).  
 Zittel and Schlosser 1911 A, 394.  
 1923 A, 474.

#### Type *P. valetoni* E. Geoffroy.

- Scott, W. B. 1913 A, 551.  
 Stromer, E. 1902 A, 240.  
 Trouessart, E. L. 1904 A, 212.  
 Weber, M. 1904 A, 538.  
 Winge, H. 1924 A, 178, 204, 243.  
 Zittel and Schlosser 1911 A, 394.  
 1923 A, 475, 673.

#### *Potamotherium lacota* Matthew.

- Matthew, W. D. 1904 C, 254, fig. 6.  
 Gidley, J. W. 1904 A, 245.  
 Matthew, W. D. 1909 C, 116.  
 Matthew and Cook 1909 A, 378.  
 Merriam, J. C. 1911 B, 250.  
 O'Harra, C. C. 1920 A, 158.  
 Zittel and Schlosser 1911 A, 394.  
 1923 A, 475 (This genus?).  
 Miocene (Arikaree); South Dakota.

- Thorpe, M. R. 1922 E, 444 (Potamotherium).  
 Middle Miocene (Mascall); Colorado: Miocene; Nebraska.

#### *Sthenictis robustus* (Cope).

- Hay, O. P. 1902 A, 767 (Stenogale).  
 Matthew, W. D. 1904 C, 254 (Potamotherium).  
 1909 C, 116 (Potamotherium).  
 1924 C, 135 (Sthenictis).  
 Peterson, O. A. 1910 A, 276 (Stenogale).  
 Miocene (Arikaree); Nebraska.

#### *Sthenictis* sp. indet.

- Matthew, W. D. 1924 C, 65. Lower Pliocene (Upper Snake Creek); Nebraska.

#### *Mionictis incertus* Matthew.

- Matthew, W. D. 1924 C, 65, 136, fig. 36.  
 Middle Miocene (Lower Snake Creek); Nebraska.

- Anderson, R. J. 1901 A, 682.  
 1902 A, 1119, fig. 9.  
 1902 B, 368, fig.  
 1909 A, 745.  
 Anthony, R. 1912 A ("loutres").

- Ardt, T. 1907 B, 255.  
 Bardeleben, K. 1885 B, 86.  
 Beddard, F. E. 1902 A, 440.  
 Birula, A. A. 1910 A, 320.  
 1913 A, 274.  
 Boas, J. E. V. 1909 A, 529.  
 Bonsdorff, E. J. 1871 A, 318.  
 Brandt and Woldrich 1887 A, 56.  
 Brauer, A. 1914 A, 282.  
 Bronn, H. G. 1848 A, 678.  
 1849 A, 722.  
 Broom, R. 1905 A, 98.  
 Camerano, L. 1916 B, pl. vii, fig. 9.  
 Carus, V. 1875 A, 128.  
 Cuvier, F. 1807 A, 120 ("loutres").  
 1825 A, 91, pl. xxix ("loutres").  
 Cuvier, G. 1805 A.  
 1825 A, iv, 243, 278, pl. xviii.  
 Dall and Harris 1892 A, 284.  
 Depéret, C. 1906 B, 1127.  
 1909 A, 141.  
 1912 A, 709.  
 Doran, A. H. G. 1878 A, 396, pl. lix.  
 Ehrenberg, K. 1926 A, 57.  
 Eimer, G. H. T. 1901 A, 259.  
 Elliot, D. G. 1901 A, 352.  
 Filhol, H. 1879 A, 58.  
 Fischer, J. B. 1829 A, 224.  
 Frassetto, F. 1903 A, 220, 270.  
 Frech and Geinitz 1903 A, 36.  
 Frick, C. 1926 A, 6.  
 Gegenbaur, C. 1864 C, 187.  
 1865 C, 559.  
 Geinitz, K. 1903 A.  
 1904 A.  
 Gervais, P. 1852 A, 116.  
 1859 A, 243.  
 Giebel, C. G. 1855 A, 35, pl. xii.  
 1878 C, 854 ("otter").  
 1883 A, pl. xvi.  
 Gottlieb, H. 1914 A, 210.  
 Grant, M. 1904 B, 205.  
 Gray, J. E. 1869 A, 163.  
 Gregory, W. K. 1920 A, 155, fig. 96.  
 Haug, E. 1911 A, 1886.  
 Hensel, R. 1870 A, 549.  
 Hoernes, R. 1886 A, 693.  
 Hogben, L. Y. 1919 A, 74.  
 Howes, G. B. 1893 C, 592.  
 Hue, E. 1907 A, pls. xxix, lxxv, lxxix, xcv, cviii, cxvii, cxxvii.  
 Ihering, H. 1910 A, 169.  
 Kampfen, P. N. 1905 A, 532.  
 Kellogg, R. 1922 A, 85.  
 Kestlin, O. 1844 A.  
 Kükenthal, W. 1891 C, 374, 384.  
 Leche, W. 1887 A.  
 1913 A, 73.  
 1915 A, 339.  
 Le Damany, P. 1906 B, 164 ("loutre").  
 Lockwood, S. 1884 A, 387.  
 Lönnberg, E. 1910 A, 50.  
 Lucas, J. C. 1872 A, 285, 372.  
 1875 A, 376, 392, pls. xi-xvii.  
 Luths, W. 1924 A, 59, pls. i-iv; text-figs.  
 Lydekker, R. 1910 E, 332 ("otters").  
 Mackie, S. J. 1863 D, 341.  
 Matschie, P. 1896 A, 249.  
 Matthew, W. D. 1904 C, 256.  
 1909 C, 118.  
 1924 C, 130.  
 1928 B, 974, fig. 13.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 62.  
 Miller, G. S. 1912 A, 354.  
 1912 B, 113.  
 1924 C, 129.  
 Nehring, A. 1880 A.  
 Osborn, H. F. 1905 I, 106.  
 1909 D, 80, 85.  
 1910 B, 621.  
 1916 B, 542.  
 Owen, R. 1845 B, 495, 497, pl. cxxviii, figs. 4-6.  
 1845 E, 127.  
 1868 A, 889.  
 Palmer, T. S. 1904 A, 337, 331.  
 Pander and Alton 1822 A, 9 ("otter").  
 Paulli, S. 1900 B, 497.  
 Pictet, F. J. 1853 A, 219, pl. iv, fig. 9.  
 Pocock, R. I. 1918 B, 308.  
 1921 A, 830.  
 Pohl, L. 1909 A, 384, fig. 2.  
 1911 A, 126.  
 Retzius, A. 1849 A, 626.  
 Reynolds, S. H. 1912 A, 10, pl. vi.  
 Römer, F. 1907 A, 73.  
 Scharff, R. F. 1895 A, 443, 467.  
 Schlosser, M. 1903 I, 26, 177, 209, 219.  
 1924 A, 11.  
 Schwalbe, G. 1904 A, 208.  
 Slater, P. L. 1875 A, 219.  
 Scott, W. B. 1913 A, 551, 684.  
 1916 A, 117 ("otter").  
 1917 A, 32, 134 ("otters").  
 Stromer, E. 1902 A.  
 1902 B, 557.  
 Taylor, W. P. 1914 A, 471, seq.  
 Tims, H. W. M. 1903 A, 140.  
 Tornier, G. 1889 A, 180.  
 1891 A, 114, 149.  
 Trouessart, E. L. 1904 A, 213.  
 Wallace, A. R. 1876 A, i, 118, 121; ii, 199.  
 Weber, M. 1904 A, 538.  
 Weber and Abel 1928 A, 335.  
 Wiegmann, F. R. 1836 B, 267, 271, 284.  
 Winge, H. 1896 A, 122, 130.  
 1924 A, 178, 204, 244, 248.  
 Zdansky, O. 1924 B, 45.  
 Zittel and Schlosser 1911 A, 394.  
 1923 A, 475, 680.
- Lutra canadensis Schreber.**  
 Hay, O. P. 1902 A, 769.  
 Bangs, O. 1898 A, 224, fig. (L. hudsonica vaga).  
 Elliot, D. G. 1901 A, 352, pl. xxxvii.  
 Fischer, J. B. 1829 A, 225.  
 Foote, J. S. 1916 A, 110, pl. xii.  
 Gidley, J. W. 1927 E, 274.  
 Hay, O. P. 1917 E, 46.  
 1923 A, 382.  
 1927 D, 191, 243, 274.  
 Lockwood, S. 1884 A, 387.  
 Matthew, W. D. 1902 F, 320.  
 Miller, G. S. 1912 B, 113.  
 1924 C, 129.  
 Miller, L. H. 1912 A, 81.

- Osborn, H. F. 1910 B, 459 ("Lutra").  
 Sellards, E. H. 1916 C, 152, 158.  
     1916 E, 16, 17.  
 Seton, E. T. 1909 A, 817, map 44.  
 Stock, C. 1925 A, 195.  
 Taylor, W. P. 1914 A, 473, seq., figs. 3, 6, 7,  
     10, 13.

Recent; greater part of United States and  
 eastern Canada: Pleistocene (Fossil Lake):  
 Oregon: Vero; Florida.

### **Lutra piscinaria** Leidy.

- Hay, O. P. 1902 A, 769.  
 Cope, E. D. 1873 II, 125.  
 Hay, O. P. 1927 D, 242.  
 McCormack, E. C. 1920 A, 23 (L. piscinaria).  
 Merrill, G. P. 1907 A, 44.  
     Pleistocene (Early); Idaho.

### **Lutra? pristina** Matthew.

- Matthew, W. D. 1904 C, 256, text-figs. 7, 8.

- Gidley, J. W. 1904 A, 245.  
 Matthew, W. D. 1909 C, 116.  
     1924 C, 65, 131, fig. 29 (Brachypsalis?).  
 O'Harra, C. C. 1920 A, 158.  
     Lower Pliocene (Snake Creek); Nebraska.  
     South Dakota?.

### **Lutra rhoadsii** Cope.

- Hay, O. P. 1902 A, 769.  
     1923 A, 312, 314.  
 Rhoads, S. N. 1903 A, 231.  
 Schlosser, M. 1899 M, 362 (L. rhoadsi).  
     1902 H, 142 (L. rhoadsi).  
     Pleistocene (Early); Pennsylvania.

### **Lutra** sp. indet.

- Cooke, C. W. 1926 A, 445 ("otter"). Pleisto-  
 cene; Florida.  
 Hay, O. P. 1924 D, 252. Pleistocene; Nebraska.  
 Matthew, W. D. 1918 A, 228. Pleistocene  
     (Sheridan); Nebraska.

**MEGENCEPHALON** Osborn, Scott and Speir. Type *M. primævus* Osborn,  
 Scott and Speir.

- Hay, O. P. 1902 A, 769.  
 Palmer, T. S. 1904 A, 407, 332.  
 Trouessart, E. L. 1904 A, 215.

### **Megencephalon primævus** Osborn, Scott and Speir.

- Hay, O. P. 1902 A, 769.  
     Eocene; Wyoming.

### *Superfamily FELOIDÆ, new name.*

Unless otherwise indicated the authors, as  
 quoted, use for this group the name *Ælu-*  
*roides*.

- Hay, O. P. 1902 A, 777.  
 Abel, O. 1912 F, 500.  
     1913 B, 715, 718.  
     1913 C, 199.  
     1914 A, 63, 69.  
     1919 A, 739.  
     1920 A, 422.  
 Brown, A. E. 1904 B, 91.  
 Gregory, W. K. 1920 A, 239.  
 Kükenenthal, W. 1913 A, 501 (Herpestoidea).  
 Lockington, W. N. 1884 A, 431.

- Matthew, W. D. 1909 D, 330, 351, 352.  
     1915 K, 445.  
 Mivart, St. G. 1882 B, 459.  
 Moodie, R. L. 1922 C, 351.  
 Osborn, H. F. 1910 B, 531.  
 Pocock, R. I. 1916 F, 26 ("æluroids").  
 Rehs, J. 1914 A, 56 (Herpestoidea).  
 Reynolds, S. H. 1897 A, 369, 467.  
 Schwarz, E. 1912 B, 3 (Æluroides).  
 Scott, W. B. 1896 D, 54.  
 Weber, M. 1904 A, 529 (Herpestoidea).  
 Weber and Abel 1928 A, 317, 318, 342 (Herpes-  
 toidea, Æluroides).  
 Weber and Burlet 1927 A, xv (Herpestoidea).

### **HYÆNIDÆ** Gray.

- Gray, J. E. 1869 A, 211.  
 Hay, O. P. 1902 A, 776.  
 Abel, O. 1919 A, 741.  
 Carus, V. 1875 A, 122 (Hyænda).  
 Chardin, P. T. 1928 A, 57 ("hyènes").  
 Cope, E. D. 1885 EE, 606 ("hyænas").  
     1891 N, 76 ("hyænas").  
 Doran, A. H. G. 1878 A, 391.  
 Flower, W. H. 1869 B, 29.  
     1883 D, 437.  
 Flower and Lydekker 1891 A, 540.  
 Gervais, P. 1889 A, 239 ("hyénidés").  
 Grevé, C. 1891 A.  
 Hay, O. P. 1921 A, 634.  
 Hoyer and Babik 1924 A, 451 (Hyæna).  
 Leche, W. 1921 A, 50.  
 Lockington, W. N. 1884 A, 431, 432.  
 Lydekker, R. 1884 A, 273, 274.  
 Matthew, W. D. 1901 A, 8.

- Matthew, W. D. 1909 D, 330.  
     1923 B, 974, fig. 13.  
 Mead, C. S. 1906 A, 481.  
 Mivart, St. G. 1882 A, 137, 143, 205.  
     1882 B.  
 Osborn, H. F. 1909 D, 64.  
 Owen, R. 1866 B, 492, 504, 510 ("hyænas").  
 Palmer, T. S. 1904 A, 829.  
 Pictet, F. J. 1853 A, 221 ("hyénidés").  
 Pocock, R. I. 1916 A, 303.  
     1916 B, 442.  
 Pohle, H. 1920 A, 57.  
 Reynolds, S. H. 1897 A, 502.  
     1902 A, 1.  
 Roger, O. 1896 A, 65.  
 Schwarz, E. 1924 A, 421 ("hyænas").  
 Stromer, E. 1902 B, 554 ("hyænidien").  
 Terra, P. 1911 A, 288, fig. 111.  
 Thorpe, M. R. 1922 D, 376 ("hyænidés").

Trouessart, E. L. 1904 A, 342.  
 Turner, H. N. 1848 A, 81, 82, 87 (*Hyænina*).  
 Vicq-d'Azyr, F. 1792 A, cvi (*Hyænini*).  
 Weber, M. 1904 A, 532.  
 Weber and Abel 1928 A, 318, 323.  
 Winge, H. 1896 A, 126.

Winge, H. 1924 A, 177, 191, 242.  
 Woodward, A. S. 1923 C, 22.  
 Zdansky, O. 1924 B, 93.  
 Zittel, K. A. 1893 B, 660.  
 Zittel and Schlosser 1911 A, 396.  
 1923 A, 477, 482.

CHIASMAPORTHETES Hay. Type *C. ossifragus* Hay.

Hay, O. P. 1921 A, 636.

Chasmaporthetes ossifragus Hay.

Hay, O. P. 1921 A, 636, pl. cxxiv, figs. 5, 6.  
 1922 A, 446 ("hyæna").  
 1923 A, 9.  
 1927 D, 129.  
 Pleistocene (Nebraskan?); Arizona.

HYÆNA Brisson. Type *Hyæna hyæna* Brisson.

Brisson, M. J. 1762, Règn. Anim., 2d ed., 13, 169.  
 Abel, O. 1922 C, 133, figs. 121, 122.  
 Blanford, W. T. 1876 A, 285.  
 Bronn, H. G. 1838 A, 1314.  
 Busk, G. 1866 A, 59, pl. ii.  
 Carus and Engelmann 1861 A, 1749.  
 Cuvier, G. 1825 A, iv, 236, 381-405, pls. xvii, xxviii-xxxii.  
 Dawkins, W. B. 1865 A, 80, figs. 1-6.  
 Doran, A. H. G. 1878 A, 391, 406, pl. lviii.  
 Ehrenberg, K. 1926 A, 57.  
 Falconer, H. 1868 A, ii, 464.  
 Fischer, J. B. 1829 A, 193.  
 Flower, W. H. 1869 B, 27, fig. 13.  
 Gaudry, A. 1867 A, 81, pls. xii-xiv.  
 1891 C, 116, 142.  
 Gegenbaur, C. 1865 C, 559.  
 Gervais, P. 1882 A, 120, explan. pls. xii, xxiv.  
 1890 A, 239, pls. xii, xxiv.  
 1861 A, 142 ("hyène").  
 Lydekker, R. 1894 A, 275, pls. xxxiv-xxxix.  
 Mivart, St. G. 1882 A, 135.

Owen, R. 1866 B, 492, 504, 510.  
 1868 A, 330, 385.  
 Palmer, T. S. 1904 A, 333, 829.  
 Pictet, F. J. 1853 A, 222, pl. v, figs. 1-6.  
 Pocock, R. I. 1916 A, 303, figs.  
 1916 B, 443, fig.  
 Reynolds, S. H. 1897 A, 543.  
 1902 A, 1, pls. i-xiv.  
 Taschenberg, O. 1899 A, 4504.  
 Terra, P. 1911 A, 277, fig. 102.  
 Turner, H. N. 1848 A, 83.  
 Weber, M. 1904 A, 532.  
 Weber and Abel 1928 A, 323.  
 Winge, H. 1924 A, 177, 192, 242, 248.  
 Zdansky, O. 1924 B, 93.  
 Zittel, K. A. 1893 A, 661.  
 Zittel and Schlosser 1911 A, 396, fig. 366.  
 1923 A, 477.

*Hyæna* sp. indet.

Whitney, J. D. 1867 C, 356-357 (This genus?).  
 Pleistocene; California.

FELIDÆ Gray.

Gray, J. E. 1821 A, 302.  
 Hay, O. P. 1902 A, 777.  
 Abel, O. 1912 D, 603 ("feliden").  
 1912 F, 501.  
 1913 B, 715.  
 1914 A, 70 ("feliden").  
 1919 A, 741.  
 Ameghino, F. 1889 A, 1012.  
 1912 B, 175 ("félidés").  
 Anthony, R. 1912 A.  
 Ardt, T. 1907 B, 449 ("feliden").  
 1907 D, 654.  
 Baird, S. F. 1876 A, ccviii ("cats").  
 Bateson, W. 1892 A, 105.  
 Bayer, F. 1897 A, 147.  
 Beddard, F. E. 1902 A, 390.  
 Behlin, H. 1907 A ("feliden").  
 Birula, A. A. 1913 A, 222.  
 Bluntsehli, H. 1912 B, 362 ("feliden").  
 Bonaparte, C. L. 1832 A, 287 (*Felina*).  
 Boulenger, G. A. 1919 A, 41 ("félidés").  
 Bradley, O. C. 1905 B, 469.  
 Brandt and Woldrich 1887 A, 22 (*Felina*).  
 Brown, A. E. 1904 B, 92.  
 Carus, V. 1875 A, 121 (*Felida*).

Case, E. C. 1899 B, 181.  
 Chandler, A. C. 1914 B, 134.  
 Cleland, J. 1863 B, 297 ("cats").  
 Cope, E. D. 1885 BB, 79.  
 1891 N, 76 ("cats").  
 Corner, E. M. 1896 A, 388.  
 Cuvier, F. 1825 A, 77 ("chats").  
 Cuvier, G. 1807 A, 117 ("chats").  
 1809 B, 136 ("chats").  
 Depéret, C. 1906 A, 620 ("félidés").  
 1906 B, 1122 ("félidés").  
 1908 A, 304, 306.  
 1899 A, 141 ("félidés").  
 Doran, A. H. G. 1878 A, 391, 406.  
 Eaton, G. F. 1922 A, 425.  
 Eimer, G. H. T. 1901 A, 259 ("kats").  
 Elliot, D. G. 1901 A, 293.  
 Filhol, H. 1899 A, 222 ("félidés").  
 Fraipont, C. 1922 A, 578 ("félidés").  
 Frassetto, F. 1903 A, 309.  
 Freund, L. 1911 A, 390 ("feliden").  
 Gaudry, A. 1901 B, 100 ("félidés").  
 Geoffroy St. Hilaire, E. F. 1824 H, 255 ("chats").  
 Gervais, P. 1859 A, 226 ("félidés").

- Giebel, C. G. 1883 A ("felinen").  
 Gill, T. 1881 A, 387 ("felids").  
 Grant, M. 1904 B, 194, 205.  
 Gray, J. E. 1825 B, 339.  
 1867 C, 258.  
 Gregory, W. K. 1927 A, 601 ("cats").  
 Hay, O. P. 1923 A, 5, 312.  
 1927 E, 77 ("cats").  
 Hensel, R. 1879 A, 551 ("feliden").  
 Hoernes, R. 1886 A, 696.  
 Hrdlička, A. 1903 A, 370.  
 Huene, F. 1927 D, 146 ("feliden").  
 Huxley, T. H. 1880 C, 4.  
 Ihering, H. 1909 A, 285 ("katze").  
 1910 A, 117.  
 Jaekel, O. 1911 A, 228 (Felidi).  
 Kampfen, P. N. 1905 A, 501.  
 Kingsley, J. S. 1925 A, 261.  
 Köstlin, O. 1844 A ("katze").  
 Koken, E. 1901 B, 220 ("katze").  
 Laloy, L. 1907 A, 587 ("félidés").  
 Leche, W. 1887 A.  
 1915 A, 316.  
 Leunis and Ludwig 1883 A, 182.  
 Loble, J. L. 1908 A, 194, 200, 204.  
 Lockington, W. N. 1884 A, 445.  
 Lönnberg, E. 1926 A, 1, 17.  
 Loomis, F. B. 1910 C, 293.  
 Lull, R. S. 1904 C, 3 ("cats").  
 1917 B, 338, 564.  
 Lydekker, R. 1896 D, 1, 282.  
 1904 C, 63.  
 1910 E, 352 ("cats").  
 Mackie, S. J. 1863 D, 343.  
 Martins, C. 1857 A, 68 ("chats").  
 Matthew, W. D. 1901 A, 8.  
 1905 D, 41.  
 1907 A, 179, 199.  
 1909 D, 330, 352, 411, 462.  
 1910 G, 155.  
 1912 B, 184, 185.  
 1913 B, 291.  
 1915 A, 187, 223.  
 1915 K, 445, fig. 17 ("cats").  
 1924 C, 146.  
 1924 E, 745.  
 1923 B, 974 ("cats").  
 Matthew and Cook 1909 A, 366.  
 Meckel, J. F. 1825 A ("katzen").  
 Merriam, J. C. 1906 A, 64.  
 1917 B, 211.  
 Miller, G. S. 1912 A, 455.  
 1912 B, 115.  
 1924 C, 155.  
 Mivart, St. G. 1882 B.  
 Neuville, H. 1915 A, 9 ("félidés").  
 Osborn, H. F. 1902 A, 87 ("cats").  
 1909 D, 126.  
 1910 B, 615.  
 Owen, R. 1868 A, 880.  
 Petronievics, B. 1919 A, 417.  
 Pictet, F. J. 1853 A, 225 ("félidés").  
 Pilgrim, G. E. 1913 A, 291.  
 1915 B, 151.  
 Pocock, R. I. 1914 B, 913.  
 1916 C, 222.  
 1916 E, 326.  
 1916 F, 261.  
 1917 A, 329.  
 Pohl, L. 1911 A, 147 ("feliden").  
 Pompeckj, J. F. 1925 A, 13 ("feliden").  
 Puecioni, N. 1908 A, 49 ("felini").  
 Rehs, J. 1914 A, 56.  
 Schlosser, M. 1897 B, 18 ("katzen").  
 1902 J, 258.  
 1903 I, 31 ("feliden").  
 1906 A, 31 ("feliden").  
 Schmidt, O. 1886 A, 276 ("cats").  
 Schwarz, E. 1912 B, 3.  
 1924 A, 420 ("cats").  
 Scott, W. B. 1896 D, 54 ("cats").  
 1913 A, 517, 518, 530.  
 1917 A, 32, 134, 140 ("cats").  
 Serres, M. 1860 A, 306 ("panthères").  
 Seton, E. T. 1909 A, 677.  
 Steinmann, G. 1907 A, 473.  
 Taschenberg, O. 1899 A, 4569.  
 Terra, P. 1911 A, 286.  
 Tims, H. W. M. 1902 A, 336.  
 Tornier, G. 1891 A, 159.  
 Trouessart, E. L. 1904 A, 261.  
 Vicq-d'Azyr, F. 1792 A, cv (Felini).  
 Wagner, R. 1843 A ("katzen").  
 Wallace, A. R. 1876 A, ix, 192.  
 1894 A, 435.  
 Weber, M. 1904 A, 529.  
 Weber and Abel 1928 A, 307, 316, 318, 319.  
 Wiegmann, F. A. 1838 B, 258, 270 ("katzen").  
 Windle, B. C. A. 1905 A, 1051 ("katze").  
 Winge, H. 1896 A, 126, 127.  
 1924 A, 177, 185, 188.  
 Wortman, J. L. 1901 B, xii, 144, 206.  
 1920 A, 17.  
 Woodward, A. S. 1898 D, 336.  
 Wright, G. F. 1908 A, 34 ("felines").  
 Zittel and Schlosser 1911 A, 397.  
 1923 A, 478, 482.

## MACHAIRODONTINÆ Gill.

- Gill, T. 1872 B, 4, 59, 60.  
 Hay, O. P. 1902 A, 777.  
 Abel, O. 1908 D, (209) ("machairodontiden").  
 1912 F, 497, 498, 573 (Machairodontidæ).  
 1913 B, 715.  
 1914 A, 71.  
 1920 A, 423.  
 1922 C, 130, fig. 117 ("machairodontinen").  
 Ameghino, F. 1905 C, 446.  
 1912 B, 176 (Machairodinæ).  
 Arldt, T. 1907 D, 663 (Machairodontidæ).  
 Arldt, T. 1912 A, 702, 748.  
 Beddard, F. E. 1902 A, 401 (Machairodontidæ).  
 Boulenger, G. A. 1919 A, 41.  
 Brandes, G. 1900 A, 106 ("machairodonten").  
 Brown, B. 1908 A, 187.  
 Diener, C. 1912 A, 216 ("machairodontiden").  
 Eaton, G. F. 1928 A, 133 ("sabre-tooth tigers").  
 Gill, T. 1881 A, 387 ("nimravids").  
 Hay, O. P. 1923 A, 5.  
 1927 E, 77 ("saber-tooth tigers").  
 Huene, F. 1927 D, 113.

- Kampfen, P. N. 1905 A.  
 Lee, Stone, Gale 1915 A, 27 ("saber-tooth tigers").  
 Loomis, F. B. 1905 B, 840 (Machærodidae).  
 Lucas, F. A. 1907 A, 46 ("saber-toothed tigers").  
 Lydekker, R. 1902 A, 357 ("saber-tooths").  
 Matthew, W. D. 1901 B, 384 (Machærodontinae).  
 1910 C, 309 (Machærodontinae).  
 1928 B, 974, fig. 13.  
 Osborn, H. F. 1905 D, 316 ("saber-tooth tigers").  
 1909 D, 129 (Machærodontinae).  
 1910 B, 621 (Machærodontinae).  
 Palacky, J. 1902 B, 151 ("machairoden").

- Scharff, R. F. 1911 A, 153 ("saber-toothed tigers").  
 Schlosser, M. 1902 J, 144, 233, 257 ("machairodontinen").  
 Scott, W. B. 1913 A, 530, 684.  
 1916 A, 117, 119 ("saber-toothed tigers").  
 Steinmann, G. 1907 A, 473 (Machairodinae).  
 Trouessart, E. L. 1904 A, 261 (Machærodinae).  
 Weber, M. 1904 A, 541 (Nimravidæ).  
 Weber and Abel 1928 A, 341.  
 Winge, H. 1896 A, 126 (Machærodontini).  
 1924 A, 177, 187, 188 (Machærodontini).  
 Wortman, J. L. 1902 B, 477 ("saber-tooth tigers").  
 Zittel and Schlosser 1911 A, 397.  
 1923 A, 478.

### DEINICTIS Leidy. Type *D. felina* Leidy.

- Hay, O. P. 1902 A, 779.  
 Abel, O. 1913 B, 716, fig. 20 (Diniectis).  
 1914 A, 71.  
 1919 A, 740, figs. 551, 552 (Diniectis).  
 Ameghino, F. 1885 A, 154 (Diniectis).  
 1889 A, 1011 (Diniectis).  
 Beddard, F. E. 1902 A, 401 (Diniectis).  
 Boulenger, G. A. 1919 A, 41 (Diniectis).  
 Cope, E. D. 1880 U, 156 (Diniectis).  
 Eaton, G. F. 1922 A, 428, 435 (Diniectis).  
 Filhol, H. 1877 A, 38 (Diniectis).  
 Gaudry, A. 1875 A, 1282 (Diniectis).  
 Haug, E. 1911 A, 1528 (Diniectis).  
 Hayden, F. V. 1871 A, 107 (Diniectis).  
 Heilprin, A. 1887 A, 385 (Diniectis).  
 Huene, F. 1927 F, 148, fig. 4 (Diniectis).  
 Lambe, L. M. 1905 D, 369 A (Diniectis).  
 Leche, W. 1915 A, 320 (Diniectis).  
 Loomis, F. B. 1905 B, 840, fig. 1 (Diniectis).  
 Lull, R. S. 1917 B, 569, 571, figs. 184, 185 (Diniectis).  
 Lydekker, R. 1896 D, 286 (Diniectis).  
 Matthew, W. D. 1901 B, 365, 369, 371, 384, 386, 387 (Diniectis).  
 1905 D, 43, fig. 19 (Diniectis).  
 1907 A, 174 (Diniectis).  
 1909 C, 110 (Diniectis).  
 1910 C, 289, 290, 308, 309, figs. 1a, 2a, 4a, 5, 6a, 7a.  
 1912 B, 185 (Diniectis).  
 1915 K, 420 (Diniectis).  
 1924 E, 748 (Diniectis).  
 Merriam, J. C. 1905 B, 174.  
 1906 A, 49, 61.  
 1919 A, 543 (Diniectis).  
 O'Harra, C. C. 1910 A, 81, 146 (Diniectis).  
 Osborn, H. F. 1902 E, 360 (Diniectis).  
 1903 I, 104 (Diniectis).  
 1907 G, 188, figs. 95, 97 (Diniectis).  
 1910 B, 612, fig. 111 (Diniectis).  
 Petronievics, B. 1919 A, 417 (Diniectis).  
 Pilgrim, G. E. 1915 B, 147 (Diniectis).  
 Pompeckj, J. F. 1925 A, 13 (Diniectis).  
 Schlosser, M. 1898 F, 132, 134 (Diniectis).  
 Scott, W. B. 1913 A, 254, 538, 540 (Diniectis).  
 Seeley, H. G. 1886 A, 519 (Diniectis).  
 Sinclair, W. J. 1924 A, 111, 118 (Diniectis).  
 Stromer, E. 1902 B, 561 (Diniectis).  
 Thorpe, M. R. 1920 A, 210, 223 (Diniectis).

- Thorpe, M. R. 1923 E, 241 (Diniectis).  
 Trouessart, E. L. 1904 A, 262 (Diniectis).  
 Wallace, A. R. 1876 A, 1, 134 (Diniectis).  
 Weber and Abel 1928 A, 317, 341 (Diniectis).  
 Winge, H. 1924 A, 177, 188, 242 (Diniectis).  
 Zittel and Schlosser 1911 A, 398 (Diniectis).  
 1923 A, 479, 670 (Diniectis).

### Deinictis bombifrons Adams.

- Hay, O. P. 1902 A, 779.  
 Cook, H. J. 1912 D, 38 (Diniectis).  
 Matthew, W. D. 1901 B, 370, 388 (Diniectis).  
 1909 C, 107 (Diniectis).  
 1910 C, 310 (Diniectis).  
 Schlosser, M. 1898 F, 133 (Diniectis).  
 Thorpe, M. R. 1920 A, 210.  
 Trouessart, E. L. 1904 A, 262 (Diniectis).  
 Upper Oligocene (Brule); Soeth Dakota, Nebraska?

### Deinictis cyclops Cope.

- Hay, O. P. 1902 A, 780.  
 Eaton, G. F. 1922 A, 434, 436, 438, 440 (Diniectis).  
 Lydekker, R. 1896 D, 287 (Diniectis).  
 Matthew, W. D. 1901 B, 390 (Diniectis).  
 1909 C, 107 (Diniectis).  
 1910 C, 310 (Diniectis).  
 Merriam, J. C. 1906 A, 37, 57.  
 Merriam and Sinclair 1907 A, 185.  
 Schlosser, M. 1898 F, 133 (Diniectis).  
 Trouessart, E. L. 1904 A, 262 (Diniectis).  
 Oligocene (John Day); Oregon.

### Deinictis felina Leidy.

- Hay, O. P. 1902 A, 780.  
 Cook, H. J. 1912 D, 36 (Diniectis).  
 Eaton, G. F. 1922 A, 436, 438, 440 (Diniectis).  
 Lambe, L. M. 1908 A, 11, 64, pl. vii, figs. 21-24 (Diniectis).  
 Lydekker, R. 1896 D, 287 (Diniectis).  
 Matthew, W. D. 1901 B, 387, 392 (Diniectis).  
 1909 C, 105 (Diniectis).  
 1910 C, 310 (Diniectis).  
 Moodie, R. L. 1922 C, 351 (Diniectis).  
 O'Harra, C. C. 1920 A, 151 (Diniectis).  
 Schlosser, M. 1898 F, 132 (Diniectis).  
 Scott, W. B. 1899 A, 20, figs. 1-7 (Diniectis).  
 1913 A, 539, 540, figs. 265, 267 (Diniectis).

- Sinclair, W. J. 1924 A, 102, 111 (Dinictis).  
 Stromer, E. 1902 A, 270.  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Zittel and Schlosser 1911 A, 398, fig. 567.  
 1923 A, 479, fig. 607 (Dinictis).  
 Oligocene (Brule); South Dakota, Nebraska.

#### **Deinictis fortis Adams.**

- Hay, O. P. 1902 A, 780.  
 Cook, H. J. 1912 D, 34 (Dinictis).  
 Eaton, G. F. 1922 A, 440 (Dinictis).  
 Matthew, W. D. 1901 B, 388 (Dinictis).  
 1909 C, 103 (Dinictis).  
 1910 C, 310 (Dinictis).  
 O'Harra, C. C. 1920 A, 149.  
 Schlosser, M. 1898 F, 133 (Dinictis).  
 Thorpe, M. R. 1920 A, 210 (Syn. of Dinictis bombifrons).  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Oligocene (Chadron); South Dakota.

#### **Deinictis paucidens Riggs.**

- Hay, O. P. 1902 A, 780.  
 Cook, H. J. 1912 D, 36 (Dinictis).  
 Eaton, G. F. 1922 A, 436, 440 (Dinictis).  
 Matthew, W. D. 1901 B, 388, 390 (Dinictis).  
 1909 C, 105 (Dinictis).  
 1910 C, 310 (Dinictis).

- Thorpe, M. R. 1920 A, 211 (Dinictis).  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Oligocene (Brule); Wyoming, Nebraska?

#### **Deinictis squalidens Cope.**

- Hay, O. P. 1902 A, 780.  
 Barbour and Cook 1914 B, 235, fig. 1.  
 Cook, H. J. 1912 D, 36 (Dinictis).  
 Eaton, G. F. 1922 A, 434, 436, 440 (Dinictis).  
 Matthew, W. D. 1901 B, 357, 390, pl. xxxviii; text-figs. 11-15 (Dinictis); 388 (Daptophilus).  
 1909 C, 105 (Dinictis).  
 1910 C, 310, fig. 10 (Dinictis).  
 O'Harra, C. C. 1910 A, 82, fig. 13 (Dinictis).  
 1920 A, 83, figs. 28, 32.  
 Pilgrim, G. E. 1915 B, 153.  
 Schlosser, M. 1898 F, 133 (Dinictis).  
 Scott, W. B. 1913 A, 540, fig. 266.  
 Sinclair, W. J. 1924 A, 102, 112 (Dinictis).  
 Thorpe, M. R. 1920 A, 211.  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Oligocene (Middle); Colorado: (Brule); Nebraska.

#### **Deinictis sp. indet.**

- Matthew, W. D. 1909 C, 103 (Dinictis). Oligocene (Chadron); South Dakota.

### **Pogonodon Cope. Type *P. platycopis* Cope.**

- Cope, E. D. 1880 F, 143.  
 Hay, O. P. 1902 A, 779 (Deinictis, in part).  
 Beddard, F. E. 1902 A, 401.  
 Eaton, G. F. 1922 A, 428.  
 Heilprin, A. 1887 A, 385.  
 Lockington, W. N. 1884 A, 447.  
 Lydekker, R. 1896 D, 288.  
 Matthew, W. D. 1909 C, 110.  
 1910 C, 290, 310 (Syn. of Nimravus).  
 Merriam, J. C. 1906 A, 61, 62.  
 Palmer, T. S. 1904 A, 554, 829.  
 Scott, W. B. 1913 A, 535, 541.  
 Seeley, H. G. 1886 A, 519.  
 Sinclair, W. J. 1924 A, 112.  
 Thorpe, M. R. 1920 A, 207, 223.  
 Winge, H. 1924 A, 177, 188, 242.  
 Zittel and Schlosser 1911 A, 397 (Syn. of Hoplophoneus).  
 1923 A, 478, 672 (Syn. of Hoplophoneus).

#### **Pogonodon brachyops (Cope).**

- Hay, O. P. 1902 A, 780 (Deinictis).  
 Eaton, G. F. 1922 A, 428.  
 Lydekker, R. 1896 D, 288.  
 Matthew, W. D. 1901 B, 390 (Dinictis).  
 1909 C, 107.  
 1910 C, 310 (Nimravus).  
 Merriam, J. C. 1906 A, 37, 57.  
 Merriam and Sinclair 1907 A, 185.  
 Schlosser, M. 1898 F, 133 (Dinictis).  
 Thorpe, M. R. 1920 A, 207.  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Oligocene (John Day); Oregon.

#### **Pogonodon cismontanus Thorpe.**

- Thorpe, M. R. 1920 A, 207, 222, fig. 5.  
 Eaton, G. F. 1922 A, 429, 438, 440.  
 Sinclair, W. J. 1924 A, 112.  
 Oligocene (White River); South Dakota.

#### **Pogonodon davisii (Merriam).**

- Merriam, J. C. 1906 A, 4, 37, 53, pl. vi figs. 1-3.  
 Eaton, G. F. 1922 A, 429, 438, 440.  
 Matthew, W. D. 1909 C, 107 (Hoplophoneus).  
 1910 C, 313 (Hoplophoneus?).  
 Merriam and Sinclair 1907 A, 185, 191, 192.  
 Thorpe, M. R. 1920 A, 207.  
 Upper Oligocene (John Day); Oregon.

#### **Pogonodon platycopis Cope.**

- Hay, O. P. 1902 A, 780 (Deinictis).  
 Eaton, G. F. 1922 A, 428, 435, 438, 440.  
 Lydekker, R. 1896 D, 288.  
 Matthew, W. D. 1901 B, 390 (Dinictis).  
 1909 C, 107.  
 1910 C, 310 (Nimravus).

- Merriam, J. C. 1906 A, 4, 37.  
 Merriam and Sinclair 1907 A, 185, 189.  
 Pavlow, M. 1915 A, 38 (P. platycopis).  
 Schlosser, M. 1898 F, 133 (Dinictis).  
 Seeley, H. G. 1886 A, 510, fig.  
 Sternberg, C. H. 1909 C, 202, fig. 31.  
 Thorpe, M. R. 1920 A, 207.  
 Trouessart, E. L. 1904 A, 262 (Dinictis).  
 Upper Oligocene (John Day); Oregon.

#### **Pogonodon serrulidens Eaton.**

- Eaton, G. F. 1922 A, 429, 440, figs. 1-3.  
 Upper Oligocene (John Day); Oregon.

NIMRAVUS Cope. Type *N. gomphodus* Cope.

- Hay, O. P. 1902 A, 781 (Nimravus, Archæ-lurus).  
 Abel, O. 1913 B, 716, fig. 20.  
 1919 A, 740, figs. 551, 552.  
 Beddard, F. E. 1902 A, 401 (Nimravus, Archæ-lurus).  
 Boulenger, G. A. 1919 A, 41.  
 Eaton, G. F. 1922 A, 430, 435, 448.  
 Haug, E. 1911 A, 1705.  
 Heilprin, A. 1887 A, 385.  
 Huene, F. 1927 D, 148, fig. 4.  
 Leche, W. 1915 A, 320.  
 Lockington, W. N. 1884 A, 447.  
 Lull, R. S. 1917 B, 569, 571, fig. 184.  
 Lydekker, R. 1896 D, 287 (Nimravus); 288 (Archæ-lurus).  
 Matthew, W. D. 1901 B, 386 (Nimravus, Archæ-lurus).  
 1907 A, 174, 204.  
 1909 C, 110 (Nimravus); 107 (Archæ-lurus).  
 1910 C, 280, 290, 308, 310, figs. 2b, 4b, 7b, 7c (Nimravus); 310 (Archæ-lurus).  
 Merriam, J. C. 1906 A, 38 (Nimravus); 38, 63 (Archæ-lurus).  
 O'Harra, C. C. 1910 A, 83, 130.  
 Osborn, H. F. 1909 D, 68 (Archæ-lurus); 68, 75 (Nimravus).  
 1912 G, 240.  
 Pilgrim, G. E. 1915 B, 147.  
 Schlosser, M. 1898 F, 134, 135 (Nimravus, Archæ-lurus).  
 Scott, W. B. 1913 A, 249, 541 (Nimravus); 249, 541, 675 (Archæ-lurus).  
 Seeley, H. G. 1886 A, 519.  
 Stromer, E. 1902 B, 561.  
 Thorpe, M. R. 1920 A, 207, 223.  
 Weber and Abel 1928 A, 317, 341.  
 Winge, H. 1924 A, 177, 188, 242 (Nimravus); 177, 187, 242 (Archæ-lurus).  
 Woodward, A. S. 1898 B, 400.  
 Zdansky, O. 1924 B, 140.  
 Zittel and Schlosser 1911 A, 398 (Archæ-lurus a syn.).  
 1923 A, 479, 672 (Archæ-lurus a syn.).

**Nimravus confertus** Cope.

- Hay, O. P. 1902 A, 781.  
 Lydekker, R. 1896 D, 287.  
 Matthew, W. D. 1909 C, 107.  
 1910 C, 310.  
 Merriam, J. C. 1906 A, 37, 42, 44.  
 Merriam and Sinclair 1907 A, 185.  
 Oligocene (John Day); Oregon.

**Nimravus debilis** (Cope).

- Hay, O. P. 1902 A, 781 (Archæ-lurus).  
 Cope, E. D. 1884 O, 953, pl. lxxi a, figs. 8-16; pl. lxxi, figs. 1-3 (Archæ-lurus).  
 Eaton, G. F. 1922 A, 434, 438, 440, 448, figs. 7, 11.  
 Lydekker, R. 1896 D, 288 (Archæ-lurus).  
 Matthew, W. D. 1909 C, 107.  
 1910 C, 310.  
 Merriam, J. C. 1906 A, 37, 44 (Archæ-lurus).  
 Merriam and Sinclair 1907 A, 185, 189 (Archæ-lurus).  
 Seeley, H. G. 1886 A, 518 (Archæ-lurus).  
 Sternberg, C. H. 1909 C, 189 (Archæ-lurus).  
 Oligocene (John Day); Oregon.

**Nimravus debilis** Merriami, new name.

- Merriam, J. C. 1906 A, 4, 39-52, pls. iv, v; text-figs. 15-18 (Archæ-lurus debilis major).  
 Eaton, G. F. 1922 A, 438, 443 (Archæ-lurus d. major).  
 Merriam and Sinclair 1907 A, 185, 188, 189 (Archæ-lurus debilis major).  
 Oligocene (John Day); Oregon.

**Nimravus gomphodus** Cope.

- Hay, O. P. 1902 A, 781.  
 Barbour and Cook 1914 B, 236, fig. 2.  
 Beddard, F. E. 1902 A, 401.  
 Condon, T. 1902 A, 122, pl. xx.  
 1910 A, 102, pl. xx ("Felis").  
 Cope, E. D. 1891 N, 76, fig. 48.  
 Eaton, G. F. 1922 A, 428, 434, 435, 438, 440.  
 Lydekker, R. 1896 D, 287.  
 Matthew, W. D. 1909 C, 107.  
 1910 C, 310, fig. 11.  
 Merriam, J. C. 1906 A, 4, 37, 40, 42, 44.  
 Merriam and Sinclair 1907 A, 185, 188, 189.  
 Scott, W. B. 1913 A, 542, fig. 268.  
 Seeley, H. G. 1886 A, 518, fig.  
 Woodward, A. S. 1898 B, 400, fig. 224.  
 Oligocene (John Day); Oregon.

**Nimravus major** (Lucas).

- Hay, O. P. 1902 A, 780 (Diniectis).  
 Matthew, W. D. 1910 C, 311.  
 Merrill, G. P. 1907 A, 34 (Diniectis).  
 Trouessart, E. L. 1904 A, 262 (Diniectis).  
 Oligocene (White River); Nebraska.

**Nimravus sectator** Matthew.

- Matthew, W. D. 1907 A, 171, 204, figs. 17, 18.  
 1909 C, 112.  
 1910 C, 310.  
 O'Harra, C. C. 1920 A, 155.  
 Lower Miocene (Harrison); South Dakota.

**Nimravus** sp. indet.

- Eaton, G. F. 1922 A, 452, fig. 12. Upper Oligocene (John Day); Oregon.

HOPLOPHONEUS Cope. Type *Machærodus oreodontis* Cope.

- Hay, O. P. 1902 A, 778.  
 Abel, O. 1913 B, 716, fig. 20.  
 1914 A, 71.  
 1919 A, 740, fig. 553.

- Ameghino, F. 1905 C, 351, 448.  
 Beddard, F. E. 1902 A, 402.  
 Boule and Thevenin 1920 A, 240.  
 Cope, E. D. 1880 U, 156.



- Dall and Harris 1892 A, 289.  
 Eaton, G. F. 1922 A, 436.  
 Haug, E. 1911 A, 1528.  
 Hayden, F. V. 1871 A, 107 (Drepanodon).  
 Heilprin, A. 1887 A, 384 (Drepanodon); 385 (Hoplophoneus).  
 Hoernes, R. 1886 A, 697.  
 Huene, F. 1927 D, 148, fig. 4.  
 Jepsen, G. L. 1926 A, 1, 4.  
 Leche, W. 1915 A, 320.  
 Lockington, W. N. 1884 A, 447.  
 Loomis, F. B. 1905 B, 840, fig. 1.  
 Lull, R. S. 1917 B, 569, 570, figs. 184, 186.  
 Lydekker, R. 1896 D, 288.  
 Matthew, W. D. 1901 B, 369, 370, 384, 386, 392, 394.  
     1905 D, 43.  
     1907 A, 174.  
     1909 C, 110.  
     1910 C, 289, 290, 308, 312, figs. 1b, 3a, 4a, 5<sup>a</sup>, 6b, 8a.  
     1912 B, 185.  
     1915 K, 420.  
     1924 E, 748.  
 Merriam, J. C. 1905 B, 173.  
     1906 A, 46, 61.  
     1919 A, 543.  
 Moodie, R. L. 1922 C, 353 (This genus?).  
 O'Harra, C. C. 1920 A, 81, 148.  
 Osborn, H. F. 1902 E, 360.  
     1905 I, 104.  
     1910 B, 197, 222, 230, 532.  
 Palmer, T. S. 1904 A, 332, 827.  
 Pilgrim, G. E. 1915 B, 151.  
 Schlosser, M. 1898 F, 132, 134, 135.  
 Scott, W. B. 1913 A, 682, fig. 133.  
 Seeley, H. G. 1886 A, 519 (Hoplophoneus); 519 (Drepanodon).  
 Sinclair, W. J. 1921 B, 96.  
     1924 A, 112, 118.  
 Sinclair and Jepsen 1927 A, 398.  
 Thevenin, A. 1907 A, 216 (Haplophoneus).  
 Thorpe, M. R. 1920 A, 207, 208.  
 Trouessart, E. L. 1904 A, 262.  
 Wallace, A. R. 1876 A, 1, 134.  
 Winge, H. 1924 A, 177, 188, 242.  
 Wood, H. E. 1927 A, 297.  
 Zittel and Schlosser 1911 A, 397.  
     1923 A, 478, 670, 672.
- Hoplophoneus cerebralis** Cope.  
 Hay, O. P. 1902 A, 778.  
 Matthew, W. D. 1909 C, 107.  
 Merriam, J. C. 1906 A, 37, 62.  
 Merriam and Sinclair 1907 A, 185.  
 Schlosser, M. 1898 F, 133.  
     Upper Oligocene (John Day); Oregon.
- Hoplophoneus insolens** Adams.  
 Hay, O. P. 1902 A, 778.  
 Cook, H. J. 1912 D, 38.  
 Jepsen, G. L. 1926 A, 2.
- Matthew, W. D. 1909 C, 107.  
     1910 C, 313.  
 O'Harra, C. C. 1920 A, 153.  
 Schlosser, M. 1898 F, 133.  
 Sinclair, W. J. 1921 B, 98.  
     1924 A, 101, 102.  
     Upper Oligocene (Brule); Nebraska.
- Hoplophoneus latidens** Thorpe.  
 Thorpe, M. R. 1920 A, 214, figs. 2, 3.  
 Sinclair, W. J. 1924 A, 112, 116, 118.  
     Oligocene (White River); Colorado.
- Hoplophoneus marshi** Thorpe.  
 Thorpe, M. R. 1920 A, 211, fig. 1.  
 O'Harra, C. C. 1920 A, 151.  
 Sinclair, W. J. 1924 A, 118.  
     Oligocene (White River); Nebraska.
- Hoplophoneus mentalis** Sinclair.  
 Sinclair, W. J. 1921 B, 97, fig. 1.  
 Jepsen, G. L. 1926 A, 4.  
 Wood, H. E. 1927 A, 296, figs. 1-6.  
     Oligocene (Chadron); South Dakota.
- Hoplophoneus molossus** Thorpe.  
 Thorpe, M. R. 1920 A, 220, fig. 4.  
 O'Harra, C. C. 1920 A, 151.  
 Sinclair, W. J. 1924 A, 112, 116, 118.  
     Oligocene (White River); Nebraska.
- Hoplophoneus occidentalis** (Leidy).  
 Hay, O. P. 1902 A, 778.  
 Cook, H. J. 1912 D, 36.  
 Jepsen, G. L. 1926 A, 1.  
 Matthew, W. D. 1901 B, 369, 394, fig. 16.  
     1909 C, 105.  
     1910 C, 313.  
 Osborn, H. F. 1904 F, 48.  
 Schlosser, M. 1898 F, 133.  
     Middle Oligocene (Brule); Nebraska.
- Hoplophoneus oharrai** Jepsen.  
 Jepsen, G. L. 1926 A, 1, pl. i; text-fig. 1.  
 Sinclair and Jepsen 1927 A, 397.  
 Wood, H. E. 1927 A, 296, 299.  
     Oligocene (Chadron); South Dakota.
- Hoplophoneus oreodontis** Cope.  
 Hay, O. P. 1902 A, 779.  
 Cook, H. J. 1912 D, 36.  
 Matthew, W. D. 1901 B, 357.  
     1909 C, 105.  
     1910 C, 313.  
 Schlosser, M. 1898 F, 133.  
 Sinclair, W. J. 1924 A, 118.  
 Thorpe, M. R. 1920 A, 213.  
 Wood, H. E. 1927 A, 297, 300.  
     Middle Oligocene (Brule); Nebraska: (Cedar Creek); Colorado.

**Hoplophoneus primævus** (Leidy).

- Hay, O. P. 1902 A, 779.  
 Barbour and Cook 1914 B, 235, fig. 1.  
 Cook, H. J. 1912 D, 36.  
 Matthew, W. D. 1901 B, 394.  
     1909 C, 105.  
     1910 C, 313, fig. 13.  
 Merrill, G. P. 1907 A, 44 (*Machairodus*).  
 O'Harra, C. C. 1910 A, 83, pl. xxvi, fig. 1.  
     1920 A, 84, 151, pls. xi, xxviii; text-figs. 29-31.  
 Osborn, H. F. 1904 F, 26.  
     1910 B, 197, fig. 87.  
 Schlosser, M. 1898 F, 132.  
 Scott, W. B. 1913 A, 536, fig. 264.  
 Sinclair, W. J. 1924 A, 102, 116, 118, pl. i, fig. 2; text-fig. 5.  
 Thorpe, M. R. 1920 A, 208, seq.  
 Wanless, H. R. 1923 A, 220, pl. iii, fig. 2.  
     Middle Oligocene (Brule); South Dakota, Nebraska?.

**Hoplophoneus robustus** Adams.

- Hay, O. P. 1902 A, 779.  
 Jepsen, G. L. 1926 A, 2.  
 Matthew, W. D. 1901 B, 392, 393.  
     1910 C, 313.  
 Schlosser, M. 1898 F, 133.  
 Sinclair, W. J. 1921 B, 98.  
     1924 A, 102, 113, 116, 118, fig. 6 (This species?).  
 Thorpe, M. R. 1920 A, 209, 214.  
     Oligocene (White River); South Dakota, Nebraska.

**Hoplophoneus strigidens** Cope.

- Hay, O. P. 1902 A, 779.  
 Merriam, J. C. 1906 A, 37, 62 (This species?).  
 Merriam and Sinclair 1907 A, 185.  
     Upper Oligocene (John Day); Oregon.

**Hoplophoneus** sp. indet.

- Matthew, W. D. 1909 C, 105. Middle Oligocene; South Dakota, Nebraska, etc.  
 Wanless, H. R. 1923 A, 220. Oligocene (White River); Nebraska.

**DINÆLURUS** Eaton. Type *D. crassus* Eaton.

Eaton, G. F. 1922 A, 437.

**Dinælurus crassus** Eaton.

- Eaton, G. F. 1922 A, 437, figs. 4-6.  
     Upper Oligocene (John Day); Oregon.

**EUSMILUS** Gervais. Type *E. bidentatus* (Filhol).

- Hay, O. P. 1902 A, 778.  
 Boule and Thevenin 1920 A, 240.  
 Depéret, C. 1908 A, 169.  
     1912 A, 708.  
 Huene, F. 1927 D, 148.  
 Matthew, W. D. 1901 B, 370.  
     1909 C, 110.  
     1910 C, 289, 313.  
 Merriam, J. C. 1906 A, 61.  
 O'Harra, C. C. 1910 A, 83, 128.  
 Osborn, H. F. 1910 B, 227, 532.  
 Schlosser, M. 1898 F, 134, 135.  
     1899 F, 167.  
 Scott, W. B. 1913 A, 254, 538.  
 Sinclair and Jepsen 1927 A, 391.  
 Trouessart, E. L. 1904 A, 263.  
 Winge, H. 1924 A, 177, 188, 242.  
 Woodward, A. S. 1898 D, 331.  
 Zittel and Schlosser 1911 A, 397.  
     1923 A, 478.

**Eusmilus dakotensis** Hatcher.

- Hay, O. P. 1902 A, 778.  
 Cook, H. J. 1912 D, 38.  
 Jepsen, G. L. 1926 A, 1.  
 Matthew, W. D. 1909 C, 107.  
     1910 C, 314.  
 O'Harra, C. C. 1920 A, 87, 153.  
 Schlosser, M. 1899 F, 167.  
 Scott, W. B. 1913 A, 538.  
 Sinclair, W. J. 1921 B, 96 (*Hoplophoneus*).  
 Sinclair and Jepsen 1927 A, 391.  
     Oligocene (Upper Brule); Nebraska.

**Eusmilus sicarius** Sinclair and Jepsen.

- Sinclair and Jepsen 1927 A, 491, figs. 1-8.  
     Oligocene (Oreodon beds); South Dakota.

**Eusmilus whitfordi** Barbour and Cook.

- Barbour and Cook 1914 B, 326, pl. i.  
     1917 A, 172.  
 Sinclair and Jepsen 1927 A, 405 (Not *Eusmilus*).  
     Pliocene (Devil's Gulch); Nebraska.

**ISCHYROSMLILUS** Merriam. Type *Machairodus ischyru*s Merriam.

- Merriam, J. C. 1918 A, 524 (*Machairodus*).  
     1915 F, 262.  
     1917 A, (No description).  
     1919 A, 543.  
 Zittel and Schlosser 1923 A, 479, 680, 681 (Syn. of *Smilodon*).

**Ischyrosmilus?** *idahoensis* Merriam.

- Merriam, J. C. 1918 A, 524, fig. 1.  
 Hay, O. P. 1927 D, 75, 267, 268.  
 Merriam, J. C. 1917 A, 432, 433 (I. "n. sp.").  
     Pleistocene (Idaho); Idaho.

**Ischyrosmilus ischyurus** (Merriam).

- Merriam, J. C. 1905 B, 171, fig. 1 (Machærodus).  
 Bovard, J. F. 1907 A, 156, 163 (Machærodus?).  
 Brown, B. 1908 A, 191 (Dinobastis).  
 Merriam, J. C. 1917 A, 425.  
 1918 A, 524, 526.

Merriam, J. C. 1919 A, 545.

Osborn, H. F. 1918 A, 31 (Machærodus).  
 Pliocene (Tulare?); California.

**Ischyrosmilus osborni** Merriam.

- Merriam, J. C. 1919 A, 525, 527, 545, fig. 155.  
 1917 A, 430 (No description).  
 Lower Pliocene (Ricardo); California.

**MACHAIRODUS** Kaup. Type *M. neogæus* Lund.

- Hay, O. P. 1902 A, 777.  
 Abel, O. 1908 D, (209).  
 1913 B, 716, fig. 20.  
 1919 A, 740, fig. 553.  
 Ameghino, F. 1889 A, 1017 (Machærodus).  
 1912 B, 170, 176.  
 Arldt, T. 1907 D, 663.  
 Barbour and Cook 1914 B, 236.  
 Beddard, F. E. 1902 A, 402 (Machærodus).  
 Bose, P. N. 1880 A, 121 (Machærodus).  
 Boule, M. 1902 A, 551.  
 1902 B, 912.  
 1906 A.  
 Boule and Thevenin 1920 A, 240.  
 Boulenger, G. A. 1919 A, 41 (Machærodus).  
 Brandes, G. 1900 A, 103 (Machærodus).  
 Brandt and Woldrich 1887 A, 22 (Machærodus).  
 Bronn, H. G. 1848 A, 690.  
 1849 A, 720.  
 Cook, H. J. 1922 B, 7 (Machærodus).  
 Depéret, C. 1906 B, 1123.  
 1907 B.  
 1909 A, 141.  
 Frech and Geinitz 1903 A, 39 (Machærodus).  
 Gaudry, A. 1867 A, 105, pl. xvi (Machærodus).  
 1891 C, 87, fig. 26.  
 1896 A, 99.  
 Geinitz, E. 1903 A, (Machærodus).  
 1904 A (Machærodus).  
 Gervais, P. 1852 A, 126.  
 1859 A, 230.  
 Giebel, C. G. 1838 A, pl. li (Machærodus).  
 Haug, E. 1911 A, 1706 (Machærodus).  
 Heilprin, A. 1887 A, 384.  
 Hoernes, R. 1886 A, 696 (Machærodus).  
 Huene, F. 1927 D, 148, fig. 4.  
 Hull, E. 1914 A, 613.  
 Huxley, T. H. 1868 C, 313.  
 1870 F, 542.  
 Kampfen, P. N. 1905 A, 502 (Machærodus).  
 Knipe, H. R. 1912 A, 156, fig.  
 Laloy, L. 1907 A, 588.  
 Leche, W. 1915 A, 320.  
 1921 A, 69 (Machærodus).  
 Lobley, J. L. 1908 A, 211.  
 Lockington, W. N. 1884 A, 447 (Machærodus).  
 Lull, R. S. 1917 B, 569, 573, fig. 184 (Machærodus).  
 Lydekker, R. 1884 A, 332, pl. xlv.  
 1896 D, 283 (Machærodus).  
 Mackie, S. J. 1863 D, 345.  
 Matthew, W. D. 1901 B, 386.  
 1907 A, 174 (Machærodus).  
 1909 C, 118 (Machærodus).  
 1910 C, 290, figs. 3b, 4b (Machærodus).  
 1918 A, 229 (Machærodus).  
 Merriam, J. C. 1906 A, 61 (Machærodus).  
 1918 A, 524 (Machærodus).  
 1919 A, 543 (Machærodus).  
 Meunier, S. 1903 A, 776.  
 Much, — 1900 A, 103.  
 Osborn, H. F. 1910 B, 621 (Machærodus).  
 1912 G, 251 (Machærodus).  
 1916 B, 541 (Machærodus).  
 Owen, R. 1845 B, 490, pl. cxxvii, figs. 5, 6.  
 1845 E, 127.  
 1868 A, 890.  
 Palmer, T. S. 1904 A, 391, 828.  
 Pavlov, M. 1915 A, 33.  
 Pilgrim, G. E. 1913 A, 391 (Machærodus).  
 1915 B, 138 (Machærodus).  
 Schlosser, M. 1898 F, 134, 135.  
 1902 H, 142.  
 1902 J, 144.  
 1903 I, 37, 209, 219.  
 1924 A, 20.  
 Schmidt, O. 1886 A, 276.  
 Scott, W. B. 1913 A, 534, 535, 536.  
 Seeley, H. G. 1878 A, 226 (Machærodus).  
 Stremme, H. 1911 A, 39.  
 Stromer, E. 1906 A, 217 (Machærodus).  
 Thorpe, M. R. 1922 E, 449 (Machærodus).  
 Trouessart, E. L. 1904 A, 263.  
 Wallace, A. R. 1876 A, i, 497.  
 Weber, M. 1904 A, 540, 541.  
 Weber and Burlet 1928 A, xviii, xix, 341.  
 Weber and Burlet 1927 A, 237, fig. 176.  
 Weithofer, A. 1888 A, 238.  
 Wilckens, O. 1911 A, 708.  
 Winge, H. 1924 A, 177, 188, 242 (Machærodus).  
 Woodward, A. S. 1898 B, 400, fig. 225 (Machærodus).  
 1910 B, 466 (Machærodus).  
 1923 C, 22 (Machærodus).  
 Zdansky, O. 1924 B, 109.  
 Zittel and Schlosser 1911 A, 397.  
 1923 A, 459, 478, 673, 679.  
**Machairodus catocopsis** Cope.  
 Hay, O. P. 1902 A, 778 (Hoplophonus).  
 Cook, H. J. 1922 B, 7, 22-26, 9 figs. [Machærodus (Heterofelis) coloradensis].  
 Matson and Clapp 1909 A, 137.  
 Matthew, W. D. 1907 A, 204 (Machærodus).  
 1909 C, 116 (Machærodus).  
 1924 C, 65 (Heterofelis); 147, fig. 39 [Machærodus (Heterofelis)]; 148 H. coloradensis a syn.  
 Merriam, J. C. 1905 B, 173 (Machærodus).  
 1917 A, 438 ("Machærodus" catocopsis).  
 Upper Miocene or Lower Pliocene (Republican River); Kansas: Lower Pliocene (Snake Creek); Nebraska, Colorado.

**Machairodus crassidens** Cragin.

- Hay, O. P. 1902 A, 778 (Hoplophonus).  
 Matthew, W. D. 1909 C, 116 (Machærodus?).  
 Merriam, J. C. 1917 A, 438 (Machærodus).  
 Upper Miocene or Lower Pliocene (Republican River); Kansas.

**Machairodus niobrarensis** Thorpe.

- Thorpe, M. R. 1922 E, 448, fig. 13 (Machærodus).  
 Upper Miocene (Valentine); Nebraska.

**Machairodus** sp. indet.

- Gidley, J. W. 1903 C, 634 (Machærodus). Upper Miocene; Texas.  
 Matthew, W. D. 1923 A, 12 (Machærodus). Lower Pliocene (Upper Snake Creek); Nebraska.  
 Thorpe, M. R. 1922 E, 450 (Machærodus?). Tertiary; Nebraska.

DINOBASTIS Cope. Type *D. serus* Cope.

- Hay, O. P. 1902 A, 781.  
 Brown, B. 1908 A, 191.  
 Hay, O. P. 1923 A, 14.  
 Matthew, W. D. 1910 C, 316.  
 1918 A, 229.  
 Palmer, T. S. 1904 A, 232, 827.  
 Schlosser, M. 1898 F, 135.  
 Zittel and Schlosser 1911 A, 394 (Syn. of Smilodon).  
 1923 A, 479 (Syn. of Smilodon).

**Dinobastis serus** Cope.

- Hay, O. P. 1902 A, 781.  
 Bovard, J. F. 1907 A, 163.  
 Dopp, K. E. 1904 A, 22 ("sabre-toothed cat").  
 Hay, O. P. 1919 C, 107, pl. xxviii, fig. 4.  
 1920 B, 142, pl. v, figs. 1, 2.  
 Merriam, J. C. 1905 B, 173.  
 Sellards, E. H. 1919 A, 74 ("sabre-tooth tiger").  
 Trouessart, E. L. 1904 A, 264.  
 Pleistocene; Oklahoma, Texas.

SMILODONTOPSIS Brown. Type *S. troglodytes* Brown.

- Brown, B. 1908 A, 188.  
 Diener, C. 1912 A, 217.  
 Freudenberg, W. 1914 A, 501.  
 Hay, O. P. 1923 A, 14.  
 Matthew, W. D. 1910 C, 316.  
 1915 K, 402.  
 1918 A, 229.  
 Osborn, H. F. 1909 D, 87, 90.  
 1910 B, 487, 488.  
 Zittel and Schlosser 1911 A, 398 (Syn. of Smilodon).  
 1923 A, 479, 681 (Syn. of Smilodon).

**Smilodontopsis conardi** B. Brown.

- Brown, B. 1908 A, 190, pl. xix.  
 Hay, O. P. 1914 A, 32.  
 1919 C, 107.  
 1924 D, 252.  
 Simpson, G. G. 1928 H, 11.  
 Pleistocene (Middle); Arkansas.

**Smilodontopsis gracilis** (Cope).

- Hay, O. P. 1902 A, 778 (Machairodus).  
 Baker, F. C. 1920 A, 208, 215, 398 (Machærodus).  
 Bovard, J. F. 1907 A, 162, 163, 168 (Machærodus).  
 Brown, B. 1908 A, 191.  
 Haug, E. 1911 A, 1886 (Smilodon).  
 Hay, O. P. 1919 C, 107 (Smilodon).  
 1920 B, 108 (Machairodus).  
 1923 A, 314.  
 Lydekker, R. 1884 A, 333 (Machærodus).  
 Mercer, H. C. 1897 A, 444 ("saber-tooth tiger").

- Merriam, J. C. 1905 B, 173 (Machærodus).  
 Rhoads, S. N. 1903 A, 231 (Machairodus).  
 Schlosser, M. 1899 M, 361 (Smilodon).  
 Trouessart, E. L. 1904 A, 264 (Smilodon).  
 Pleistocene (Early); Pennsylvania.

**Smilodontopsis mercerii** (Cope).

- Hay, O. P. 1902 A, 778 (Machairodus).  
 Baker, F. C. 1920 A, 208, 215, 398 (Machærodus).  
 Brown, B. 1908 A, 191.  
 Frech and Geinitz 1903 A, 36 (Felis).  
 Haug, E. 1911 A, 1886 (Smilodon merceri).  
 Hay, O. P. 1920 B, 108 (Smilodon).  
 1923 A, 312, 314.  
 Matthew, W. D. 1918 A, 229 (Machærodus merceri).  
 Rhoads, S. N. 1903 A, 232 (Machairodus).  
 Schlosser, M. 1899 M, 360, 362 (Uncia merceri).  
 Trouessart, E. L. 1904 A, 264 (Smilodon).  
 Pleistocene (Early); Pennsylvania.

**Smilodontopsis mooreheadi** Hay.

- Hay, O. P. 1920 B, 107, pl. iv, figs. 21, 22.  
 1923 A, 348.  
 Pleistocene (Middle); Maryland.

**Smilodontopsis troglodytes** B. Brown.

- Brown, B. 1908 A, 188, pl. xix.  
 Haug, E. 1911 A, 1887.  
 Hay, O. P. 1914 A, 32.  
 1924 D, 252.  
 Pleistocene (Middle); Arkansas.

SMILODON Lund. Type *S. populator* Lund.

- Hay, O. P. 1902 A, 780.  
 Abel, O. 1912 D, 603.  
     1912 F, 498, 701, fig. 382.  
     1913 B, 716, fig. 20.  
     1914 A, 71.  
     1919 A, 740, fig. 553.  
     1920 A, 423, fig. 639.  
     1922 C, 131, figs. 118, 119.  
 Ameghino, F. 1885 A, 203.  
     1889 A, 1025.  
     1905 A, 2, 60.  
     1905 B, 198.  
     1905 C, 443, fig. 90.  
     1906 B, 4.  
     1908 A, 39, fig. 3.  
     1912 B, 170, 176.  
 Barbour, E. H. 1916 A, 349.  
 Boule, M. 1902 A, 572.  
     1923 A, 408, 426.  
 Boule and Thevenin 1920 A, 235, pl. xxvi.  
 Burmeister, H. 1866 B, 123 (*Machærodus*).  
     1868 C, 181-196, pl.  
     1886 C, expl. pl. ix (*Machærodus neogæus*).  
 Cope, E. D. 1891 N, 77, fig. 49.  
     1895 G, 596.  
 Dall and Harris 1892 A, 284.  
 Diener, C. 1912 A, 224.  
 Fraipont, C. 1922 A, 578.  
 Gaudry, A. 1875 D, 1282 (*Machærodus*).  
 Giebel, C. G. 1855 A, 21.  
 Grant, M. 1904 B, 195.  
 Hay, O. P. 1916 E, 54 ("saber-tooth tiger").  
     1923 A, 14 (*Trucifelis*).  
     1925 D, 245.  
     1926 E, 388, 390.  
 Kampfen, P. N. 1905 A, 502.  
 Leche, W. 1915 A, 320.  
 Lockington, W. N. 1884 A, 447.  
 Loomis, F. B. 1905 B, 840, fig. 1.  
     1926 A, 153 ("saber-tooth").  
 Lucas, F. A. 1907 A, 46.  
 Lull, R. S. 1917 B, 567, pl. xx; text-figs. 183, 187.  
 Lydekker, R. 1884 A, 333 (*Machærodus*).  
 MacCurdy, G. G. 1917 A, 261.  
 Marinelli, W. 1924 A, 32.  
 Matthew, W. D. 1910 C, 290, 307, 315, figs. 1d, 3c, 4c, 5, 6d, 8d, 9 (*Smilodon*); 316, fig. 3d (*Trucifelis*).  
     1910 G, 155, 159.  
     1915 A, 198.  
     1915 K, 447, fig. 25.  
     1924 E, 748.  
 Merriam, J. C. 1906 D, 249.  
     1919 A, 543.  
 Merriam, Stock and Moody 1916 A, 104.  
 Moodie, R. L. 1922 C, 353, 357, fig. 16.  
     1923 B, 566, pls. xliii, liv, fig. 25.  
     1926 A, 68, 86, text-figs. 7, 9.  
     1928 C, 1.  
 Osborn, H. F. 1905 I, 104.  
     1910 B, 467, 631.  
     1925 D, 532.  
 Owen, R. 1845 E, 128 (*Smilodon*).  
 Palacký, J. 1902 B, 151.  
 Palmer, T. S. 1904 A, 635, 829 (*Smilodon*); 696, 829 (*Trucifelis*).  
 Schlosser, M. 1898 F, 134, 135.  
 Scott, W. B. 1913 A, 204, 531, 532, 533, 534, 536, 622, fig. 262.  
 Shufeldt, R. W. 1889 D, 27, figs.  
 Sinclair and Jepsen 1927 A, 393.  
 Stromer, E. 1902 B, 555.  
 Thorpe, M. R. 1922 B, 231.  
 Trouessart, E. L. 1904 A, 264 (Subg. of *Machærodus*).  
 Warren, J. C. 1853 B, 256 (*Felis Smilodon*).  
 Weber and Abel 1928 A, 341, fig. 207.  
 Wood, H. E. 1927 A, 300.  
 Zittel and Schlosser 1911 A, 398.  
     1923 A, 479, 680.  
**Smilodon californicus** Bovard.  
 Bovard, J. F. 1907 A, 157, pl. xiii, figs. 1-4.  
 Abel, O. 1912 F, 497, fig. 381 (*S. californicum*).  
     1919 A, 746, fig. 555.  
     1926 B, 235, 458, fig. 144.  
 Archer, W. J. 1918 B, 13 ("saber-tooth").  
 Bryan, W. A. 1927 A, 78, figs. ("saber-tooth tiger").  
 Collins, H. O. 1910 A, 6 ("saber-tooth tiger").  
 Denton, W. 1875 A, 186 ("Machærodus").  
 Eastman, C. R. 1914 B, 690 ("saber-tooth rat").  
 Freudenberg, W. 1914 A, 501.  
     1921 A, 138.  
 Gilbert, J. Z. 1910 B, 28, figs. 5-7 ("saber-tooth").  
 H. H. 1927 A, 166, 2 figs. ("saber-tooth").  
 Hay, O. P. 1926 F, 426 ("saber-tooths").  
     1927 D, 312.  
 Huene, F. 1927 D, 144, figs. 1-3, 5.  
 Lotichius, A. 1911 A, 268, pl.  
 Lull, R. S. 1921 B, 162.  
 Lytle, J. W. 1926 A, 23, fig. ("saber-tooth tiger").  
 Matthew, W. D. 1910 C, 315, fig. 15.  
     1912 B, 183 ("sabre-tooth tiger").  
     1913 D, 296, pl.  
     1914 E, 57, plate ("sabre-tooth tiger").  
     1914 I, 46.  
     1916 F, 469, 2 figs. ("sabre-tooth").  
 Merriam, J. C. 1908 D, 468, 2 figs.  
     1909 A, 263.  
     1900 C, 11, fig.  
     1911 F, 210, fig. 1 ("saber-tooth cats").  
     1915 G, 101 ("sabre-tooth").  
     1918 A, 524.  
 Merriam and Stock 1925 A, 10.  
 Miller, L. H. 1912 A, 78.  
 Moodie, R. L. 1917 B, 385, fig. 9 ("Smilodon").  
     1918 C, 278, fig. 21 ("Smilodon").  
     1918 D, 507, fig. 33 ("saber-tooth").  
     1927 A, 93, figs. 3-8, 10, 11.  
 Osborn, H. F. 1910 B, 473.  
     1925 D, 528, 531, 533, figs.  
 Ridgway, J. L. 1926 A, 22, fig. ("saber-tooth tiger").  
 Schuchert and Levene 1927 A, 341, fig.  
 Scott, W. B. 1913 A, 195, 531, figs. 113, 261.  
 Stock, C. 1925 A, 30, 35.  
 Stoner, R. W. 1913 A, 391 ("sabre-tooth tiger").

- Swarth, H. S. 1915 A, 19, figs. 8, 9.  
 Thorpe, M. R. 1922 B, 281.  
 Wyman, L. E. 1922 A, 18, figs. 11, 13.  
 1927 A, 84, figs. ("saber-tooths").  
 Young and Cooper 1927 A, 5.  
 Pleistocene (Rancho La Brea); California.

***Smilodon fatalis* (Leidy).**

- Hay, O. P. 1902 A, 780.  
 Bovard, J. F. 1907 A, 163.  
 Brown, B. 1908 A, 191 (Trucifelis).  
 Deussen, A. 1924 A, 20 (Smilodon); 108 (Trucifelis).  
 Hay, O. P. 1919 C, 106 (Trucifelis).  
 1924 D, 241, 242 (Trucifelis).  
 Hayes and Kennedy 1903 A, 20.  
 Leidy, J. 1869 A, 366, pl. xxviii, figs. 10, 11 (Trucifelis).  
 Lockington, W. N. 1884 A, 447.  
 Lull, R. S. 1921 B, 160, fig. 1 (This species?).  
 Matthew, W. D. 1918 A, 229.  
 Merriam, J. C. 1905 B, 173.  
 Shuler, E. W. 1923 A, 333 ("saber-tooth tiger").  
 Pleistocene (Early); Texas.

***Smilodon floridanus* (Leidy).**

- Hay, O. P. 1902 A, 781.  
 Abel, O. 1926 B, 8 (Machairodus).  
 Bovard, J. F. 1907 A, 158, 160, 162.  
 Chamberlin, R. T. 1916 A, 35 ("saber-tooth tiger").  
 Hay, O. P. 1919 C, 106-108, pl. xxvi, figs. 1-3 (Trucifelis).  
 1923 A, 497 (Trucifelis); 38, 224 (Machairodus).  
 1924 B, 259 ("saber-tooth").  
 1926 G, 129 ("saber-tooth").  
 1927 C, 281.  
 1927 D, 275.  
 1928 B, 238 ("saber-tooth tiger").  
 1928 C, 426.

Lydekker, R. 1896 D, 284.

Matson and Clapp 1909 A, 136, 137 (Machairodus).

Matthew, W. D. 1918 A, 229.

Sellards, E. H. 1916 B, 103 (Machairodus).

1916 C, 134, 152, 158, pl. xxviii, fig. 1; pl. xxix, fig. 8 (Trucifelis).

1916 D, 617 (Smilodon sp.).

1916 E, 16 ("Smilodon sp.").

1916 F, 9 (Smilodon sp.).

Simpson, G. G. 1928 H, 2, 10, fig. 7 (This species?).

Spencer, J. W. 1895 A, 138.

Wieland, G. R. 1913 A, 93 ("saber-tooth").

Pleistocene (Early); Florida.

***Smilodon nebrascensis* Matthew.**

Matthew, W. D. 1918 A, 226, 228.

Hay, O. P. 1924 D, 305.

1928 C, 423, 426.

Pleistocene (Sheridan); Nebraska.

***Smilodon* sp. indet.**

Frick, C. 1921 A, 341, fig. 46 (This genus?).

Pliocene (Eden); California.

Gidley, J. W. 1925 A, x ("saber-tooth").

Pleistocene; Florida.

Hay, O. P. 1917 B, 22 (This genus?). Pleistocene; Texas.

1924 D, 384. Pleistocene; Kansas, Texas.

1927 A, 5 (This genus?).

1927 D, 223, 274. Pleistocene; California, Florida.

Loomis, F. B. 1924 C, 506. Pleistocene; Florida.

Stock, C. 1925 A, 21 (This genus?). Lower Pliocene (Eden); California: Pleistocene; California.

Todd, J. E. 1913 A, 45 ("large cat"). This genus?. Pleistocene; Kansas.

**METALLURUS Zdansky. Type *M. major* Zdansky.**

Zdansky, O. 1924 B, 123.

Inasmuch as the species here referred to *Metallurus* have usually been assigned to *Pseudalurus* citations are made to the literature of this genus. Unless otherwise indicated *Pseudalurus* is used.

Hay, O. P. 1902 A, 782.

Boulenger, G. A. 1919 A, 41.

Depéret, C. 1912 A, 709.

Gaudry, A. 1875 D, 1282.

Gervain, P. 1852 A, 127.

1859 A, 232.

Haug, E. 1911 A, 1706.

Heilprin, A. 1887 A, 385.

Hoernes, R. 1886 A, 696.

Huene, F. 1927 D, 148.

Isaacs, W. 1915 A, 320.

Lull, R. S. 1917 B, 569, 571.

Lydekker, R. 1896 D, 289.

Matthew, W. D. 1901 B, 374.

1909 C, 118.

1910 C, 290, 308, 311, figs. 2c, 7d.

1924 C, 65, 72, 147.

1928 B, 974, fig. 13.

Merriam, J. C. 1906 A, 61.

Osborn, H. F. 1909 D, 77, 80.

1910 B, 629.

Pilgrim, G. E. 1915 B, 147.

Schlosser, M. 1898 F, 134, 135.

1902 J, 142.

Schmidt, O. 1886 A, 277.

Scott, W. B. 1913 A, 545.

Trouessart, E. L. 1904 A, 264.

Winge, H. 1924 A, 177, 186, 242.

Zittel and Schlosser 1911 A, 398.

1923 A, 479, 608, 673, 679.

***Metallurus intrepidus* (Leidy).**

Hay, O. P. 1902 A, 782 (Pseudalurus).

Matthew, W. D. 1901 B, 359 (Pseudalurus).

1909 C, 114 (This species?); 116 (Pseudalurus).

1910 C, 290, 312 (Pseudalurus).

1924 C, 147 (Pseudalurus).

Merriam, J. C. 1917 A, 436, fig. 5 (Pseudalurus. This species?).

1919 A, 469 (Pseudalurus).

Merrill, G. P. 1907 A, 59 (Pseudalurus).

- Pavlov, M. 1908 A, 41 (Pseudelurus. This species?).  
 Sinclair, W. J. 1915 A, 76, 81 (Pseudelurus. This species?).  
 Thorpe, M. R. 1922 E, 446 (Pseudelurus).  
 Zdansky, O. 1924 B, 127, 131.  
 Miocene (Middle); Colorado: Miocene (Ankaree); Nebraska; Russia? (M. Pavlov).

**Metailurus intrepidus sinclairi** (Matthew).

- Matthew, W. D. 1918 A, 185, 196, fig. 6 (Pseudelurus).  
 Zdansky, O. 1924 B, 131, 134.

**Metailurus marshi** (Thorpe).

- Thorpe, M. R. 1922 E, 446, fig. 12 (Pseudelurus).  
 Zdansky, O. 1924 B, 131, 134.  
 Upper Miocene (Valentine); Nebraska.  
**Metailurus sp. indet.**  
 Merriam, J. C. 1917 A, 429 (Pseudelurus).  
 Pliocene (Thousand Creek); Nevada.  
 1919 A, 450, 469, 527, fig. 27 (Pseudelurus).  
 Miocene (Barstow); California.  
 Merriam and Stock 1928 A, 8, text-fig. 2 (Pseudelurus).  
 Pliocene (Thousand Creek); Nevada.

FELINÆ GEN.

- Gill, T. 1872 B, 59.  
 Hay, O. P. 1902 A, 781.  
 Abel, O. 1913 B, 715.  
 1914 A, 71.  
 1920 A, 423.  
 Ameghino, F. 1905 C, 446.  
 Arldt, T. 1912 A, 702, 748.  
 Frassetto, F. 1903 A, 309.  
 Giebel, C. G. 1855 A, 20.  
 Gray, J. E. 1867 C, 261 (Felina).

- Matthew, W. D. 1909 C, 103, 105, 107, 110, 112, 114, 116, 118, 120.  
 1910 C, 308.  
 Osborn, H. F. 1909 D, 126.  
 Pocock, R. I. 1917 A, 332.  
 Schlosser, M. 1902 J, 144, 233 ("felinen").  
 Scott, W. B. 1913 A, 530, 543, 681.  
 Trouessart, E. L. 1904 A, 264.  
 Weber and Abel 1928 A, 319.  
 Winge, H. 1924 A, 177, 188 (Felini).  
 Zittel and Schlosser 1911 A, 398.  
 1923 A, 479.

FELIS Linnæus. Type *F. catus* Linnæus.

- Hay, O. P. 1902 A, 782.  
 Abel, O. 1914 A, 71.  
 1919 A, 740, figs. 551, 552.  
 Adams, L. A. 1919 A, 118.  
 Alesais, — 1902 A, 587 ("chat").  
 Allen, J. A. 1892 A.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1889 A, 1012.  
 1905 C, 445, fig. 91.  
 1912 B, 170, 176.  
 Anderson, R. J. 1902 A, 1022, fig. 19.  
 1902 B, 369, fig. ("puma").  
 1903 A, 651.  
 1905 A, 328, figs. 24, 44.  
 Arldt, T. 1907 D, 167, 201.  
 Auer, K. 1914 A, 197 ("katze").  
 Bardeleben, K. 1885 B, 86.  
 Bardenfleth, K. S. 1913 A, 102.  
 Bärthold, — 1904 A, 367.  
 Beer, G. R. 1926 A, 328, fig. 102.  
 Bertelli, D. 1909 A, 175.  
 Beyer, H. 1908 A, 81, 96 ("katze").  
 Blendinger, W. 1904 A, 465, figs. 11-13.  
 Boas, J. E. V. 1884 B, 392 ("katze").  
 1909 A, 531, fig. 7 ("katze").  
 Bolk, L. 1922 A, 114, fig. 101.  
 Boule, M. 1906 A.  
 Boulenger, G. A. 1919 A, 41.  
 Bradley, O. C. 1905 A, 317, figs. 1, 2 ("lion").  
 1905 B, 469, figs. 1-13 ("lion").  
 Brandt and Woldrich 1887 A, 25.  
 Bronn, H. G. 1838 A, 1309.  
 1848 A, 491.  
 1849 A, 719, 783, seq.  
 Brown, A. E. 1904 B, 93.  
 Bugnion, E. 1901 A, 94 ("tigre").  
 Burmeister, H. 1868 C, 188.

- Carus and Engelmann 1861 A, 1737.  
 Corner, E. M. 1896 A, 388.  
 Cuvier, F. 1825 A, 77, pl. xxiv ("chats").  
 Cuvier, G. 1805 A.  
 1809 B, 136.  
 1825 A, iv, 233, pl. xvii; 407-456, pls. xxxiii-xxxvi.  
 Depéret, C. 1906 B, 1123.  
 1909 A, 141.  
 Dixey, F. A. 1881 A, 68, pl. i, fig. 1 ("cat").  
 Doran, A. H. G. 1878 A, 391, pl. lix.  
 Eimer, G. H. T. 1901 A, 258.  
 Elliot, D. G. 1901 A, 263.  
 Engelmann, O. 1910 A, 487 ("katze").  
 Fawcett, E. 1918 A, pl. xi.  
 Fischer, J. B. 1829 A, 196.  
 Foote, J. S. 1916 A, 111, 116, 125, pls. xiii, xiv, xvi.  
 Frassetto, F. 1903 A, 309.  
 Freund, L. 1911 A, 390.  
 Frey, H. 1911 A, 414.  
 Frick, C. 1926 A, 47.  
 Fuchs, H. 1907 A, 152.  
 1909 C, 87, figs. 1-5.  
 1909 D, 206, fig. 46.  
 1911 B, 410, figs. 49-54 ("katze").  
 1911 D, 112.  
 1914 A, 29.  
 Gaudry, A. 1901 B, 100 ("chat").  
 Gaupp, E. 1910 C, 356 ("katze").  
 1911 B, 99 ("katze").  
 Gegenbaur, C. 1864 C, 187.  
 1865 C, 559.  
 Geinitz, E. 1903 A.  
 1904 A.  
 Geoffroy St.-Hilaire, E. F. 1832 A, 355 ("chat").  
 Gervais, P. 1852 A, 122.

- Gervais, P. 1859 A, 226.
- Giebel, C. G. 1855 A, 21, pls. vi, vii.  
1883 A, pls. I, II, LVIII, LXXII, LXXIX, LXXX, LXXXIX.
- Gottlieb, H. 1914 A, 188.
- Grant, M. 1904 B, 195.
- Gray, J. E. 1867 C, 270.
- Gregory, W. K. 1921 A, 77.
- Gregory and Camp 1918 A ("cat").
- Gregory and Noble 1924 A, 555, fig. 12.
- Hasse and Schwarek 1870 A, 102.
- Haug, E. 1911 A, 1706.
- Hay, O. P. 1923 A, 2, 14.
- Heilprin, A. 1887 A, 383, 384.
- Hensel, R. 1870 A.
- Hilzheimer, M. 1905 B, 594, figs. 1-6.
- Hoernes, R. 1886 A, 606.
- Honmes, J. H. 1924 A, 21, figs. 26, 41, 49 ("cat").
- Hoyer and Babik 1924 A, 451, pl. xxxiii, fig. 4 ("löwe").
- Hrdlička, A. 1903 A, 370.
- Hue, E. 1907 A, pls. xxxviii, xxxix, xl, lxvii, lxxv, lxxvi, lxxvii, xcvii, cxi, cxv, cxxxv, cxlviii, clxiii, clxxvii.
- Huene, F. 1927 E, 148, figs. 4, 5.
- Ihering, H. 1910 A, 117.
- Jayne, H. 1898 A, 1-816, figs. 1-611.
- Kampfen, P. N. 1905 A, 501.
- Klatt, B. 1912 A, 161 ("katze").
- Küstlin, O. 1844 A.
- Kükenthal, W. 1913 A, 646.
- Leche, W. 1887 A.  
1915 A, 316.  
1921 A, 70.
- Leunis and Ludwig 1883 A, 182.
- Lobley, J. L. 1908 A, 211.
- Lockington, W. N. 1884 A, 447.
- Lönnberg, E. 1926 A, 1, text-figs. 1-5.
- Lubosch, W. 1907 A, 619 ("katze").
- Lucas, J. P. 1872 A, 372.
- Lull, R. S. 1917 B, 569, 572, fig. 184.
- Lydekker, R. 1884 A, 320, pls. xl-xliii.  
1896 D, 26, 282.
- Mackenzie, W. 1911 A, 384.
- Mackie, S. J. 1863 D, 343.
- Martins, C. 1872 A, 308.
- Matthew, W. D. 1909 D, 324, text-fig. 3.  
1910 C, 290, 307, 312, figs. 1, 2, 4-7, 9.  
1910 G, 154, 159.  
1915 K, 402.
- Mead, C. S. 1909 A, 62.
- Merriam, C. H. 1892 A, 62.
- Merriam, J. C. 1908 A, 61.  
1911 B, 216.  
1915 F, 259.
- Miller, G. S. 1912 A, 456.  
1912 B, 115.  
1924 C, 155.
- Mivart, St. G. 1879 B, 509 ("cat").  
1882 B.
- Mivart and Clarke 1879 A, 525, pl. lxvi, fig. 7 ("cat").
- Mysberg, W. A. 1917 A, 655.
- Nehring, A. 1880 A.
- Osborn, H. F. 1905 I, 110.  
1907 G, 188, figs. 95, 196.  
1909 D, 126.
- Osborn, H. F. 1916 B, 538.
- Owen, R. 1845 B, 486, 489, pl. cxxvii, figs. 1-4.  
1845 E, 121.  
1868 A, 880.
- Pander and Alton 1822 A, 7, pl. vii ("katzen").
- Pauli, S. 1900 B, 502, figs. 15-18.
- Pictet, F. J. 1853 A, 325, pl. v, figs. 7-9.
- Pilgrim, G. E. 1915 B, 138.
- Pocock, R. I. 1916 A, 304, figs.  
1916 B, 443, fig.  
1916 C, 222.  
1916 D, 306.  
1917 A, 333.
- Pohl, L. 1911 A, 148.
- Rehs, J. 1914 A, 56.
- Retterer, E. 1884 A, 478, 507 ("chat").  
1906 A, 201, fig. 3 ("chat").
- Retzius, A. 1837 A, 489.  
1849 A, 634.
- Reynolds, S. H. 1897 A, 436, 437, 439, 450, fig. 84.
- Roth, S. 1908 A, 141.
- Rudolf, G. de M. 1922 A, 143, fig. 12 ("cat").
- Ruhwandl, G. 1916 B, 109, pls. v, vi.
- Schlosser, M. 1898 F, 134, 135.  
1903 I, 209, 219.
- Schmidt, O. 1886 A, 276.
- Schwalbe, G. 1904 A, 207.
- Scalater, P. L. 1875 A, 205.
- Scott, W. B. 1913 A, 543, 681.
- Serres, M. 1852 B, 183, 194 ("lions").
- Strecker, C. 1887 A, 316.
- Stromer, E. 1902 A.  
1902 B, 555.
- Taschenberg, O. 1899 A, 4570.
- Terra, P. 1911 A, 288, figs. 107-109.
- Terry, R. J. 1917 A, 281, pls. i-xiii ("cat").
- Tins, H. W. M. 1902 A, 336.  
1903 A, 140, fig. 2b.  
1905 B, 1786, fig. 3.
- Toldt, C. 1905 A, 318, figs.
- Tourneux, F. and J. P. 1912 A, 93, fig. 29.
- Trouessart, E. L. 1904 A, 265.
- Virchow, H. 1907 A, 43 ("löwe").
- Wagner, R. 1843 A.
- Wallace, A. R. 1876 A, 1, 494.
- Weber, M. 1904 A, 529, 542, fig. 398.
- Weber and Abel 1928 A, xviii, xix, 303, 319, 341, figs. 190, 192 ("tiger").
- Weber and Burlet 1927 A, fig. 195.
- Whitehead and Waddell 1911 A, 100, figs. 5-8 ("cat").
- Wilder, B. 1872 B, 319.  
1874 A, 301, fig. 1 ("lion").
- Williston, S. W. 1910 G, 595.
- Winge, H. 1923 A, 354, pl. iii, fig. 7.  
1924 A, 177, 186, 246.
- Woodward, A. S. 1898 D, 333.
- Worthmann, F. 1922 A, 312, fig. 5 ("katze").
- Wortman, J. L. 1902 A, xiii, 120.
- Zdansky, O. 1924 B, 141.
- Zietzschmann, O. 1917 A, 437 ("katze").
- Zittel and Schlosser 1911 A, 399.  
1923 A, 480, 679-681.
- Zuckerlandl, E. 1908 A, 501, 536, figs. 2-4 ("katze").
- Zukowsky, L. 1922 A, 175.



**Felis atrox** Leidy.

- Leidy, J. 1853 F, 322, pl. xxxiv.  
 Hay, O. P. 1902 A, 782.  
 Antevs, E. 1925 A, 75.  
 Diener, C. 1912 A, 216.  
 Foster, J. W. 1857 A, 362.  
 1869 A, 238, 253.  
 1873 A, 59 ("lion"); 91 (*F. atrox*).  
 Freudenberg, W. 1910 A, 33, pl. viii, fig. 3; pl. ix, fig. 5.  
 1921 A, 138.  
 Gilbert, J. Z. 1910 B, 33 ("lion").  
 Haug, E. 1911 A, 1886, 1887.  
 Hay, O. P. 1919 C, 109.  
 1923 A, 265, 291.  
 1923 E, 395 ("extinct tiger").  
 1927 D, 303, 305.  
 1928 C, 428.  
 Jones, J. C. 1925 A, 49.  
 Leidy, J. 1853 H, 261 (Description insufficient).  
 Matthew, W. D. 1914 M, 640.  
 Merriam, J. C. 1909 A, 301, 303.  
 1912 A, 44.  
 1915 C, 379, 380, fig. 1.  
 1918 D, 517, 520.  
 Merriam and Stock 1921 A, 567.  
 1925 A, 23.  
 Miller, L. H. 1925 A, 309.  
 Osborn, H. F. 1910 B, 467, 473, 486.  
 1925 D, 533.  
 Ruschenberger and Tryon 1879 A, 11.  
 Schmidt, E. 1872 A, 245.  
 Scott, W. B. 1913 A, 204, 545.  
 Shimek, B. 1902 A, 285.  
 1904 A, 305.  
 Stock, C. 1925 A, 201 (This species?).  
 Wyman, L. E. 1922 A, 20.  
 Zdansky, O. 1924 B, 144.  
 Pleistocene (Early and Middle); Mississippi, California, Nevada, Mexico.

**Felis atrox bebbi** Merriam, J. C.

- Merriam, J. C. 1909 A, 301, pl. xxvi; text-figs. 1-3 (*F. atrox* var. *bebbi*).  
 Abel, O. 1926 B, 237.  
 Archer, W. J. 1918 B, 13 ("lion").  
 Freudenberg, W. 1911 A, 134.  
 Gilbert, J. Z. 1910 B, 33, fig.  
 Hay, O. P. 1927 D, 184, 185, 191.  
 Matthew, W. D. 1914 I, 46.  
 1914 M, 640.  
 Merriam, J. C. 1909 C, 11, fig. ("lion").  
 1911 A, 164.  
 1912 A, 43, fig. 10.  
 Merriam and Stock 1925 A, 10.  
 Miller, L. H. 1912 A, 78.  
 Osborn, H. F. 1910 B, 473, 486.  
 1925 D, 529, 531, 533, fig.  
 Stock, C. 1925 A, 30.  
 Swarth, H. S. 1915 A, 21, fig. 9.  
 Pleistocene (La Brea); California; Mexico (fide Freudenberg).

**Felis augustus** Leidy.

- Hay, O. P. 1902 A, 782.  
 Freudenberg, W. 1910 A, 31.  
 Hay, O. P. 1919 C, 109.

- Matthew, W. D. 1909 C, 116 (*Machærodus*?).  
 Merrill, G. P. 1907 A, 37.  
 Thorpe, M. R. 1922 E, 445.  
 Miocene (Arikaree); Nebraska.

**Felis centralis** Mearns.

- Mearns, E. A. 1901, Proc. Biol. Soc. Wash., xiv, 139.  
 Gidley, J. W. 1927 E, 274 (This species?).  
 Hay, O. P. 1927 D, 374 (This species?).  
 Miller, G. S. 1912 B, 116.  
 1924 C, 155.  
 Recent; Costa Rica: Pleistocene; Florida.

**Felis cougar** Kerr.

- Kerr, R. 1792, Anim. Kingd., i, 151.  
 Hay, O. P. 1902 A, 782 (*F. concolor*).  
 Ameghino, F. 1889 A, 1012 (*F. concolor*).  
 Anderson, R. J. 1905 A, 328, fig. 21 (*F. concolor*).  
 Brown, A. E. 1904 B, 94 (*F. concolor*).  
 Brown, B. 1908 A, 186, pls. xix, xxiii (*F. cougar*).  
 Cuvier, G. 1809 B, 142 (*F. concolor*).  
 Dewey, M. 1913 A, 144, figs. 7, 8 ("mountain lion").  
 Diener, C. 1912 A, 224 (*F. concolor*).  
 Eaton, G. F. 1922 A, 436, 438 (*F. concolor*).  
 Elliot, D. G. 1901 A, 293, pl. xxviii (*F. concolor*).  
 Fischer, J. B. 1829 A, 197 (*F. concolor*).  
 Foote, J. S. 1916 A, 134, pl. xviii (*F. concolor*).  
 Frech, F. 1907 A, 315 (*F. concolor*).  
 1910 A, 35 (*F. concolor*).  
 1921 A, 139 (*F. concolor*).  
 Freudenberg, W. 1922 A, 4 (*F. concolor*?).  
 Frey, H. 1911 A, 415 (*F. concolor*).  
 Gray, J. E. 1867 C, 265 (*F. concolor*).  
 Hahn, W. L. 1909 A, 540 (*F. cougar*).  
 Haug, E. 1911 A, 1887 (*F. concolor*).  
 Hay, O. P. 1914 A, 32 (*F. cougar*).  
 1920 B, 109 (*F. cougar*?).  
 1923 A, 337, 348.  
 1924 D, 252 (*F. cougar*).  
 1927 D, 251.  
 Heilprin, A. 1887 A, 19, 383 ("couguar").  
 Hensel, R. 1879 A, 553 (*F. concolor*).  
 Hrdlička, A. 1903 A, 370 (*F. concolor*).  
 Ihering, H. 1910 A, 125 (*F. concolor*).  
 Lockington, W. N. 1884 A, 453 (*F. concolor*).  
 Lydekker, R. 1896 D, 101 (*F. concolor*).  
 Matthew, W. D. 1902 F, 321 (*F. concolor*?).  
 1910 C, 312, fig. 12 (*F. concolor*).  
 Merriam, C. H. 1901 A, 582 (*F. cougar*).  
 Merriam, J. C. 1927 A, 268, fig. ("mountain lion").  
 Miller, G. S. 1912 B, 116.  
 1924 C, 158.  
 Osborn, H. F. 1909 D, 89 (*F. concolor*).  
 1910 B, 477 (*F. concolor*).  
 Pocock, R. I. 1916 C, 227 (*F. concolor*).  
 1916 D, 316 (*F. concolor*).  
 1916 E, 327 (*F. concolor*).  
 1917 A, 336 (*Puma concolor*).  
 Ruseconi, C. 1927 A, 293, 294 (*F. puma*).  
 Scharff, R. F. 1911 A, 107 (*F. concolor*).  
 Scott, W. B. 1913 A, 168, 544, 545, figs. 83, 270, 271 (*F. concolor*).

Stock, C. 1925 A, 199 (F. concolor. This species?).

Trouessart, E. L. 1904 A, 266.

Volk, E. 1911 A, 32, 54 ("puma").

Recent; N and S. America: Pleistocene; Arkansas?, Illinois?, Maryland.

### **Felis daggetti Merriam, J. C.**

Merriam, J. C. 1918 C, 535.

Abel, O. 1926 B, 237.

Archer, W. J. 1918 A, 1.

Hay, O. P. 1927 D, 184, 191, 197.

Merriam and Stock 1921 A, 567 (This species?).  
1925 A, 10, 11 (This species?).

Osborn, H. F. 1925 D, 531, 533.

Stock, C. 1925 A, 30.

Pleistocene (LaBrea, McKittrick); California.

### **Felis eyra Desmarest.**

Desmarest, A. G. 1820, Mammalogie, 1, 231.

Hay, O. P. 1902 A, 782.

Baker, F. C. 1920 A, 208, 215, 398.

Elliot, D. G. 1901 A, 295.

Hay, O. P. 1923 A, 312, 314.

Hensel, R. 1879 A, 553.

Ihering, H. 1910 A, 129.

Miller, G. S. 1912 B, 116.

1924 C, 159.

Rhoads, S. N. 1903 A, 232.

Winge, H. 1896 A, 107 (F. eyra).

Recent; Paraguay to Central America?;

Pleistocene; Pennsylvania?

### **Felis hawveri Stock.**

Stock, C. 1918 A, 482, figs. 4a, 4b.

Hay, O. P. 1927 D, 223.

Stock, C. 1925 A, 113.

Pleistocene (Hawver cave); California.

### **Felis hillianus Cope.**

Hay, O. P. 1902 A, 782.

Cope, E. D. 1893 A, 55, pl. xiv, figs. 1-11 (F. hillianus).

Dumble, E. T. 1894 A, 559.

Gidley, J. W. 1903 C, 627.

Hay, O. P. 1919 C, 109.

Matthew, W. D. 1909 C, 120 (F. hillianus).  
1910 C, 290.

Merriam, J. C. 1917 A, 434.

Montgomery, T. H. 1904 A, 58.

Osborn, H. F. 1909 D, 83.

1910 B, 366.

Scharff, R. F. 1911 A, 107.

Zdanovsky, O. 1924 B, 130, 144 (To Metailurus?).

Pliocene (Blanco); Texas.

### **Felis hyanoides Freudenberg.**

Freudenberg, W. 1910 A, 37, pl. ix, figs. 1-3.

1914 A, 501 (Smilodontopsis).

1921 A, 137, 138 (Smilodontopsis).

1922 A, 4.

Pliocene?; Mexico.

### **Felis imperialis Leidy.**

Hay, O. P. 1902 A, 782.

Ashley, G. H. 1895 A, 362 ("lion").

Bovard, J. F. 1907 A, 155, 156, 164.

Cooper, J. G. 1875 A, 390.

Freudenberg, W. 1910 A, 31, pl. viii, fig. 3;  
pl. ix, fig. 5

1921 A, 138.

1922 A, 4.

Haug, E. 1911 A, 1887 (Felix).

Hay, O. P. 1919 C, 109.

1927 D, 305.

McCormack, E. C. 1920 A, 16, 23 (This species?).

Matthew, W. D. 1902 F, 321 (This species?).

Merriam, J. C. 1905 B, 173.

1909 A, 303.

Osborn, H. F. 1910 B, 474, 486.

Scott, W. B. 1913 A, 204.

Stock, C. 1925 A, 199 (This species?).

Pleistocene?; California, Washington State, Mexico.

### **Felis inexpectata (Cope).**

Hay, O. P. 1902 A, 783.

Baker, F. C. 1920 A, 208, 215, 398.

Frech and Geinitz 1903 A, 36.

Freudenberg, W. 1910 A, 36.

Haug, E. 1911 A, 1886 (Uncia).

Hay, O. P. 1919 C, 109.

1920 B, 108.

1923 A, 312, 316.

Osborn, H. F. 1910 B, 469 (Uncia).

Rhoads, S. N. 1903 A, 232.

Schlosser, M. 1902 H, 142 (Uncia).

Pleistocene (Early); Pennsylvania.

### **Felis longicrus B. Brown.**

Brown, B. 1908 A, 187, pls. xviii, xxiii.

Freudenberg, W. 1910 A, 36.

Hay, O. P. 1914 A, 32.

1920 B, 108.

1924 D, 252.

Pleistocene (Illinoian?); Arkansas.

### **Felis? maxima Scott and Osborn.**

Hay, O. P. 1902 A, 783.

Matthew, W. D. 1909 C, 116 (Machærodus?).  
1918 A, 185 (This genus and species?).

Matthew and Cook 1909 A, 378, fig. 7 (This species?).

Merriam, J. C. 1917 A, 436 (This species?).

Sinclair, W. J. 1915 A, 76 (F. maxima, This genus?).

Trouessart, E. L. 1904 A, 266.

Pliocene (Snake Creek); Nebraska.

### **Felis oregonensis (Rafinesque).**

Rafinesque, C. S. 1912, Atlant. Jour., 1, 62 (Felix).

Bovard, J. F. 1907 A, 156, 165, pl. xiv, figs. 3-5 (F. hippolestes).

Elliot, D. G. 1901 A, 294 (F. concolor oregonensis).

Freudenberg, W. 1910 A, 35, fig. 7 (F. onza?).

1921 A, 17 ("jaguar"); 139 (F. onza?).

1922 A, 4 (F. onza?).

Furlong, E. L. 1904 A, 55 (F. hippolestes).

1906 A, 245 (F. hippolestes?).

1907 A, 393 (F. hippolestes?).

Hay, O. P. 1927 D, 302, 305 (F. o. hippolestes).

- McCornack, E. C. 1920 A, 16, 23 (F. concolor, F. cougar).
- Merriam, C. H. 1897, Proc. Biol. Soc. Wash., xi, 219 (F. hipolestes).
- Merriam, J. C. 1912 A, 42, figs. 4-9 (F. hipolestes?).
- Miller, G. S. 1912 B, 117.
- 1924 C, 158.
- Miller, L. H. 1912 A, 70, 73, 74 (F. hipolestes).
- Osborn, H. F. 1910 B, 474 (F. concolor).
- Sinclair, W. J. 1903 A, 711 (Felis "near" hipolestes).
- 1904 A, 17 (F. hipolestes).
- Stock, C. 1925 A, 195 (This species?).
- Wyman, L. E. 1922 A, 20, fig. 13.
- Recent; Wyoming to Pacific Ocean: Pleistocene; California, Oregon, Mexico.
- Felis veronis Hay.**
- Hay, O. P. 1919 C, 108-109, pl. xxviii, figs. 5-7.
- 1923 A, 382.
- 1924 B, 259 ("tiger").
- 1927 C, 281 ("tigers").
- Pleistocene (Early); Florida.
- Felis sp. indet.**
- Bovard, J. F. 1907 A, 163. Pleistocene (Rancho La Brea); California.
- Cooke, C. W. 1926 A, 445 ("tiger"). Pleistocene; Florida.
- Freudenberg, W. 1910 A, 6 ("jaguar"). Pleistocene; Mexico.
- Frick, C. 1921 A, 341, figs. 47, 48 (This genus?). Pliocene (Eden); California.
- Hay, O. P. 1914 A, 28.
- 1920 B, 143. Pleistocene (Middle); Texas.
- 1923 A, 321, 376. Pleistocene; Florida.
- 1924 D, 247. Pleistocene; Texas.
- 1927 D, 305. Pleistocene; California.
- Merriam, J. C. 1911 B, 205, 211, 212, 214, 251, 252, figs. 17-19. Pliocene (Virgin Valley and Thousand Creek beds); Nevada.
- 1917 A, 428, 429, 439. Pliocene (Rattlesnake); Oregon; (One Thousand Creek); Nevada; (Dunnellon); Florida.
- Merriam and Stock 1925 A, 10. Pleistocene (Potter Creek cave); California.
- Merriam, Stock, Moody 1925 A, 58, 67, figs. 20, 21 ("felid sp. A." This genus?); 58, 68, ("felid sp. B." This genus?). Pliocene (Rattlesnake); Oregon.
- Miller, L. H. 1912 A, 81. Pleistocene (Fossil Lake); Oregon.
- Sinclair, W. J. 1903 A, 711 ("sp. nov.").
- 1904 A, 17 ("Felis n. sp."); 20 (Felis sp.); 20 ("Felis sp. indet."). Pleistocene (Fossil Lake); Oregon.
- Stock, C. 1925 A, 18, 21, 113, 195. Lower Pliocene (Eden); California: Pleistocene (La Brea, Upper San Pedro, caves); California: (Christmas Lake); Oregon.
- Thorpe, M. R. 1922 E, 445, 450 (This genus?). Tertiary; Nebraska.
- LYNX Kerr. Type Felis lynx Linnaeus.**
- Kerr, R. 1792, Anim. King., i, 41, 155.
- Allen, J. A. 1892 A.
- Baird, S. F. 1857 A, 89.
- Bangs, O. 1897 A, 47.
- Brandt and Woldrich 1887 A, 32 (Felis).
- Doran, A. H. G. 1878 A, 391 (Felis).
- Flower and Lydekker 1891 A, 518 ("lynxes").
- Frech, F. 1906 A, 481 ("luchs").
- Gervais, P. 1852 A, 125 (Felis).
- 1859 A, 229 (Felis).
- Grant, M. 1904 B, 193.
- Gray, J. E. 1867 C, 276 (Lynx).
- Hasse and Schwarck 1870 A, 100 (Felis lynx).
- Howes, G. B. 1893 C, 592 (Felis).
- Hue, E. 1907 A, pls. xxxix, lxxvi, lxxvii, xcvi, cxi, cxv, cxxv, cxlviii, clxiii ("lynx").
- Leche, W. 1915 A, 317.
- 1921 A, 70.
- Leunis and Ludwig 1883 A, 186.
- Lydekker, R. 1896 D, 189 ("lynxes").
- 1910 E, 352 ("lynx").
- Merriam, C. H. 1892 A, 62.
- Miller, G. S. 1912 B, 118.
- 1924 C, 159.
- Osborn, H. F. 1909 D, 89, 90.
- 1916 B, 541.
- Palmer, T. S. 1904 A, 390, 828.
- Paramore, R. H. 1910 A, 1459, fig. 11 ("lynx").
- Poock, R. I. 1917 A, 324.
- Retzius, A. 1837 A, 469.
- Schlosser, M. 1898 F, 134, 135.
- Scott, W. B. 1918 A, 153, 163, 169, 517, 544.
- Seton, E. T. 1909 A, 677.
- Taschenberg, O. 1899 A, 4579 (Felis).
- Trouessart, E. L. 1904 A, 276 (Subg. of Felis).
- Weber, M. 1904 A, 529.
- Weber and Abel 1928 A, 320.
- Zittel and Schlosser 1923 A, 681.
- Lynx calcaratus (Cope).**
- Hay, O. P. 1902 A, 782 (Felis).
- Baker, F. C. 1920 A, 208, 215, 398 (Felis).
- Hay, O. P. 1923 A, 312, 316.
- Pleistocene (Early); Pennsylvania.
- Lynx canadensis Kerr.**
- Kerr, R. 1792, Anim. King., i, Cat. between 32, 33; 157.
- Hay, O. P. 1902 A, 782 (Felis).
- Baird, S. F. 1857 A, 99.
- Bangs, O. 1897 A, 48.
- Cuvier, G. 1825 A, iv, 443 ("lynx du Canada").
- Elliot, D. G. 1901 A, 295 (Felis).
- Fischer, J. B. 1829 A, 212 (Felis).
- Hay, O. P. 1923 A, 310.
- 1927 D, 251.
- Hrdlička, A. 1903 A, 371 (Felis).
- Lockington, W. N. 1894 A, 465, fig. 218 (L. canadensis, L. borealis).
- Lydekker, R. 1896 D, 195 (Felis).
- McCornack, E. C. 1920 A, 16, 23 (Felis).
- Matthew, W. D. 1902 F, 321 (Felis. This species?).
- Mercer, H. C. 1894 A, 97 ("lynx").

Miller, G. S. 1912 B, 119.  
1924 C, 160.

Osborn, H. F. 1909 D, 89 (Felis).  
1910 B, 474 (Felis).

Pocock, R. I. 1916 E, 329, fig. 3 (Felis).

Rhoads, S. N. 1903 A, 232.

Seton, E. T. 1909 A, 677, pls. xlviii, xlx;  
text-figs. 163-187, map 39.

Recent; Canada and northern United  
States: Pleistocene; Pennsylvania and Ore-  
gon.

### ***Lynx compressus* B. Brown.**

Brown, B. 1908 A, 185, pl. xviii.

Hay, O. P. 1914 A, 32.

1924 D, 252.

Pleistocene (Middle); Arkansas.

### ***Lynx fasciatus fasciatus* Rafinesque.**

Rafinesque, C. S. 1817, Amer. Monthly Mag.,  
ii, 46 (L. fasciatus).

Baird, S. F. 1857 A, 96 (L. fasciatus).

Hay, O. P. 1927 D, 215 (L. fasciatus).

Miller, G. S. 1912 B, 119.

1924 C, 160.

Miller, L. H. 1912 A, 70 (L. fasciatus).

Osborn, H. F. 1925 D, 531 (Felis lynx).

Stock, C. 1925 A, 113 (L. fasciatus).

Recent; coast region of northwestern  
U. S.: Pleistocene (Caves); California.

### ***Lynx fasciatus parvus* Bovard.**

Bovard, J. F. 1907 A, 165, pl. xiv, fig. 2  
(Felis).

Elliot, D. G. 1901 A, 297 (Felis).

Miller, L. H. 1912 A, 70 (L. fasciatus n.  
subsp.?).

Sinclair, W. J. 1903 A, 711.

1904 A, 17.

Pleistocene (Caves); California.

### ***Lynx rufus* (Schreber).**

Schreber, J. C. D. 1777, Säugethiere, Th. III,  
412, pl. cix A (Felis).

Hay, O. P. 1902 A, 783 (Felis rufus).

Allen, J. A. 1902 A, 90.

Baird, S. F. 1859 A, 90.

Bangs, O. 1897 A, 49, pl. ii, fig. 3 (L. rufus).

Brown, B. 1908 A, 186, pl. xviii (This species?).

Cuvier, G. 1825 A, rv, 443 (Felis).

Elliot, D. G. 1901 A, 296 (Felis).

Frech and Geinitz 1903 A, 36 (L. rufus).

Hay, O. P. 1914 A, 32 (F. rufus).

1923 A, 489 (L. rufus).

1924 D, 252.

Lockington, W. N. 1884 A, 466.

Lydekker, R. 1896 D, 197 (Felis rufa).

Miller, G. S. 1912 B, 120.

1924 C, 161.

Pocock, R. I. 1916 C, 227 (Felis).

Pocock, R. I. 1916 E, 331 (Felis).

Scott, W. B. 1913 A, 544, fig. 269.

Simpson, G. G. 1928 H, 2, 10.

Recent; eastern United States: Pleistocene  
(Middle); Arkansas.

### ***Lynx rufus californicus* Mearns.**

Mearns, E. A. 1897, Proc. U. S. Nat. Mus.,  
xx, 458.

Abel, O. 1926 B, 237 (Felis).

Elliot, D. G. 1901 A, 298 (Felis).

Merriam, C. H. 1899, N. Amer. Fauna, No. 16,  
104 (L. californicus).

Merriam, J. C. 1910 A, 394 (L. californicus).

Merriam and Stock 1925 A, 10.

Miller, G. S. 1912 B, 120 (L. rufus cali-  
fornicus).

1924 C, 161.

Osborn, H. F. 1925 D, 531.

Recent; region of San Diego County, Cali-  
fornia: Pleistocene (La Brea); Los Angeles,  
California.

### ***Lynx rufus fischeri* (J. C. Merriam).**

Merriam, J. C. 1910 A, 394 (L. californicus  
fischeri).

Hay, O. P. 1927 D, 184, 191 (L. r. fischeri);  
184 (L. californicus fischeri).

Miller, L. H. 1912 A, 78 (L. occidentalis  
fischeri).

Stock, C. 1925 A, 80 (L. "near" rufus cali-  
fornicus).

Swarth, H. S. 1915 A, 22 (L. californicus  
fischeri).

Pleistocene (La Brea); California.

### ***Lynx rufus floridanus* (Rafinesque).**

Rafinesque, C. S. 1817, Amer. Monthly Mag.,  
ii, 46.

Baird, S. F. 1859 A, 91.

Bangs, O. 1897 A, 49, pl. ii, fig. 4.

1898 A, 234 (L. rufus f.).

Elliot, D. G. 1901 A, 299 (Felis).

Gidley, J. W. 1927 E, 274 (This species?).

Hay, O. P. 1917 E, 46, 64.

1923 A, 382 (L. rufus flor.).

1927 D, 274.

Miller, G. S. 1912 B, 120 (L. rufus flor.).

1924 C, 161.

Sellards, E. H. 1916 C, 152, 153, pl. xxviii,  
fig. 3 ("Lynx").

1916 E, 17 (Lynx sp.).

Recent; Florida: Pleistocene; Florida.

### ***Lynx* sp. indet.**

Gidley, J. W. 1920 B, 282 ("lynx"). Pleisto-  
cene (Middle); Maryland.

Hay, O. P. 1923 A, 350. Pleistocene (Sanga-  
mon); Maryland.

## Suborder PINNIPEDIA Illiger.

Illiger, C. 1811 A, 138.

Hay, O. P. 1903 A, 783.

Abel, O. 1904 A, 183.

1907 G, 10, 34 ("robber").

1908 A, 479 ("pinnipeds").

Abel, O. 1912 D, 600 ("robber").

1912 F, 124, 175, 693 ("pinnipedier").

1913 B, 712 ("pinnipedier").

1914 A, 57, 80 ("pinnipeden").

1919 A, 747.

- Abel, O. 1920 A, 423.
- Adloff, P. 1903 A, 367 ("pinnipédier").  
1913 C, 8 ("pinnipédier").  
1917 B, 350.  
1920 A, 179, 188 ("pinnipédier").
- Ameghino, F. 1889 A, 1022.  
1905 C, 439.  
1906 A, 356.
- Anthony, R. 1912 A ("pinnipèdes").  
1913 A, 248 ("pinnipèdes").
- Arlt, T. 1907 D, 674.
- Bardleben, K. 1885 B, 85.
- Bayer, F. 1897 A, 147.
- Beddard, F. E. 1902 A, 446.
- Boas, J. E. V. 1914 B, 577, 582 ("pinnipédien").
- Bolk, L. 1913 A, 102 ("pinnipédier").
- Bonaparte, C. L. 1832 A, 287.
- Branca, W. 1915 A, 50.
- Braus, H. 1906 A ("pinnipédier").
- Broman, I. 1920 A, 299-406.
- Brown, A. E. 1904 B, 90 ("seals").
- Carruccio, A. 1913 B, 178 (Pinnipedi).
- Carus, V. 1875 A, 131.
- Case, E. C. 1899 B, 182 (Pinnipeda).
- Cope, E. D. 1891 N, 75, 90.
- Dana, J. D. 1863 C, 333 ("pinnipèdes").
- Dollo, L. 1922 A, 216 ("pinnipèdes").
- Doran, A. H. G. 1878 A, 399.
- Eggeling, H. 1904 A, 97 ("pinnipédier").
- Eumer, G. H. T. 1901 A, 163, 219 ("pinnipédier").
- Elliot, D. G. 1901 A, 355.
- Fleischmann, A. 1904 A, 433.
- Fraas, E. 1904 A, 24 ("pinnipédier").  
1905 B, 376.
- Frassetto, F. 1915 A, 30.
- Frey, H. 1911 A, 416.
- Gegenbaur, C. 1864 C, 191 ("pinnipédien").
- Giebel, C. G. 1855 A, 80.  
1883 A ("pinnipédier").
- Gottlieb, H. 1914 A, 210 ("pinnipédier").
- Gray, J. E. 1844 A, 2 ("seals").
- Gregory, W. K. 1910 A, 71, 312, 314, 315, 416, 465.  
1920 A, 156, 239.
- Hasse and Schwarck 1870 A, 105.
- Hay, O. P. 1923 A, 21.
- Hilzheimer, M. 1913 A, 566.
- Hoernes, R. 1886 A, 697.
- Hogben, L. T. 1919 A, 74.
- Howes, G. B. 1903 A, 326.
- Huxley, T. H. 1870 F, 531 ("seals").
- Jacobi, A. 1921 A, 217 ("pinnipédier").
- Jaekel, O. 1911 A, 229 (Phocidi).
- Kellogg, R. 1922 A, 23-132.  
1924 C, 755 ("pinnipèdes").
- Köstlin, O. 1844 A ("seehunde").
- Koken, E. 1893 B, 487, 499 ("pinnipédier").
- Kükenthal, W. 1913 A, 501.
- Larger, R. 1913 A, 718 ("pinnipèdes").
- Leboucq, H. 1904 A, 120 ("pinnipédier").  
1904 B, 1 ("pinnipèdes").
- Leche, W. 1887 A.  
1900 A, 1021.
- Leiche, M. 1910 C, 369 ("pinnipèdes").
- Leunis and Ludwig 1883 A, 201.
- Lockington, W. N. 1884 A, 466.
- Lucae, J. C. 1872 A, 285 ("pinnipédien").  
1875 A.
- Lull, R. S. 1917 B, 322.
- Lydekker, R. 1907 C, 453.
- Martins, C. 1857 A, 81 ("pinnipèdes").
- Matthew, W. D. 1901 A, 8.  
1905 D, 45.  
1909 D, 316, 413, 430, 531.  
1915 A, 223.
- Miller, G. S. 1924 C, 162.
- Osborn, H. F. 1907 G, 13, 131, 143.  
1910 B, 533.
- Osburn, R. C. 1903 A, 653.  
1906 A, 447.
- Owen, R. 1857 E (Pinnigrada).  
1858 A, 31 ("pinnigrades").
- Palacký, J. 1902 C, 25 ("pinnipédien").
- Parker and Haswell 1897 A, 475.
- Perna, G. 1906 A, 122.
- Pohl, L. 1909 A, 382 ("pinnipédier").  
1911 A, 115, 149 ("pinnipédier").
- Pompeckj, J. F. 1925 A, 10 ("robber").
- Roche, O. 1905 B, 244.
- Rehs, J. 1914 A, 2, 64.
- Reynolds, S. H. 1897 A, 550.
- Römer, F. 1907 A, 67 ("robber").
- Ryder, J. 1887 A, 346 ("pinnipèdes").  
1887 B.
- Schlosser, M. 1897 B, 19 ("pinnipédier").  
1904 B, 447.
- Sclater, P. L. 1897 A, 350.
- Seeley, H. G. 1886 A, 516.
- Steinmann, G. 1907 A, 474.  
1912 A, 46 ("pinnipédier").
- Sterling, S. 1910 C, 668 ("pinnipédier").
- Stromer, E. 1902 B, 561 ("pinnipédier").  
1908 B, 157 (Fissipedia, *errore*).  
1912 A, 182.
- Taschenberg, O. 1899 A, 4438.
- Terra, P. 1911 A, 292.
- Thompson, D. W. 1889 A, 226 ("pinnipèdes").
- Tornier, G. 1891 A, 153.
- Trouessart, E. L. 1904 A, 279.
- Underhill, B. M. 1910 A, 85.
- Van den Broeck, A. J. P. 1912 A, 783.
- Wagner, R. 1843 A, 12.
- Weber, M. 1886 A, 231, 240.  
1904 A, 543.
- Weber and Abel 1928 A, 343, 348, 353.
- Weber and Burlet 1927 A.
- Woodward, H. 1904 B, 163.
- Woodward, M. F. 1894 B, 436.
- Wortman, J. L. 1894 A, 157.  
1901 B, xi, 338; xii, 281.  
1902 A, xiii, 104.  
1906 A, 90.
- Zittel and Schlosser 1911 A, 399.  
1923 A, 480, 482.

# DESMATOPHOCIDÆ, new family.

DESMATOPHOCA Condon. Type *D. oregonensis* Condon.

- Condon, T. 1906 A, 5.  
 Lydekker, R. 1907 C, 452.  
 1908, Internat. Cat. Sci. Lit. for 1906,  
 Mamm., 68 (Desmatognathus).  
 Matthew, W. D. 1915 A, 224.  
 Weber and Abel 1928 A, 353.  
 Wortman, J. L. 1906 A, 90.

## **Desmatophoca oregonensis** Condon.

- Condon, T. 1906 A, 5, pls. i, ii.  
 1910 A, 117 ("seal"); pl. vi (Desmatophoca).  
 Hay, O. P. 1915 B, 383.  
 Kellogg, R. 1921 A, 213.  
 1922 A, 31, 59, 62, 84, tab. 1.  
 1925 B, 71, 97.  
 Lydekker, R. 1908, Internat. Cat. Sci. Lit. for 1926, Mamm., 68 (Desmatognathus).  
 Smith and Packard 1919 A, 97.  
 Wortman, J. L. 1906 A, 90.  
 Middle Miocene; Oregon.

# OTARIIDÆ Gill.

- Gill, T. 1866 A, 10, 13.  
 Hay, O. P. 1902 A, 783.  
 Abel, O. 1907 A, 227 ("ohrenrobbe").  
 1907 G, 11, fig. 8 ("ohrenrobbe").  
 1908 E, 405.  
 1912 F, 688, 689 ("otariiden").  
 1913 B, 718 ("otariiden").  
 1914 A, 81 ("otariiden").  
 1921 A, 222 ("ohrenrobbe").  
 Allen, J. A. 1870 A, 1 (Otariadæ).  
 Ameghino, F. 1906 B, 4 (Otaria).  
 Ardit, T. 1907 D, 870.  
 1912 A, 702, 703, 748.  
 Bateson, W. 1892 A, 105.  
 Beddard, F. K. 1902 A, 450.  
 Bous, J. E. V. 1914 B, 583 ("ohrenrobbe").  
 Braun, M. 1908 A, 409 ("ohrenrobbe").  
 Camerano, L. 1916 B, 9, pl. iv, figs. 8, 9 (Otaria).  
 Condon, T. 1906 A, 13.  
 Duran, A. H. G. 1878 A, 399, 407, pl. lix.  
 Eggeling, H. 1904 A, 97, fig. 38 (Otaria).  
 Elliot, D. C. 1901 A, 355.  
 Fraas, E. 1905 B, 377.  
 Giebel, C. G. 1883 A ("ohrrobbe").  
 Gill, T. 1871 C, 683 (Otariadæ).  
 Gottlieb, H. 1914 A, 189 (Otaria).  
 Gray, J. E. 1866 B, 228.  
 1869 D, 264 (Otariadæ).  
 1874 A, 24 (Otariadæ).  
 Henderson, J. 1904 A, 466 ("sea-lions").  
 Hennicke, C. 1902 A, 159, 163.  
 Hughes, L. T. 1919 A, 74.  
 Kampfen, P. N. 1905 A, 543.  
 Kellogg, R. 1921 A, 212.  
 1922 A, 26, 51, 58.  
 1925 B, 72, 97.  
 1927 C, 28.

- Küstlin, P. 1844 A ("otarien").  
 Leboucq, H. 1889 A, 573 (Otaria).  
 Leche, W. 1887 A ("otarien").  
 1900 A, 1021.  
 Le Damany, P. 1903 G, 139, fig. 5 ("otarie").  
 1906 A, 63, figs. 17, 18 ("otarie").  
 1906 B, 164 ("otarie").  
 Leriche, M. 1910 C, 370 ("otaries").  
 Leunis and Ludwig 1883 A, 203 (Otariæ).  
 Lilljeborg, W. 1860 A, 297 (Otaria).  
 Lobley, J. L. 1908 A, 200, 204.  
 Lockington, W. N. 1884 A, 470.  
 Lucas, F. A. 1904 E, 537 ("seals").  
 Matthew, W. D. 1915 A, 224.  
 Meckel, J. F. 1825 A ("seehunde").  
 Metcalf, M. M. 1904 A, 722 ("seals and sea-lions").  
 Miller, G. S. 1924 C, 162.  
 Nilsson, S. 1841 A, 328 (Otaria).  
 Owen, R. 1845 B, 505 (Otariæ).  
 Pohl, L. 1911 A, 149, pl. vii, fig. 38.  
 Rehs, J. 1914 A, 64.  
 Reynolds, S. H. 1897 A, 439, 498 (Otaria).  
 Ryder, J. 1887 B, 434, 447 (Otariæ, Otariadæ).  
 Schlosser, M. 1897 B, 18 ("robbe").  
 Schluter, P. L. 1897 A, 350.  
 Taschenberg, O. 1899 A, 4643.  
 Tornier, G. 1891 A, 162 (Otaria).  
 Trouessart, E. L. 1904 A, 279.  
 Van Beneden, P. J. 1871 A, 62 ("otaries").  
 Wagner, R. 1843 A ("seehunde").  
 Weber, M. 1904 A, 548.  
 Weber and Abel 1928 A, 343, 349.  
 Winge, H. 1896 A, 126, 128.  
 1924 A, 178, 192, 205, 208, 244 (Otariidæ, Otariini).  
 Wortman, J. L. 1894 A, 159.

ZALOPHUS Gill. Type *Otaria californiana* Lesson.

- Gill, T. 1866 A, 7.  
 Allen, J. A. 1880 A, 275.  
 Miller, G. S. 1912 B, 121.  
 1924 C, 162.

## **Zalophus** sp. indet.

- Kellogg, R. 1927 C, 33, fig. 7. Pleistocene (Early); California.

ALLODESMUS Kellogg. Type *A. kernensis* Kellogg.

- Kellogg, R. 1922 A, 26, seq.  
 Hay, O. P. 1927 D, 173, 174.

- Kellogg, R. 1927 C, 27.  
 Zittel and Schlosser 1923 A, 481.

**Alloidesmus kernensis Kellogg.**

Kellogg, R. 1922 A, 26, figs. 1-19, tab. i.  
Hanna, G. D. 1923 A, 65, pl. ix, figs. h, j, k.

Hay, O. P. 1927 D, 173, 174.

Kellogg, R. 1925 B, 71.  
Middle Miocene (Temblor); California.

**PONTOLIS True. Type *Pontoleon magnus* True.**

True, F. W. 1905 B, 253. (To replace Pontoleon preocc.).

Lydekker, R. 1907 C, 452 (Pontoleon).

Matthew, W. D. 1915 A, 224 (Pontoleon).

True, F. W. 1905 A, 47 (Pontoleon, type *P. magnus* True).  
1909 A, 144.

Kellogg, R. 1921 A, 212.

1922 A, 29, 60, tab. i.

1925 B, 97, 98, 14 figs. (This species).

Lydekker, R. 1905 C, 230.

True, F. W. 1905 B, 253.

1909 A, 144, pls. xxi-xxiii.

Middle Pliocene (Empire); Oregon.

**Pontolis magnus True.**

True, F. W. 1905 A, 48 (Pontoleon).

Dall, W. H. 1909 A, 17.

**Pontolis sp. indet.**

Kellogg, R. 1922 A, 60, tab. i ("otarid").

Lower Pliocene; California.

**PITHANOTARIA Kellogg.**

Kellogg, R. 1925 B, 74.

**Pithanotaria starri Kellogg.**

Kellogg, R. 1922 A, 70 ("phocid").

**Type *P. starri* Kellogg.**

Kellogg, R. 1925 B, 74, pls. xii, xiii; text-figs. 1-10.

Sarmatian or Upper Miocene; California.

**PLIOPEDIA Kellogg. Type *P. pacifica* Kellogg.**

Kellogg, R. 1921 A, 213.

**Pliopedia pacifica Kellogg.**

Kellogg, R. 1921 A, 213, figs. 1, 4, 6-13.  
1922 A, tab. i.

Kellogg, R. 1925 B, 97.

Upper Miocene (Santa Margarita); California.

**EUMETOPIAS Gill. Type *Otaria stelleri* Lesson.**

Hay, O. P. 1902 A, 783.

Allen, J. A. 1870 A, 45.

Elliot, D. G. 1901 A, 355.

Gill, T. 1871 C, 676, 681.

Gray, J. E. 1844 A, 5 (Otaria).

1866 B, 232.

1869 D, 269.

Heilprin, A. 1887 A, 391.

Kellogg, R. 1922 A, 28, seq.

1925 B, 102.

1927 C, 27.

Lockington, W. N. 1884 A, 471.

Miller, G. S. 1912 B, 121.

1923 A, 9, 10, pl. ii, fig. 2; pl. iii, fig. 1.

1924 C, 162.

Owen, R. 1845 B, 509, pl. cxxxii (Otaria).

Ryder, J. 1887 B, 439.

Taschenberg, O. 1899 A, 4569.

True, F. W. 1909 A, 145.

Weber, M. 1904 A, 549 (Otaria).

Weber and Abel 1928 A, 342, 346, 351, fig. 208.

**Eumetopias jubata (Schreber).**

Schreber, J. C. D. 1776, Säugethiere, III, 7 (Phoca).

Hay, O. P. 1902 A, 733 (E. stelleri).

Allen, J. A. 1870 A, 46, pl. i; pl. ii, figs. 9-15 (E. stelleri).

Doran, A. H. G. 1878 A, 400 (E. stelleri).

Elliot, D. G. 1901 A, 355, pl. xxxix (E. stelleri).

Gill, T. 1871 C, 681 (E. stelleri); 679 (Otaria jubata).

Gray, J. E. 1844 A, 5 (E. stelleri).

1866 B, 237 (E. stelleri).

1874 A, 25 (E. stelleri).

Hanna, G. D. 1923 A, 63.

Hay, O. P. 1927 D, 302 (E. stelleri); 305 (E. jubata).

Kellogg, R. 1921 A, 212, figs. 2, 5.

1922 A, 37, 61, tab. i (E. stelleri).

1925 B, 99, 15 figs.

1927 C, 35, 36.

Lockington, W. N. 1884 A, 471, fig. 220 (E. stelleri).

Matsumoto, H. 1926 A, 13, pl. vi (E. stelleri).

Miller, G. S. 1912 B, 121.

1924 C, 162.

Palaeký, J. 1902 C, 252 (E. stelleri).

Trouessart, E. L. 1904 A, 279.

Van Beneden, P. J. 1877 A, 9, 10, 13 (E. stelleri).

Recent; North Pacific to Patagonia: Pleistocene (?); California, Japan.

**DUSIGNATHUS Kellogg. Type *D. santacruzensis* Kellogg.**

Kellogg, R. 1927 C, 27.

**Dusignathus santacruzensis Kellogg.**

Kellogg, R. 1927 C, 27, figs. 1-7.

Upper Miocene (Santa Margarita); California.

## ODOBENIDÆ Palmer.

- Palmer, T. S. 1904 A, 833.  
 Hay, O. P. 1902 A, 788.  
 Abel, O. 1914 A, 81 ("trichechiden").  
 Allen, J. A. 1870 A, 20 (Rosmaridæ).  
 1880 A, 5, 17 (Odobenidæ).  
 Arldt, T. 1907 D, 246, 265 (Trichechidæ).  
 1912 A, 748.  
 Beddard, F. E. 1902 A, 451 (Trichechidæ).  
 Berry and Gregory 1906 A, 448 (Odobænidæ).  
 Boas, J. E. V. 1914 B, 583 ("walrosse").  
 Bonaparte, C. L. 1832 A, 287 (Trichechidæ).  
 Carus, J. V. 1875 A, 133 (Trichechina).  
 Cuvier, F. 1825 A, 233 ("morses").  
 Elliot, D. G. 1901 A, 357 (Trichechidæ).  
 Gervais, P. 1859 A, 275 ("trichichidés").  
 Gill, T. 1871 C, 676, 682 (Rosmariadæ).  
 Gray, J. E. 1821 A, 302 (Trichechidæ).  
 1825 A, 340 (Trichechidæ).  
 Hasse, C. 1910 A, 298 ("morses").  
 Hoernes, R. 1886 A, 697 (Odobenidæ).  
 Hogben, L. T. 1919 A, 74 (Trichechidæ).  
 Kampfen, P. N. 1905 A, 545 (Trichechidæ).  
 Kellogg, R. 1922 A, 46, 98.  
 Kükenthal, W. 1913 A, 502 (Trichechidæ).  
 Lounis and Ludwig 1883 A, 202 (Trichechina).  
 Lobley, J. L. 1908 A, 200 (Trichechidæ).  
 Lockington, W. N. 1884 A, 467 (Trichechidæ).  
 Martins, C. 1872 A, 307 ("morses").  
 Matthew, W. D. 1915 A, 224 ("walruses").  
 Meckel, J. F. 1825 A ("wallrosse").  
 Miller, G. S. 1912 B, 126.  
 1924 C, 167.  
 Osborn, H. F. 1910 B, 533 (Odobænidæ).  
 Reynolds, S. H. 1897 A, 557, 558 (Trichechidæ).  
 Rutten, L. 1907 A, 798 ("trichechiden").  
 1907 B, 2 ("trichechids").  
 Slater, P. L. 1897 A, 350 (Trichechidæ).  
 Sokolowsky, A. 1908 A, 237 ("walrosse").  
 Terra, P. 1911 A, 294 (Trichechidæ).  
 Trouessart, E. L. 1904 A, 281 (Trichechidæ).  
 Van Beneden, P. J. 1877 A, 23 (Trichecina);  
 39 ("trichichides").  
 Wallace, A. R. 1876 A, 11, 203 (Trichechus).  
 1894 A, 435 (Trichechidæ).  
 Weber and Abel 1928 A, 343, 351.  
 Wichmann, C. E. A. 1907 A, 798 ("trichechiden").  
 Winge, H. 1924 A, 178, 208 (Trichechini).  
 Zittel and Schlosser 1911 A, 400.  
 1923 A, 483 (Trichechidæ).

## PROROSMARUS Berry and Gregory.

- Berry and Gregory 1906 A, 444.  
 Kellogg, R. 1922 A, 52, 56, 84, 100.  
 Weber and Abel 1928 A, 358.

Type *P. allenii* Berry and Gregory.

## PROROSMARUS allenii Berry and Gregory.

- Berry and Gregory 1906 A, 444, 447, figs. 1, 4.  
 Clark and Miller 1912 A, 167, 168 (Prorosmarus).  
 Kellogg, R. 1922 A, 26, 47, 100, tab. i.  
 Upper Miocene (Yorktown); Virginia.

ODOBENUS Brisson. Type *Phoca rosmarus* Linnæus.

Unless otherwise indicated the authors cited use for this genus the name *Trichechus*.

- Hay, O. P. 1902 A, 784 (Odobenus).  
 Abel, O. 1907 A, 227 ("walross").  
 1910 B, (186) ("walross").  
 1912 F, 465 ("walross"); 705.  
 Allen, J. A. 1870 A, 23 (Rosmarus).  
 Anderson, R. J. 1902 A, 119, fig. 8.  
 Bardsleben, K. 1889 A, 107 ("walross").  
 Beddard, F. E. 1902 A, 451.  
 Berry and Gregory 1906 A, 444 (Odobænus).  
 Bonadoff, E. J. 1871 A, 318.  
 Bronn, H. G. 1849 A, 719.  
 Carus, V. 1875 A, 133.  
 Cuvier, F. 1825 A, 234, pl. xci ("morses").  
 Cuvier, G. 1803 A, 165 ("morse").  
 1806 A.  
 Doran, A. H. G. 1878 A, 401, pl. lix.  
 Eimer, G. H. T. 1901 A, 262.  
 Elliot, D. G. 1901 A, 358, 513.  
 Fraas, E. 1905 B, 377.  
 Gervais, P. 1859 A, 275.  
 Giebel, C. G. 1855 A, 82.  
 1878 C, 853 ("wallross").  
 1883 A, pls. xxxvi, lxi, lxxiv, lxxii.  
 Gill, T. 1871 C, 683 ("walrus").  
 Gottlieb, H. 1914 A, 189.  
 Gray, J. E. 1844 A, 3 (Trichechus).  
 1866 B, 229 ("morse").  
 Gregory, W. K. 1920 A, 157, fig. 100 (Odobænus).  
 Hasse, G. 1910 A, 298 ("morse").  
 1911 A, 172.  
 Hasse and Schwarck 1870 A, 105, figs. 32-34.  
 Heilprin, A. 1887 A, 391 (Trichechus).  
 Hoernes, R. 1886 A, 697.  
 1912 A, 661.  
 Kellogg, R. 1922 A, 31, 54.  
 Kingsley, J. S. 1925 A, 296, fig. 319 ("walrus").  
 Küstlin, O. 1844 A.  
 Lankester, E. R. 1880 A, 144.  
 Larger, R. 1913 A, 708 ("morses").  
 Lataste, F. 1887 A, 270 ("morse").  
 Leboucq, H. 1889 A, 573.  
 1904 A, 122.  
 Leche, W. 1887 A (Rosmarus).  
 Le Damany, P. 1906 B, 164 ("morses").  
 Lounis and Ludwig 1883 A, 202.  
 Lockington, W. N. 1884 A, 468.  
 Lucas, J. P. 1872 A, 370.  
 Martins, C. 1857 A, 69 ("morses").  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1912 B, 126 (Odobenus).  
 1924 C, 167 (Odobænus).  
 Nilsson, S. 1841 A, 321.  
 Osborn, H. F. 1910 B, 449, 487, 489, 490, 533 (Odobænus).  
 Owen, R. 1845 E, 126 ("walrus").  
 Palmer, T. S. 1904 A, 470, 834 (Odobenus).  
 Pander and Alton 1826 A, 6.  
 Peters, W. 1872 A, 151 (Odobænus).  
 Pictet, F. J. 1853 A, 223.



- Retzius, A. 1837 A, 491.  
 Reynolds, S. H. 1897 A, 558.  
 Rutten, L. 1907 A, 798.  
 1907 B, 2.  
 Ryder, J. 1887 B, 431, fig. 3 ("walrus").  
 Schmidt, O. 1886 A, 287.  
 Scott, W. B. 1917 A, 32, 130 ("walrus").  
 Seeley, H. G. 1876 C, 177 ("walrus").  
 Steenstrup and Sundevall 1860 A, 270 (*Odobenus*, *Odontobænus*).  
 Steinmann, G. 1908 A, 262, figs. 169, 172.  
 Stromer, E. 1902 B, 555.  
 Taschenberg, O. 1899 A, 4697.  
 Terra, P. 1911 A, 294.  
 Trouessart, E. L. 1904 A, 281.  
 Turner, H. N. 1848 A, 84 ("walrus").  
 Weber and Abel 1928 A, 345, 351.  
 Wichmann, C. E. A. 1907 A, 798.  
 Wilder, B. 1872 B, 319.  
 Winge, H. 1924 A, 178, 208, 244.  
 Zittel and Schlosser 1923 A, 483.
- Odobenus divergens* (Illiger).**  
*Illiger, J. C. W.* 1815, Abh. Akad. Wiss. Berlin, 1804-1811 (1815), 68 (*Trichechus*).  
*Barrett-Hamilton, G. E. H.* 1897 A, 266 (*Trichechus obesus*).  
*Elliot, D. G.* 1901 A, 358 (*Trichechus obesus*).  
*Hanna, G. D.* 1919 A, 220 ("walrus." This species?).  
*Kellogg, R.* 1922 A, 212.  
*Matsumoto, H.* 1926 A, 15, pl. vii (*Odobænus obesus*).  
*Miller, G. S.* 1912 B, 126 (*O. obesus*).  
 1924 C, 167.  
*Quackenbush, L. S.* 1909 A, 92, 125, 127 (*O. sp. indet.*).  
*Solater, P. L.* 1897 A, 350 (*Trichechus obesus*).  
*Stejneger, L.* 1919 A, 145.  
 1928 A, 157.  
*Trouessart, E. L.* 1904 A, 282 (*Trichechus obesus*).  
*Weber and Abel* 1928 A, 351 (*O. obesus*).  
 Recent; coast of northeastern Asia and northern coast of Alaska: Pleistocene; Nome, Alaska; St. Paul Island, in Behring Strait.
- Odobenus rosmarus* (Linnaeus).**  
 Unless otherwise indicated the authors cited use the genus name *Trichechus*.  
*Hay, O. P.* 1902 A, 784 (*Odobenus*).  
*Abbott, C. C.* 1881 A, 483 ("walrus").  
*Abel, O.* 1902 B, 515.  
*Anonymous* 1912 B, 269.  
*Ardt, T.* 1907 D, 265.  
*Beddard, F. E.* 1900 A, 320 ("walrus").  
*Berry and Gregory* 1906 A, 445, figs. 2, 4 (*Odobænus*).  
*Boyd, C. H.* 1882 A, 234 ("walrus").  
*Bradley, O. C.* 1903 B, 50-52 ("walrus").  
*Brandt and Woldrich* 1887 A, 57.  
*Clapp, F. G.* 1908 A, 522 (*Rosmarus obesus*).  
*Cleland, J.* 1903 A, 647 ("walrus").  
*Cuvier, G.* 1825 A, iv, 280 (*Trichechus*); v, 2, 521, pl. xxxiii ("morse").  
*Dall, W. H.* 1894 A, 297 (*Rosmarus sp.* This species?).  
*Dana, J. D.* 1863 A, 3 ("walrus").
- Elliot, D. G.* 1901 A, 358, pl. xii.  
*Eudes-Deslongchamps, E.* 1836 A, 134.  
*Fischer, J. B.* 1829 A, 243.  
*Gervais, P.* 1852 A, 140.  
 1859 A, 275.  
*Gray, J. E.* 1844 A, 3.  
*Hasse, G.* 1910 A, 298.  
*Hay, O. P.* 1916 B, 330 ("walrus").  
 1919 D, 364 ("walrus").  
 1923 A, 492 (*Odobenus*).  
 1927 C, 282 ("walruses").  
*Huard, V. A.* 1908 A, 51 (*Odobænus*).  
*Kellogg, R.* 1922 A, 50.  
*Lankester, E. R.* 1880 A, 144.  
*Leche, W.* 1887 A, 603 (*Rosmarus arcticus*).  
*Lewis, H. C.* 1881 A, 544 ("walrus").  
 1883 B, 366, 374 ("walrus").  
*Lockington, W. N.* 1884 A, 468, fig. 219.  
*Lull, R. S.* 1917 A, 477.  
*Lyell, C.* 1845 B, i, 258, pl. v, fig. 1.  
*Matschie, P.* 1901 A, 308.  
*Matthew, W. D.* 1912 G, 269.  
*Miller, G. S.* 1912 B, 126 (*Odobenus*).  
*Moreau, L. J.* 1900 A, 112 (*Odobænus rosmarus*).  
*Newberry, J. S.* 1871 C, 316 ("walrus").  
*Newton, E. T.* 1882 A, 27.  
*Nilsson, S.* 1841 A, 322.  
*Owen, R.* 1845 B, 510, pl. cxxii, fig. 8.  
 1868 A, 912.  
*Packard, A. S.* 1867 A, 243, 246, 268 (*Odobenus*).  
 1868 B, 268 ("walrus").  
*Palacký, J.* 1902 C, 252.  
*Pander and Alton* 1826 A, 10, pls. i, ii.  
*Pohl, L.* 1911 A, 150, pl. vii, fig. 38.  
*Provancher, l'abbé* 1869 A, 19.  
*Rutten, L.* 1907 A, 807 ("walrus").  
 1907 B, 2.  
*Sclater, P. L.* 1897 A, 350.  
*Sokolowsky, A.* 1908 A, 241.  
 1909 A, 636 ("walrus").  
*Stejneger, L.* 1928 A, 157.  
*Stone, G. H.* 1899 A, 54, 287 ("walrus").  
*Van Beneden, P. J.* 1871 A, 67.  
 1877 A, 71.  
*Weber, M.* 1904 A, 549, 550, fig. 408.  
*Weber and Abel* 1928 A, 344, 350, figs. 210, 214.  
*Wichmann, C. E. A.* 1907 A, 802.  
*Winge, H.* 1904 A, 237.  
*Wright, G. F.* 1905 A, 18 ("walrus").  
 1911 A, 282 ("walrus").  
 1911 C, 42 ("walrus").  
 Recent; Arctic regions to Labrador: Pleistocene; Labrador, Nova Scotia, Massachusetts, New Jersey, North Carolina, South Carolina.
- Odobenus virginianus* (De Kay).**  
*Hay, O. P.* 1902 A, 784.  
*Kellogg, R.* 1922 A, 50, 104, tab. i (*Odobeno-therium*).  
*Rhoads, S. N.* 1903 A, 233 (*Rosmarus*).  
*Toula* 1897 A, 50, 55 (*Trichechus*).  
 Pleistocene; Virginia.
- Odobenus sp. indet.***  
*McAdams, W.* 1863 A, lxxx ("walrus." Alton, Ill. Certainly something else).

## PHOCIDÆ Gray.

- Gray, J. E. 1825 A, 340.  
 Hay, O. P. 1902 A, 784.  
 Abel, O. 1912 F, 124 ("phociden").  
 1913 B, 718 ("phociden").  
 1914 A, 81 ("phociden").  
 Allen, J. A. 1902 C, 459.  
 Arldt, T. 1907 D, 673.  
 1912 A, 702.  
 Ash, F. H. 1908 A, 79 ("seals").  
 Bateson, W. 1892 A, 105.  
 Beddard, F. E. 1902 A, 452.  
 Bolk, L. 1913 A, 103 ("phociden").  
 Bonaparte, C. L. 1832 A, 287.  
 Branca, W. 1915 A, 50.  
 Carus, V. 1875 A, 134 (Phocina).  
 Cleland, J. 1903 A, 646 ("seals").  
 Condon, T. 1906 A, 13.  
 Cuvier, F. 1824 A, 174 ("phoques").  
 1825 A, 113 ("phoques").  
 Cuvier, G. 1825 A, v, pt. 1, 198-234.  
 Dependorf, T. 1907 C, 108 ("phociden").  
 Doran, A. H. G. 1878 A, 402.  
 Du Bus, B. 1867 A, 565 ("phoques").  
 Duvernoy, Y. L. 1822 A, 49 ("phoques").  
 Elliot, D. G. 1901 A, 359.  
 Fawcett, E. 1918 B, pls. i-xi ("seals").  
 Fraas, E. 1905 B, 277.  
 Gervais, P. 1852 A, 137, 199 ("phoques").  
 1859 A, 269 ("phocides").  
 Gill, T. 1871 C, 683.  
 Gray, J. E. 1821 A, 302 (Phocadæ).  
 1869 E, 342.  
 Gregory, W. K. 1920 A, 158.  
 Hennicke, C. 1902 A, 158, 163.  
 Hoernes, R. 1886 A, 697.  
 Hogben, L. T. 1919 A, 74.  
 Howell, A. B. 1927 A.  
 Kampfen, P. N. 1905 A, 537.  
 Kellogg, R. 1922 A, 66, 85.  
 1925 B, 72 ("phocids").  
 Leche, W. 1887 A.  
 1902 A, 45.  
 Leunis and Ludwig 1883 A, 204 (Phocina).  
 Lobley, J. L. 1908 A, 200, 204.  
 Lockington, W. N. 1884 A, 474.  
 Lull, R. S. 1917 B, 331.  
 Martins, C. 1857 A, 69 ("phoques").  
 1872 A, 307 ("phoques").  
 Matthew, W. D. 1915 A, 224.  
 1928 B, 974, fig. 13 ("seals").  
 Meckel, J. F. 1825 A ("phoken").  
 Miller, G. S. 1912 B, 122.  
 1924 C, 163.  
 Nilsson, S. 1841 A, 301 ("phoken").  
 Osborn, H. F. 1910 B, 317, 321, 538.  
 Osburn, R. C. 1903 A, 656.  
 Owen, R. 1868 A, 900.  
 Pander and Alton 1826 A, 3 ("robben").  
 Perrier, E. 1920 A, 152 ("phoques").  
 Pohl, L. 1911 A, 151 ("phociden").  
 Rehs, J. 1914 A, 64.  
 Reynolds, S. H. 1897 A, 369, 480, 497.  
 Ryder, J. 1887 B, 446.  
 Scharff, R. F. 1911 A, 280 ("seals").  
 Schlosser, M. 1897 B, 18 ("phociden").  
 Schmidt, O. 1886 A, 287 ("seals").  
 Slater, P. L. 1897 A, 351.  
 Scott, W. B. 1917 A, 32 ("seals").  
 Stromer, E. 1902 B, 555 ("phociden").  
 1903 B, 37.  
 Thompson, D. W. 1839 A, 226 ("phocides").  
 Trouessart, E. L. 1904 A, 282.  
 True, F. W. 1905 C, 794 ("seals").  
 1906 A, 837.  
 Turner, H. N. 1820 A, 260 ("seals").  
 Van Beneden, P. J. 1871 A, 61 ("phoques").  
 1877 A, 23 (Phocina).  
 Vicq-d'Azyr, F. 1822 A, cvi (Phocini).  
 Wallace, A. R. 1876 A, i, 140; ix, 203.  
 1894 A, 435.  
 Wallisch, W. 1906 A, 308.  
 Weber, M. 1904 A, 550.  
 Weber and Abel 1928 A, 351.  
 Winge, H. 1896 A, 126, 128.  
 1924 A, 178, 192, 205, 209, 212, 244.  
 Wortman, J. L. 1894 A, 159.  
 Zittel and Schlosser 1911 A, 400.  
 1923 A, 481, 482.

## CYSTOPHORINÆ Gill.

- Gill, T. 1866 A, 4, 9.  
 Allen, J. A. 1870 A, 81.  
 Flower and Lydekker 1891 A, 605.  
 Gill, T. 1872 B, 7, 70.  
 Kellogg, R. 1922 A, 89.  
 1927 C, 28.  
 Weber and Abel 1928 A, 352.

CYSTOPHORA Nilsson. Type *C. borealis* Nilsson = *Phoca cristata* Erxleben.

- Hay, O. P. 1902 A, 785.  
 Arldt, T. 1907 D, 81.  
 Beddard, F. E. 1902 A, 453.  
 Brann, H. G. 1849 A, 719.  
 Carlsson, A. 1921 A, 72.  
 Carus, V. 1875 A, 134.  
 Eimer, G. H. T. 1901 A, 100.  
 Elliot, D. G. 1901 A, 360.  
 Flower, W. H. 1883 D, 444.  
 Gervais, P. 1852 A, 139 (Stemmatopus).  
 1859 A, 270 (Stemmatopus).  
 Gistel, C. G. 1855 A, 82, pl. xxxvi, figs. 8, 13.  
 1883 A, pl. xxxvi.  
 Gray, J. E. 1844 A, 4.  
 Gray, J. E. 1869 E, 346.  
 Heilprin, A. 1887 A, 392.  
 Hensel, R. 1879 A, 533.  
 Jacobi, A. 1921 A, 202.  
 Kampfen, P. N. 1905 A, 539, fig. 56.  
 Kellogg, R. 1922 A, 84.  
 Leche, W. 1900 A, 1022.  
 Leunis and Ludwig 1883 A, 204.  
 Leydig, F. 1859 A, 719.  
 Miller, G. S. 1912 B, 125.  
 1924 C, 166.  
 Nilsson, S. 1841 A, 323.  
 Owen, R. 1845 B, 505.  
 Palmer, T. S. 1904 A, 213, 835.

- Slater, P. L. 1897 A, 351.  
 Terra, P. 1911 A, 292, fig. 116.  
 Trouessart, E. L. 1904 A, 282.  
 Van Beneden, P. J. 1871 A, 67.  
 Wallace, A. R. 1876 A, 11, 204.  
 Weber and Abel 1928 A, 352  
 Wilder, B. 1872 B, 319.  
 Winge, H. 1895 B, 76, 92.  
     1896 A, 128.  
     1924 A, 178, 209, 244.

### **Cystophora cristata (Erxleben).**

- Hay, O. P. 1902 A, 785.  
 Bateson, W. 1892 A, 106.  
 Bishop, S. C. 1921 A, 170 (This species?).  
 Bradley, O. C. 1903 B, 50-52 ("hooded seal").  
 Cleland, J. 1903 A, 646 (Stemmatopus).  
 Cuvier, F. 1824 A, 197, pl. xii (Phoca).  
 Dall, W. H. 1894 A, 297 (C. sp. This species?).  
 Dollo, L. 1885 D, 624.  
 Doran, A. H. G. 1878 A, 402, pl. lix.  
 Elliot, D. G. 1901 A, 360, pl. xlv.  
 Flower, W. H. 1892 A, 144.  
 Gervais, P. 1852 A, 139, pl. xlii (Phoca, Stemmatopus).

- Gervais, P. 1859 A, 270, pl. xlii (Stemmatopus).  
 Giebel, C. G. 1848 A, 224 [Phoca (Cystophora) proboscidea].  
 Gray, J. E. 1844 A, 4.  
 Hartnagel and Bishop 1921 A, 82.  
 Hay, O. P. 1923 A, 26.  
 Jacobi, A. 1921 A, 206, fig. 4.  
 Kellogg, R. 1922 A, 71, tab. i (C. proboscidea).  
 Lockington, W. N. 1884 A, 477, fig. 222.  
 Lyell, C. 1845 B, 257 ("seal").  
 Meckel, J. F. 1825 A (Phoca).  
 Miller, G. S. 1912 B, 125.  
     1924 C, 166.  
 Nilson, S. 1841 A, 326.  
 Owen, R. 1845 B, 505, pl. cxxii, fig. 7 (C. proboscidea).  
     1868 A, 876.  
 Pictet, F. J. 1853 A, 233 (Phoca proboscidea).  
 Van Beneden, P. J. 1871 A, 63.  
     1877 A, 12, 17 (Cystophora); 33 (Phoca proboscidea).  
     Recent; western coast of North Atlantic; Pleistocene (Late); New York.

### **LOBODONTINÆ.**

- Allen, J. A. 1870 A, 31 (Stenorhynchidæ).  
 Gill, T. 1872 B, 7, 69 (Stenorhynchinæ).

#### **Lobodon Gray. Type *Phoca carcinophaga* Homb., Jacq.**

- Hay, O. P. 1902 A, 785.  
 Broman, I. 1920 A, 304, 16 pls.; 5 text-figs.  
 Doran, A. H. G. 1878 A, 403, pl. lix.  
 Gill, T. 1871 C, 676 (Stenorhynchus).  
 Gray, J. E. 1844 A, 2, 5 (Lobodon); 6 (Stenorhynchus).  
     1869 E, 345 (Lobodon, Stenorhynchus).  
 Kellogg, R. 1922 A, 84, 115.  
 Lehoucq, H. 1904 B, 5, figs. 2, 4, 5.  
 Owen, R. 1845 B, 506, pl. cxxxii, fig. 4 (Stenorhynchus).  
     1868 A, 909 (Stenorhynchus).  
 Winge, H. 1924 A, 178, 211, 244.

- Kellogg, R. 1922 A, 69 (Lobodoninæ).  
 Weber and Abel 1928 A, 352 (Lobodoninæ).

#### **Lobodon vetus Leidy.**

- Hay, O. P. 1902 A, 785.  
 Gray, J. E. 1866 A, 10 (Stenorhynchus).  
 Kellogg, R. 1922 A, 67, 115 (Lobodon); 68 (Stenorhynchus).  
 Palacký, J. 1902 C, 251 (Stenorhynchus).  
 Rhoads, S. N. 1903 A, 233 (Ogmorhinus).  
 Toula, F. 1897 A, 50 (Stenorhynchus).  
 Van Beneden, P. J. 1877 A, 28.  
     Upper Cretaceous (Greensand marl); New Jersey.

### **PHOCINÆ Gill.**

- Gill, T. 1866 A, 5, 8.  
 Allen, J. A. 1870 A, 31.  
 Flower and Lydekker 1891 A, 600.

- Gill, T. 1872 B, 7, 69.  
 Kellogg, R. 1922 A, 81, 84.  
 Weber and Abel 1928 A, 351.

#### **LEPTOPHOCA True. Type *L. lenis* True.**

- True, F. W. 1906 A, 836.

#### **Leptophoca lenis True.**

- True, F. W. 1906 A, 836, pl. lxxv, figs. 2-4; pl. lxxvi, figs. 1-3.  
 Kellogg, R. 1922 A, 71, 81, 123, tab. i.  
     Upper Miocene (Calvert); Maryland.

#### **PHOCA Linnæus. Type *P. vitulina* Linnæus.**

- Hay, O. P. 1902 A, 785.  
 Abel, O. 1909 D, (225).  
     1912 F, 692.  
     1921 A, 234.  
 Adloff, P. 1903 A, 367.  
 Ahrens, H. 1912 B, 49.  
 Allen, J. A. 1902 C, 461.  
 Anderson, R. J. 1900 A, 790 ("seal").

- Anderson, R. J. 1902 A, 119, fig. 5.  
     1902 B, 369, fig. 5.  
     1909 A, 745.  
 Ardit, T. 1907 D, 673.  
 Beddard, F. E. 1902 A, 452.  
 Bolck, L. 1913 A, 102.  
 Bonadoff, E. J. 1871 A, 318.  
 Broman, I. 1920 A, 307, pl. xli; 4 text-figs.

- Bronn, H. G. 1848 B, 959.  
1849 A, 719.  
Carlson, A. 1921 A, 72.  
Carus, V. 1875 A, 135.  
Cieoland, J. 1863 B, 298 ("seal").  
1903 A, 647.  
Cuvier, F. 1825 A, 117.  
Cuvier, G. 1805 A.  
Dawson, J. W. 1857 A, 414.  
Dependorf, T. 1898 A, 384.  
1907 C, 109.  
Duvernoy, G. L. 1822 A, 49.  
Eggeling, H. 1904 A, 97, fig. 39.  
Eimer, G. H. T. 1901 A, 26, 156.  
Elliot, D. S. 1901 A, 361.  
Fischer, J. B. 1829 A, 229.  
Gervais, P. 1852 A, 137.  
1859 A, 271 (Calocephalus).  
Giebel, C. G. 1855 A, 81, pl. xxxvi, figs. 10, 11, 14.  
1878 C, 853.  
1883 A, pls. xxxvi, lxxxii, xcii.  
Gottlieb, H. 1914 A, 189.  
Gray, J. E. 1844 A, 3.  
1869 E, 345 (Phoca, Pagophilus, Callocephalus).  
Hanke, H. 1914 A, 520.  
Hasse and Schwarck 1870 A, 107.  
Heilprin, A. 1887 A, 392, 393.  
Hensel, R. 1879 A.  
Hoernes, R. 1912 A, 661.  
Hrdlička, A. 1903 A, 381.  
Huxley, T. H. 1863 F, 609.  
Kampfen, P. N. 1905 A, 537, fig. 55.  
Kellogg, R. 1922 A, 84, 93.  
Klein, E. E. 1868 A, 81.  
Köstlin, O. 1844 A.  
Leboucq, H. 1904 A, 122.  
Leche, W. 1887 A, pls. xciv, xcvi.  
1900 A, 991, 1021, figs. 90, 91.  
1912 A, 73.  
Le Damany, P. 1906 B, 164 ("phoques").  
Leunis and Ludwig 1883 A, 205.  
Lockington, W. N. 1884 A, 474.  
Lucas, J. P. 1872 A, 285, 371.  
1875 A.  
Mackie, S. J. 1863 D, 347.  
Matthew, W. D. 1915 A, 224.  
Meckel, J. F. 1825 A.  
Miller, G. S. 1912 B, 122.  
1924 C, 163.  
Nilsson, S. 1841 A, 301, 309.  
Osborn, H. F. 1907 (i), 144, fig. 103.  
Owen, R. 1845 B, 505, pl. cxxxii, figs. 1, 2.  
1868 A, 899.  
Palmer, T. S. 1904 A, 532, 835.  
Pauder and Alton 1826 A, 3 ("phoken").  
Paulli, S. 1900 B, 505.  
Pohl, L. 1911 A, 151.  
Ratzius, A. 1837 A, 491.  
Ryder, J. 1887 B, 445.  
Scharff, R. F. 1911 A, 280.  
Schlosser, M. 1897 B, 19.  
1898 D, 123.  
Sciater, P. L. 1897 A, 351.  
Steenstrup and Sundevall 1860 A, 272.  
Sterling, S. 1910 A, 179.  
Strecker, C. 1837 A, 318.  
Stromer, E. 1908 A, 86.  
Taschenberg, O. 1899 A, 4656.  
Thompson, A. 1902 A, 104 ("seal").  
Tornier, G. 1891 A, 160.  
Trouessart, E. L. 1904 A, 285.  
Veith, A. 1912 A, 19.  
Wagner, R. 1843 A.  
Weber, M. 1904 A, 550.  
Weber and Abel 1928 A, 343, 351, 353.  
Weber and Burlet 1927 A, figs. 46, 106, 199.  
Wilders, B. 1868 A, 423, pl. xi, fig. 4.  
1872 B, 319.  
Winge, H. 1924 A, 178, 209, 244.  
Woodward, M. F. 1894 B, 446.  
Zittel and Schlosser 1911 A, 401.  
1923 A, 481.  
Zukowsky, L. 1922 B, 189.
- Phoca grœnlandica** Erxleben.  
*Erzleben, J. C. P.* 1777, Syst. Regni Anim., i, 588.  
Hay, O. P. 1902 A, 785.  
Allen, J. A. 1902 C, 475.  
Ami, H. M. 1897 A, 24 (Pagophilus).  
Bateson, W. 1892 A, 108, fig. 2.  
Beddard, F. E. 1902 A, 453.  
Bell, R. 1897 A, 136 A.  
Billings, E. 1856 A, 345 ("seal").  
Burlet, H. M. 1917 A, 381.  
Cieoland, J. 1903 A, 647 (P. grœnlandica).  
Coleman, A. P. 1901 C, 224 (P. grœnlandica).  
Cuvier, F. 1824 A, 186, pl. xii (P. grœnlandica).  
Dawson, J. W. 1857 A, 405, 414.  
1863 F, 920.  
1872 B, 403.  
1872 C, 99.  
1894 C, 267, fig. P. (Pagophilus).  
Doran, A. H. G. 1878 A, 401, pls. lix, lx.  
Elliot, D. G. 1901 A, 364.  
Fischer, J. B. 1829 A, 238, 576.  
Giebel, C. G. 1855 A, 81.  
Hasse and Schwarck 1870 A, 107.  
Hay, O. P. 1923 A, 493.  
1927 D, 279.  
Hrdlička, A. 1903 A, 381.  
Jackson, C. T. 1844 A, 94 ("seal." This species?).  
Kellogg, R. 1922 A, 78, 83, 123, tab. i (Pagophoca, near "grœnlandica").  
Lambe, L. M. 1904 C, 31, 39, 52.  
1912 A, 14.  
Leboucq, H. 1889 A, 573.  
Leche, W. 1893 B, 120, figs. 5-12.  
Leunis and Ludwig 1883 A, 205.  
Leydig, F. 1859 A, 719.  
Lockington, W. N. 1884 A, 476, fig. 221.  
Matthew, G. F. 1879 A, 23.  
Meckel, J. F. 1825 A.  
Miller, G. S. 1924 C, 165.  
Murie, J. 1870 B, 604, pl. xxxii.  
Nilsson, S. 1841 A, 314.  
Owen, R. 1845 B, 507.  
1868 B, 489, fig. 335.  
1868 A, 900.  
Packard, A. S. 1867 A, 261 ("seal").  
Palacký, J. 1902 C, 253.  
Pauder and Alton 1826 A, 3, pl. iii.

- Retzius, A. 1849 A, 636.  
 Schmidt, O. 1886 A, 289, fig. 51.  
 Selwyn, A. R. C. 1887 A, 46 ("harp seal").  
 Stansfield, J. 1915 A, 67 (P. *greenlandica*).  
 Stromer, E. 1902 B, 555.  
 Taylor, F. B. 1908 A, 652 ("seal").  
 Trouessart, E. L. 1904 A, 287 (Pagophoca).  
 True, F. W. 1906 A, 836; pl. lxxv, fig. 1.  
 Turner, W. 1870 A, 263 (Pagophilus).  
 Van Beneden, P. J. 1871 A, 63.  
 1877 A, 9, 13, 20, 33 (Pagophilus).  
 Weber and Abel 1928 A, 352.  
 Winge, H. 1904 A, 239.  
 Zittel and Schlosser 1911 A, 401, fig. 569.  
 1923 A, 481.

Recent; circumpolar, south to Newfoundland and Sitka?: Pleistocene (Leda clay); Quebec, Ontario.

### *Phoca hispida* Schreber.

- Schreber, J. C. D. 1775, Säugethiere, III, 312, pl. lxxxvi.  
 Allen, J. A. 1902 C, 477.  
 Cleland, J. 1903 A, 647.  
 Cuvier, F. 1824 A, 189, pl. xii.  
 Doran, A. H. G. 1878 A, 404, pls. lix, lx.  
 Elliot, D. G. 1901 A, 364.  
 Fielden, H. W. 1877 A, 488.  
 Fielden and De Rance 1878 A, 566.  
 Fischer, J. B. 1829 A, 239, 577.  
 Hay, O. P. 1923 A, 493.  
 Kellogg, R. 1922 A, 121 ("P. near hispida").  
 Lönnberg, E. 1922 A, 169, figs. 1-6.  
 Miller, G. S. 1912 B, 123.  
 1924 C, 164.

- Pander and Alton 1826 A, 3, pl. iii.  
 Turner, W. 1870 A, 263, figs. 1, 2.  
 Van Beneden, P. J. 1877 A, 14, 18 (Pagomys).  
 Zukowsky, L. 1922 B, 183, 2 figs. (Pusa).  
 Recent; Arctic Ocean south to Labrador: Pleistocene or early Recent; Grinnell Land, North Greenland.

### *Phoca? modesta* Leidy.

- Hay, O. P. 1902 A, 589 (Squalodon).  
 Kellogg, R. 1922 A, 128 (Squalodon).  
 1923 A, 3 (Squalodon); 26 (Phoca?).  
 Toulou, F. 1897 A, 53 (Squalodon).  
 Trouessart, E. L. 1897 A, 383 (Squalodon).  
 Van Beneden, P. J. 1877 A, 28.  
 Edisto marl or Upper Miocene; South Carolina.

### *Phoca vitulina* Linnæus.

- Linnæus, C. 1758 A, 38.  
 Abel, O. 1921 A, 234, fig. 84.  
 Allen, J. A. 1870 A, 25.  
 1880 A, 559, figs. 43-48.  
 1902 C, 467, figs. 1-4.  
 Ami, H. M. 1897 A, 23, 24 (This species?).  
 1901 C, 54 (This species?).  
 Barrett-Hamilton, G. E. H. 1897 A, 267.  
 Broom, R. 1918 A, 459.  
 Burlet, H. M. 1917 A, 381.

- Cleland, J. 1903 A, 647.  
 Coleman, A. P. 1901 B, 131 ("seal").  
 Cuvier, F. 1824 A, 182, pl. xii.  
 Cuvier, G. 1825 A, IV, 278; v, pt. 1, 200.  
 Doran, A. H. G. 1878 A, 404, pls. lix.  
 Duvernoy, G. L. 1822 A, 49, 165.  
 Elliott, D. G. 1901 A, 363, pl. xlix.  
 Fischer, J. B. 1829 A, 236.  
 Frey, H. 1911 A, 415.  
 Gervais, P. 1852 A, 140 (Calocephalus).  
 1859 A, 271 (Calocephalus).  
 Giebel, C. G. 1855 A, 81, pl. xxxvi, fig. 3.  
 Gray, J. E. 1869 E, 343, 345 (Calocephalus).  
 Hay, O. P. 1923 A, 493.  
 Hennicke, C. 1902 A, 158.  
 Huxley, T. H. 1863 F, 609, 633, fig. 57.  
 Kellogg, R. 1922 A, 83, 117, tab. i.  
 1925 B, 77, 78.  
 Leunis and Ludwig 1883 A, 205.  
 Leydig, F. 1859 A, 679.  
 Lockington, W. N. 1884 A, 474.  
 Lucae, J. P. 1872 A, 277, pls.  
 1875 A, 373, pls. i-x.  
 Miller, G. S. 1912 B, 123.  
 1924 C, 164 (P. v. concolor).  
 Newton, E. T. 1882 A, 29, pl. v, figs. 1, 2.  
 (This species?).  
 1891 A, 19 (This species?).  
 Nilsson, S. 1841 A, 310.  
 Pander and Alton 1826 A, 3, pl. iv.  
 Ryder, J. 1887 B, 444.  
 Taylor, F. B. 1908 A, 652 ("seal").  
 Toldt, C. 1905 A, 321, figs.  
 Toulou, F. 1897 A, 50.  
 Trouessart, E. L. 1904 A, 286.  
 Turner, W. 1870 A, 261.  
 Van Beneden, P. J. 1871 A, 62.  
 Weber, M. 1886 A.  
 Weber and Abel 1928 A, 343, 347, 352, figs. 209, 211.  
 Zukowsky, L. 1922 B, 186.

Recent; Arctic seas, ascending rivers; south to North Carolina and southern California, also in European waters: Pleistocene (Champlain); Quebec, near Ottawa.

### *Phoca wymani* Leidy.

- Hay, O. P. 1902 A, 785.  
 Clark and Miller 1912 A, 167, 168.  
 Kellogg, R. 1922 A, 74, 120, tab. i.  
 True, F. W. 1912 C, 185, 186.  
 Upper Miocene (Calvert); Maryland.

### *Phoca* sp. indet.

- Hay, O. P. 1927 D, 166. Pleistocene; California.  
 Kellogg, R. 1922 A, 45, 120 (P. sp. a). Upper Miocene (Santa Margarita sands); California.  
 1922 A, 45, 121 (P. sp. b). Pleistocene (San Pedro); California.  
 1927 C, 35 ("phocid?"). This genus? Middle Miocene (Temblor); California.  
 Miller, L. H. 1912 A, 115 ("seals"). Pleistocene (San Pedro); California.

ERIGNATHUS Gill. Type *Phoca barbata* Erxleben.

- Gill, T. 1866 A, 5.  
 Kellogg, R. 1922 A, 84.  
 Miller, G. S. 1912 B, 124.  
 1924 C, 165.  
 Trouessart, E. L. 1905 A, 285 (Subg. of Phoca).  
 Weber and Abel 1928 A, 352.  
 Winge, H. 1924 A, 178, 209, 244.
- Erignathus barbatus (Fabricius).**  
*Fabricius, O.* 1776, Müller's Zool. Dan. Prod., VIII (Phoca, *vide* Elliot).  
*Blainville, H. M. D.* 1864 A, II, 42 (Phoca).  
*Burlet, H. M.* 1917 A, 381 (Phoca).  
*Cleland, J.* 1903 A, 647 (Phoca).  
*Doran, A. H. G.* 1878 A, 405, pl. ix (Phoca).  
*Elliot, D. G.* 1901 A, 382, pl. xlv (Phoca).  
*Erxleben, J. C. P.* 1877, Syst. Regni Anim., I, 590 (*vide* G. S. Miller).
- Fielden, H. W. 1877 A, 488 (Phoca).  
 Fischer, J. B. 1829 A, 239, 577 (Phoca).  
 Gray, J. E. 1844 A, 3 (Phoca).  
 Hay, O. P. 1923 A, 493 (Phoca).  
 Kellogg, R. 1922 A, 80, 116.  
 Lockington, W. N. 1834 A, 476.  
 Miller, G. S. 1912 B, 124.  
 1924 C, 165.  
 Newton, E. T. 1891 A, 19 (Phoca, Erignathus).  
 Roger, O. 1896 A, 74.  
 Toulas, F. 1897 A, 54 (Phoca).  
 Trouessart, E. L. 1904 A, 285 (Phoca, Erignathus).  
 Turner, W. 1870 A, 267 (Phoca).  
 Van Beneden, P. J. 1877 A, 10, 13, 20 (Phoca).  
 Weber and Abel 1928 A, 347, fig. 213 (Phoca).  
 Zierler, F. E. 1905 A, 510 (Phoca).  
 Recent; Arctic seas: Pleistocene; Grinnell Land.

## Order CETE Linnæus.

- The author is indebted to Dr. Remington Kellogg for the systematic arrangement of the Cete here adopted.
- Hay, O. P. 1902 A, 585.  
 Abel, O. 1901 A, 7 ("cetacei").  
 1904 A, 183 ("cetaceen").  
 1905 B, 203, 208 ("cetacei").  
 1905 C, 375 ("cetaceen").  
 1905 E, 95 ("cetaceen").  
 1907 A, 228, 235 ("cetaceen").  
 1907 C, (80) ("cetaceen").  
 1907 G, 2, 32 ("wale").  
 1908 B, 139 ("cetaceen").  
 1910 B, (186) ("cetaceen").  
 1912 D, 600 ("wale").  
 1912 F, 178, 197 ("cetaceen"); 522 ("walen"); 665.  
 1913 B, 712, 719 ("cetaceen").  
 1913 C, 185-224.  
 1914 A, 57 ("cetaceen"); 81 ("wale").  
 1914 C, 390 ("cetaceen").  
 1919 A, 748 (Cetacea).  
 1920 A, 424 (Cetacea).  
 1921 A, 217, 299 ("walen").
- Adloff, P. 1901 C, 425 ("wale").  
 1903 A, 366.  
 1913 C, 8 ("cetaceen").  
 1917 B, 349 ("wale").  
 1920 A, 179, 188 ("cetaceen").
- Agassiz, L. 1836 B, 24 ("cetacei").  
 1844 C, 255 ("cetacei").
- Ahlborn, F. 1896 B, 7 ("wale").  
 Allen, G. M. 1916 A, 110 ("whales").  
 1921 B, 240 (Cetacea).
- Allen, J. A. 1883 A, 399.  
 1913 B, 454 (Cetacea).
- Ameghino, F. 1906 E, 240 ("cetacei").
- Anderson, R. J. 1912 D, 253.  
 1914 A, 533 (Cetacea).
- Anthony, R. 1912 A, ("cetacei").  
 1913 A, 248 ("cetacei").
- Ardt, T. 1907 D, 644 (Cetacea).
- Ash, F. H. 1908 A, 78 (Cetacea).
- Augustin, W. 1913 A, 533 ("cetaceen").
- Baer, K. E. 1834 A, 409 ("cetacei").
- Baird, G. 1877 A, 3, 44 ("cetacei").  
 Bardeleben, K. 1835 B, 85 (Cetacea).  
 Bardenheft, K. S. 1913 A, 69 (Cetacea).  
 Bateson, W. 1892 A, 103 (Cetacea).  
 Bayer, F. 1897 A, 147 (Cetacea).  
 Beddard, F. E. 1900 A.  
 1902 A, 339 (Cetacea).  
 Bertelli, D. 1909 A, 158 (Cetacei).  
 Beyer, H. 1908 A, 81, 99 ("cetaceen").  
 Black, N. 1900 A, 14 (Cetacea).  
 Bluntschli, H. 1912 B, 378 ("cetaceen").  
 1913 B, 195 ("cetaceen").  
 Boas, J. E. V. 1914 B, 577, 584 ("cetaceen").  
 Bolk, L. 1922 A, 126 (Cetacea).  
 1922 B, 56 (Cetacea).  
 Bonaparte, C. L. 1832 A, 293.  
 Bouvier, L. E. 1889 A, 232 ("cetacei").  
 1889 B, 302 ("cetacei").  
 Brandt, J. F. 1865 A, 1 (Cetacea).  
 Braun, M. 1906 B, 131 ("wale").  
 1908 A, 400 ("cetaceen").  
 Braus, H. 1906 A, 175 ("cetaceen").  
 Broom, R. 1897 B, 252 (Cetacea).  
 1899 A, 762 (Cetacea).  
 1915 A, 162 (Cetacea).  
 Burlet, H. M. 1916 A, 1 ("wale").  
 1917 A, 373 ("cetaceen").  
 Burmeister, H. 1879 B, 530 (Bipinnata).  
 Carruccio, A. 1913 B, 178 (Cetacei).  
 Carus, V. 1875 A, 163 (Natantia).  
 Carus and Engelmann 1861 A, 1292, 1720 (Cetacea).  
 Case, E. C. 1898 C, 829 (Cetacea).  
 1904 D, 3 (Cetacea).  
 Clark and Sonntag 1926 A, 459 (Cetacea).  
 Cleland, J. 1863 B, 302 (Cetacea).  
 Cope, E. D. 1835 BB, 71 (Cetacea).  
 1891 N, 67, 69 (Cetacea).  
 Cuvier, F. 1836 A, 1 ("cetacei").  
 Cuvier, G. 1805 A, ("cetacei").  
 Dana, J. D. 1868 A, 1 ("cetaceans").  
 1868 C, 333 ("cetaceans").  
 Dart, R. A. 1923 A, 615 (Cetacea).  
 Deins, A. B. 1916 B, 521 ("cetaceen").  
 Denker, A. 1902 A, 421 (Cetacea).

- Dependorf, T. 1907 A, 561 ("wale").  
 1907 C, 101 ("cetacean").  
 Dollo, L. 1884 D, 89 ("cétacés").  
 1884 E, 81 ("cétacés").  
 1899 A, 203 ("cétacés").  
 1901 A, 13.  
 1905 A, 127 ("cétacés").  
 1907 D, 159 ("cétacés").  
 1922 A, 216 ("cétacés").  
 Doran, A. H. G. 1878 A, 371, 450 (Cetacea).  
 Eastman, C. R. 1907 C, 79.  
 Eggeling, H. 1904 A, 98 (Cetacea).  
 Eimer, G. H. T. 1901 A, 257 ("cetaceen").  
 Elliot, D. G. 1901 A, 7 (Cetacea).  
 Eschricht, D. F. 1849 A ("wallthiere").  
 Fischer, J. B. 1829 A, 501.  
 Fleischmann, A. 1904 A, 483 (Cetacea).  
 Flower, W. H. 1870 A, 244 (Cetacea).  
 Fraas, E. 1904 A, 24 ("cetaceen").  
 1905 A, 1311 ("waltiere").  
 1905 B, 380 (Cetacea).  
 Frassetto, F. 1903 A, 244 (Cetacea).  
 1915 A, (Cetacea).  
 Freund, L. 1904 A, 387 ("waltiere").  
 1906 A, 118 ("cetaceen").  
 Fuchs, H. L. 1914 A, 28 ("wale").  
 Gadow, H. 1896 A, 48 (Cetacea).  
 1914 A, 503 ("cetaceans").  
 Gaupp, C. 1908 B, 525 (Cetacea).  
 1913 A, 125 ("cetaceen").  
 Gegenbaur, C. 1880 A, 592 ("cetaceen").  
 Gervais, P. 1852 A, 146 ("cétacés").  
 1853 B, 35 ("cétacés").  
 1859 A, 233 ("cétacés").  
 Gessner, I. 1921 A, 271 ("cetaceen").  
 Giebel, C. G. 1855 A, 82 (Cetacea).  
 1878 C, 853 ("cetaceen").  
 1883 A, ("cetaceen").  
 Goodsir, J. 1857 A (Cetacea).  
 1857 B ("cetaceans").  
 Gottlieb, H. 1914 A, 139 (Cetacea).  
 Gray, J. E. 1821 A, 309 (Cetaceae).  
 1825 B, 340 (Cetm).  
 1846 A, 15.  
 1863 A, 198.  
 1870 A, 193 (Cetacea).  
 1870 B, 387 (Cetacea).  
 Gregory, W. K. 1910 A, 515 (Cetacea).  
 1917 D, 624, 635 (Cetacea).  
 1920 A, 158, 243 (Cetacea).  
 Guérin, R. 1874 A, 1-145 ("cétacés").  
 Guldberg, G. 1894 A, 94 ("cetaceen").  
 1903 A, 803 ("waltiere").  
 Haeckel, E. 1868 A, 478.  
 1873 A, 544 (Cetacea).  
 Hasso and Schwarck 1870 A, 143 (Cetaceae).  
 Hay, O. P. 1923 A, 432 ("cetaceans").  
 Heilprin, A. 1887 A, 341 (Cetacea).  
 Hennicke, C. 1902 A, 159 (Cetacea).  
 Hepburn, D. 1901 A, 680 (Cetacea).  
 Hilsheimer, M. 1913 A, 570 (Cetacea).  
 Hoernes, R. 1886 A, 698 (Cetacea).  
 Hogben, L. T. 1919 A, 76 (Cetacea).  
 Rollard, H. 1864 C, 362 ("cétacés").  
 Houssay, F. 1910 A, 12 ("cétacés").  
 Howes, G. B. 1894 A, 78 (Cetacea).  
 1903 A, 326 (Cetacea).  
 Howes and Harrison 1893 A, 798 (Cetacea).  
 Hubrecht, A. A. W. 1908 A, 153 (Cetaceae).  
 Humphry, G. M. 1876 A, 665 ("cetaceans").  
 Huxley, T. H. 1863 E, 555 (Cetacea).  
 1863 F, 579, 607, 633 (Cetacea).  
 1870 F, 528, 531 (Cetacea).  
 Ihde, — 1912 A, 265 ("cetacean").  
 Jaekel, O. 1901 B, 52 ("wale").  
 1904 A, 33 ("cetaceen").  
 1908 B, 464 ("cetaceen").  
 1911 A, 230 (Cetacei).  
 Kampfen, P. N. 1905 A, 636.  
 Kellogg, R. 1924 C, 756 (Cetacea).  
 1925 D, 1-8.  
 1926 B, 405 ("whales").  
 1928 A, 30 (Cetacea).  
 Kingsley, J. S. 1925 A, 211, 296 (Cetacea).  
 Klein, E. E. 1868 A ("cetaceen").  
 Knox, R. 1831 A, 400 (Cetacea).  
 Kostlin, O. 1844 A ("cetaceen").  
 Koken, E. 1893 B, 487, 489, 506 ("walfische").  
 Kükenthal, W. 1891 C, 384 ("wale").  
 1894 B, 69 ("wale").  
 1897 B, 145 ("cetacean").  
 1897 C, 182 ("cetacean").  
 1900 A, 179 ("wale").  
 1908 A, 609 ("wale").  
 1908 C, 241 ("wale").  
 1909 A, 545 ("wale").  
 1913 A, 681 (Cetacea).  
 1914 B, 1 ("wale").  
 Kunze, A. 1912 A, 578 ("wale").  
 Lataste, F. 1887 A, 268 ("cétacés").  
 Lavocat, A. 1885 A, 20, 46 ("cétacés").  
 Leboucq, H. 1889 A, 585 ("cétacés").  
 1904 B, 15 ("cétacés").  
 Leche, W. 1887 A (Cetacea).  
 1900 A, 1026 (Cetacea).  
 Le Damany, P. 1903 D, 356 ("cétacés").  
 1903 G, 318 ("cétacés").  
 Ledouble, A. F. 1903 A, 647 ("cétacés").  
 Leunis and Ludwig 1883 A, 274 (Natantia).  
 Leydig, F. 1859 A, 679, 681 ("cetaceen").  
 Lillie, D. G. 1910 A, 760 (Cetacea).  
 Lockington, W. N. 1884 A, 178-209 (Cetacea).  
 Lönnberg, E. 1910 B, 219 ("hvalar").  
 1911 C, 13.  
 1911 D, 1-15.  
 1924 A, 1 ("whales").  
 Lucas, F. A. 1904 D, 102 ("whales").  
 Lull, R. S. 1910 D, 153 (Cetacea).  
 1917 B, 322 (Cetacea).  
 Lydekker, R. 1887 B, 7.  
 1901 B, 652 ("whales").  
 1903 D, 124 ("whales").  
 1900 D (Cetacea).  
 1910 F, 655 (Cetacea).  
 McIntosh, — 1911 A, 82 ("cetaceans").  
 Major, C. J. F. 1899 B, 64 (Cetacea).  
 Muntoll, G. A. 1844 A, 823 (Cetacea).  
 Martins, C. 1872 A, 307 ("cétacés").  
 Matthes, E. 1912 A, 594 ("wale").  
 1921 C, ("wale").  
 Matthew, W. D. 1912 A, 156 (Cetacea).  
 Mead, C. S. 1906 A, 481 (Cetacea).  
 Meckel, J. F. 1825 A ("cetaceen").  
 Mennair, W. H. 1902 A, 274 (Cetacea).  
 Miller, G. S. 1923 A, 1-70 (Cetacea).  
 1924 C, 504 (Cetacea).

- Mitchell, P. C. 1905 A, 467.  
 Mivart, St. G. 1871 B, 376, 380 (Cetacea).  
 Moodie, R. L. 1908 D, 462 (Cetacea).  
 1913 A, 185 (Cetacea).  
 Nopcea, F. 1923 B, 357 ("wale").  
 1923 H, 161, 163 ("wale").  
 Osborn, H. F. 1905 N, 242 ("cetaceans").  
 1907 G, 37, 101, 190 (Cetacea).  
 1910 B, 78, 317 (Cetacea).  
 1917 B, 322 ("whales").  
 Osburn, R. C. 1903 A, 653 (Cetacea).  
 1906 A, 448 (Cetacea).  
 Owen, R. 1845 E, 120 (Cetacea).  
 1857 E (Cetacea).  
 1858 A, 26 (Cetacea).  
 1868 A, 871 (Cetacea).  
 1870 D, 1 (Cetacea).  
 Palnecký, J. 1902 C, 255 ("cetaceen").  
 Pander and Alton 1827 A, 1 ("cetaceen").  
 Parker and Haswell 1897 A, 450, 471, 499 (Cetacea).  
 Perrier, E. 1920 A, 152 ("cétacés").  
 Pietet, F. J. 1853 A, 380 ("cétacés").  
 Pompeckj, J. F. 1925 A, 10 ("wale").  
 Purcioni, N. 1908 A, 42 (Cetacei).  
 Pütter, A. 1923 A, 224 ("wale").  
 Ruhl, C. 1903 A, 155 ("cetaceen").  
 Reche, O. 1905 B, 150 ("wale").  
 Rehs, J. 1914 A, 2, 41 (Cetacea).  
 Retzius, A. 1840 A, 670 (Cetacea).  
 Reynolds, S. H. 1897 A, 353, 444, 452, 513, 536 (Cetacea).  
 Römer, F. 1904 A, 77 ("wale").  
 Röse, C. 1892 F, 402 ("wale").  
 1892 G, 145 ("wale").  
 Rutland, J. 1901 A, 21032.  
 Ryder, J. 1885 G, 1013 (Cetacea).  
 1887 A, 346 (Cetacea).  
 1887 B.  
 Sabatier, A. 1897 B, 933 ("cétacés").  
 1902 A, 100 ("cétacés").  
 Schlosser, M. 1899 I, 353 ("cetaceen").  
 1900 C, 133 ("cetaceen").  
 Schmidt, O. 1886 A, 246 (Cetacea).  
 Selater, P. L. 1875 A, 209 (Cetacea).  
 Scott, W. B. 1913 A, 60, 123, 125, 442 (Cetacea).  
 1917 A, 67, 69, 78 (Cetacea).  
 Seeley, H. G. 1872 A, 275 ("cetaceans").  
 1876 C, 156 ("whales").  
 Serrek, M. 1852 A, 122, 144 ("cétacés").  
 Smith, G. E. 1903 A, 326 (Cetacea).  
 1903 B, 46 (Cetacea).  
 Steinmann, G. 1907 A, 468 (Cetacea).  
 1908 A, 234 ("wale").  
 1909 A, 83 ("cetaceen").  
 1912 A, 45 ("wale").  
 Steinmann, G. 1912 B, 718 ("cetaceen").  
 Sterling, S. 1910 A, 179 ("wielorybów").  
 1910 B, 231 ("wielorybów").  
 Stromer, E. 1902 B, 555 ("cetaceen").  
 1908 B, 157 (Cetacea).  
 1912 A, 184, 244 (Cetacea).  
 1915 A, 131 (Cetacea).  
 Symington, J. 1905 A, 100 (Cetacea).  
 Taschenberg, O. 1899 A, 4427 (Cetacea).  
 Terra, P. 1911 A, 341 (Cetacea).  
 Thacker, A. G. 1914 A, 283 ("whales").  
 Thomas, O. 1888 A, 458 (Cetacea).  
 Thompson, D. W. 1889 A, 225 ("cétacés").  
 Tims, H. W. 1905 B, 1785 (Cetacea).  
 Tredgold, A. F. 1897 A, 295 (Cetacea).  
 Trouessart, E. L. 1905 A, 753.  
 Troxell, E. L. 1925 D, 613 ("cetaceans").  
 True, F. W. 1908 B, 385.  
 1912 C, 197 (Cetacea).  
 1912 E, 779 ("cetaceans").  
 Turner, W. 1871 A, 348 (Cetacea).  
 Van Bambeke, C. 1868 A, 20 ("cétacés").  
 Van Bemmelen, J. F. 1914 A, 524 (Cetacea).  
 1918 A, 575 (Cetacea).  
 1928 A, 288 ("cétacés").  
 Van Beneden, P. J. 1836 A, 158 ("cétacés").  
 1836 B, 318 ("cétacés").  
 1871 A, 61 ("cétacés").  
 Vaughan, T. W. 1924 A, 688 (Cetacea).  
 Vicq-d'Azyr, F. 1792 A, lxxvi ("cétacés").  
 Wagner, R. 1843 A, 12 (Cetacea).  
 Wallace, A. R. 1876 A, i, 112, 119, 130, 140 (Cetacea); ii, 207 (Cetacea).  
 Watson, D. M. S. 1913 D, 27 ("whales").  
 Weber, M. 1886 A (Cetacea).  
 1904 A, 552 (Cetacea).  
 Weber and Abel 1928 A, 354, 388 (Cetacea).  
 Weber and Burlet 1927 A (Cetacea).  
 Wilder, B. 1872 B (Cetacea).  
 1875 A, 105 ("cetaceans").  
 Williston, S. W. 1902 F, 268 ("cetaceans").  
 1912 E, 261 (Cetacea).  
 1914 A, 62 (Cetacea).  
 1925 A, 199 (Cetacea).  
 Winge, H. 1919 A (Cetacea).  
 Winge and Miller 1921 A (Cetacea).  
 Woodward, A. S. 1898 E, 330 (Cetacea).  
 1909 A, 330 (Cetacea).  
 1910 B, 470 (Cetaceen).  
 Woodward, H. 1904 B, 154.  
 Wyman, J. 1867 B, 259, 261, 269 (Cetacea).  
 Zanijer, T. 1894 A, 339.  
 Zittel, K. A. 1877 A, 237 ("cetaceen").  
 Zittel and Schlosser 1911 A, 401 (Cetacea).  
 1923 A, 488.

## Suborder ZEUGLODONTES Gill.

Unless otherwise indicated the writers, as cited, use for this suborder the name *Archæoceti*.

- Gill, T. 1871 A, 269 (Zeuglodontes).  
 Hay, O. P. 1902 A, 585 (Zeuglodontes).  
 Abel, O. 1901 A, 80 ("zeuglodontes").  
 1901 B, 315 ("zeuglodontes").  
 1905 A, 22 ("archæocetes").  
 1905 C, 375 ("archæoceten").  
 1905 E, 95 ("archæoceten").

- Abel, O. 1912 F, 467, 660.  
 1913 B, 719.  
 1913 C, 182, 199, 211, 219.  
 1914 A, 81.  
 1914 D, 30.  
 1919 A, 749.  
 1920 A, 424.  
 Ameghino, F. 1889 A, 1027 (Zeuglodonta).  
 1906 E, 287 ("zeuglodontes").



- Andrews, C. W. 1906 A, xxiii ("zeuglodonts").  
 1907 C, 304 ("zeuglodonts").  
 1908 B, 209.  
 1908 C ("zeuglodonts").  
 Arldt, T. 1907 D, 144.  
 Beddard, F. E. 1900 A, 106, 308.  
 1902 A, 384.  
 Bluntschli, H. 1912 B, 398 ("zeuglodontiden").  
 Boas, J. E. V. 1914 B, 584 ("zeuglodonten").  
 Carus, V. 1875 A, 168 (Zeuglodontia).  
 Case, E. C. 1904 D, 4.  
 Cope, E. D. 1891 N, 69.  
 Fraas, E. 1904 A, 3 ("zeuglodonten").  
 1905 A, lxiii ("zeuglodonten").  
 1905 B, 361, 383.  
 Gervais, P. 1852 A, 199 ("zeuglodontes").  
 1871 B, 80 ("zeuglodontes").  
 Gregory, W. K. 1910 A, 411, 416-419 (Zeuglodontes).  
 1920 A, 243.  
 Hoernes, R. 1886 A, 89 (Zeuglodontia).  
 Howes, G. B. 1903 A, 322.  
 Jaekel, O. 1911 A, 203.  
 Kellogg, R. 1926 B, 406 ("zeuglodonts").  
 1928 A, 29, 36.  
 Lydekker, R. 1892 C, 560 ("zeuglodonts").  
 1907 E, 679 ("zeuglodonts").  
 1910 F, 655 ("zeuglodonts").  
 McIntosh, — 1911 A, 93 ("zeuglodonts").  
 Matthew, W. D. 1909 D, 315.  
 Miller, G. S. 1923 A, 12, 13, 40, 42.  
 Nopcsa, F. 1923 B, 354 ("zeuglodonten").  
 Osborn, H. F. 1902 E, 356, fig. 1.  
 1906 B, 56 (Zeuglodontia).  
 1907 H, 613 (Zeuglodontia).  
 1910 B, 73, 559 (Zeuglodontia).  
 Osborn, H. F. 1917 B, 241.  
 1925 B, 18.  
 Parker and Haswell 1897 A, 450.  
 Peterson, O. A. 1912 B, 164 ("zeuglodonten").  
 Pompeckj, J. F. 1922 A, 78.  
 Reynolds, S. H. 1897 A, 356, 426, 461.  
 Ryder, J. 1887 B, 430 (Phocodontia, Zeuglodontia).  
 Schmidt, O. 1886 A, 251 (Zeuglodonta).  
 Smith, G. E. 1903 A, 322.  
 1903 B, 41.  
 Steinmann, G. 1908 A, 249.  
 1912 B, 727.  
 Stromer, R. 1903 B, 39.  
 1903 D, 91 ("zeuglodonten").  
 1908 A, 81.  
 1908 B, 106, 148.  
 1912 A, 187.  
 1915 A, 134.  
 1916 A, 413.  
 1921 A, 41, 55.  
 Thompson, D. W. 1889 A, 225 (Zeuglodontes).  
 Trouessart, E. L. 1903 A, 306 (Zeuglodontes).  
 1905 A, 753 (Zeuglodonta).  
 True, F. W. 1908 B, 386.  
 1912 D, 197 (Zeuglodontia).  
 Weber, M. 1904 A, 581, 583.  
 Weber and Abel 1928 A, 396.  
 Winge, H. 1919 A, 68.  
 Winge and Miller 1921 A, 10.  
 Woodward, A. S. 1898 B, 270.  
 1909 A, 330 ("zeuglodonts").  
 1910 B, 470 ("zeuglodonts").  
 Zittel and Schlosser 1911 A, 405.  
 1923 A, 487.

## DORUDONTIDÆ Miller.

Miller, G. S. 1923 A, 13, 40.

Kellogg, R. 1928 A, 32.

DORUDON Gibbes. Type *D. serratus* Gibbes.

- Hay, O. P. 1902 A, 587.  
 Abel, O. 1913 C, 205.  
 Fraas, E. 1905 B, 385 (Doruodon).  
 Kellogg, R. 1928 A, 32.  
 Lucas, F. A. 1901 C, 619.  
 Palmer, T. S. 1904 A, 244, 791.  
 Stromer, E. 1908 B, 148.  
 Winge and Miller 1921 A, 62 (Doryodon).  
 Zittel and Schlosser 1923 A, 488 (Syn. of Basilosaurus).

*Dorudon serratus* Gibbes.

- Hay, O. P. 1902 A, 587.  
 Abel, O. 1913 C, 204.  
 Allen, G. M. 1926 A, 459.  
 Kellogg, R. 1924 C, 758.  
 Lydekker, R. 1892 C, 559 (Zeuglodon hydrarchus).  
 Mannigault, G. E. 1887 A, 187.  
 Trouessart, E. L. 1905 A, 754.  
 True, F. W. 1908 C, 65, pls. i-iii; 2 text-figs.  
 Tuomey, M. 1848 A, 156 ("Zeuglodon"); 166 (Zeuglodon).  
 1850 B, 156 ("Zeuglodon").  
 Upper Eocene (Cooper marl); South Carolina.

ZYGORHIZA True. Type *Zeuglodon brachyspondylus minor* Stromer.

- True, F. W. 1908 C, 78.  
 Kellogg, R. 1928 A, 32.  
 Winge and Miller 1921 A, 62.  
*Zygorhiza minor* (Stromer).  
 Stromer, E. 1903 D, 85 (Zeuglodon brachyspondylus minor).

- Kellogg, R. 1928 A, 40, 41.  
 Müller, J. 1849 A, 28, 31, 32, pl. viii, fig. 3; pl. xix, figs. 1-5; pl. xxvi; pl. xxvii, fig. 1 ("kleineres Individuum").  
 True, F. W. 1908 C, 78 (Zeuglodon brachyspondylus minor).  
 Upper Eocene (Jackson); Alabama.

## BASILOSAURIDÆ Cope.

Cope, E. D. 1887 C, 144.

Unless otherwise indicated the writers, as cited,  
use for this family the name Zeuglodontidæ.

Hay, O. P. 1902 A, 586 (Basilosauridæ).

Abel, O. 1907 G, 19, fig. 13 (Prozeuglodon).

1913 B, 719.

1913 C, 219.

1919 A, 751.

Ameghino, F. 1889 A, 1027.

Andrews, C. W. 1906 A, 234.

1907 A, 125.

Ardt, T. 1907 D, 689.

1912 A, 702, 703.

Beddard, F. E. 1902 A, 384.

Brandt, J. F. 1873 A, 334 (Stegorhinidæ).

Burmeister, H. 1879 B, 531.

Dart, R. A. 1923 A, 615, 635.

Giebel, C. G. 1855, Säuegeriere, 148.

Kampfen, P. N. 1905 A, 652.

Kellogg, R. 1928 A, 32, 206 ("zeuglodonts").

Lönnberg, E. 1911 A, 67.

Lydekker, R. 1909 D, 43.

Miller, G. S. 1923 A, 13, 40.

Osburn, R. C. 1903 A, 652.

Palacky, J. 1902 B, 140 ("zeuglodontiden").

Palmer, J. S. 1904 A, 729, 791 (Basilosauridæ);  
776, 791 (Zeuglodontidæ).

Reche, O. 1905 B, 184.

Stromer, E. 1903 B, 36 ("zeuglodonten").

1903 A, 86.

1908 B, 148.

1915 A, 136 (Zeuglodontidæ, Zeuglodontinæ).

Terra, P. 1911 A, 344.

Trouessart, E. L. 1905 A, 753.

Van Beneden, P. J. 1880 A, 30 ("zeuglodons").

Wallace, A. R. 1876 A, II, 210.

Weber, M. 1904 A, 581.

Wiman, C. 1905 A, 248 ("zeuglodonten").

Winge, H. 1919 A, 68, 69, 73, 103, 117.

Winge and Miller 1921 A, 10, 11, 15, 45.

Zugno, A. de 1876 A, 32 (Zeuglodonti).

Zittel and Schlosser 1911 A, 405.

1923 A, 487, 670.

BASILOSAURUS Harlan. Type *Zeuglodon cetoides* Owen.

Unless otherwise indicated the writers, as cited,  
use for this genus the name *Zeuglodon*.

Hay, O. P. 1902 A, 586 (Basilosaurus).

Abel, O. 1901 A, 8.

1901 B, 287.

1902 B, 518, pl., fig. 1.

1905 A, 23.

1905 B, 203.

1905 C, 384.

1905 E, 84.

1908 B, 458 (*Alabamornis*, type *A. gigantea*  
Abel).

1907 C, (80).

1907 G, 20, fig. 14.

1908 A, 486, fig. 14.

1912 F, 477, fig. 390.

1912 G, 70.

1913 B, 719, fig. 22.

1913 C, 161, 178, 202, fig. 14, pl. ix.

1914 A, 84, figs. 46, 47.

1914 C, 390.

1919 A, 750, figs. 558, 559.

1920 A, 424, fig. 643.

Andrews, C. W. 1904 A, 214.

1906 A, xxiii, 236.

1907 A, 124.

1907 C, 304.

1908 B, 209.

1919 A, 310.

1923 A, 648, figs. 23, 24.

Ardt, T. 1907 D, 38.

Ash, F. H. 1908 A, 81 ("zeuglodons").

Beddard, F. E. 1900 A, 308, 320.

1902 A, 384.

Bronn, H. G. 1848 B, 1379.

1849 A, 702.

Capellini, G. 1881 A, 418.

Carus, C. G. 1847 A, 5 (Hydrarchus).

Dall, W. H. 1898 A, 342.

Dal Piaz, G. 1903 A, 219.

Dart, R. A. 1923 A, 616, figs. 1-21.

Fraas, E. 1904 A, 3.

1905 B, 383.

Goinitz, H. B. 1847 B, 1 (Basilosaurus, Hydrar-  
chos, Zygodon).

Gervais, P. 1871 B (Zeuglodon); 83 (Basilosau-  
rus).

Giebel, C. G. 1855 A, 80.

1883 A, 43.

Gregory, W. K. 1920 A, 158.

Hall, T. S. 1911 A, 257.

Heilprin, A. 1887 A, 244.

Hoernes, R. 1886 A, 698.

Holmes, F. S. 1870 A, 84 ("zeuglodon").

Howes, G. B. 1903 A, 323, figs. 1, 2.

Hutchinson, H. N. 1910 A, 297 (Basilosaurus).

Huxley, T. H. 1870 F, 531.

Jaekel, O. 1911 A, 231, fig. 256.

Kampfen, P. N. 1905 A, 652.

Kellogg, R. 1928 A, 32, 36 (Basilosaurus).

Kingsley, J. S. 1925 A, 213, fig. 226.

Koch, A. 1845 C, 2 (Hydrarchos).

1845 D, 10 (Hydrarchos).

Lankester, E. R. 1905 A, 76.

Leche, W. 1900 A, 1028.

Lönnberg, E. 1910 B, 242.

1911 A, 67 (Basilosaurus, Zeuglodon).

Lucas, F. A. 1901 C, 619 (Basilosaurus).

1904 B, 436.

1904 D, 102 (Basilosaurus).

1906 D, 317 (Alabamornis).

1908 A, 311 (Alabamornis).

1910 B, 278.

Lydekker, R. 1892 C, 559.

1903 D, 124.

1907 E, 679.

1914 A, 637.

McIntosh, — 1911 A, 100.

Mantell, G. A. 1844 A, 827 (Basilosaurus).

1848 C (Basilosaurus).

Matthew, W. D. 1912 A, 160.

Miller, G. S. 1923 A, 3.

- Nopcsa, F. 1923 B, 357.  
1926 A, 638.
- Osborn, H. F. 1907 G, 16, 191, fig. 194.  
1907 K, 819, 830.  
1909 D, 20.  
1910 B, 561, 635.  
1917 B, 200, 241, 242.
- Owen, R. 1868 A, 914.
- Palmer, T. S. 1904 A, 133, 791 (Basilosaurus).  
Paquier, A. 1894 A, 18 (Zeuglodon).  
Perrier, E. 1920 A, 152, 229, 348 (Zeuglodon).  
Pictet, F. J. 1853 A, 376 (Zeuglodon).  
Pompeckj, J. F. 1922 A, 44-100.  
1925 A, 13.
- Reche, O. 1905 B, 185.
- Reichenbach, H. G. L. 1847 A, 13 (Basilosaurus).  
Reynolds, S. H. 1897 A, 559.
- Ryder, J. 1887 B, 430.
- Schlosser, M. 1899 I, 346.
- Schmidt, O. 1896 A, 251.
- Seeley, H. G. 1876 D, 428.  
1878 A, 223.
- Smith, G. E. 1903 A, 322, figs. 1, 2.  
1903 B, 41, pls. i, ii; text-fig. 2.
- Stromer, E. 1902 C, 345, fig.  
1903 B, 36, fig.  
1903 D, 66.  
1906 A, 208.  
1908 A, pl. i, fig. 1.  
1908 B.  
1915 A, 134, 135.  
1923 A, 258.
- Thompson, D. W. 1889 A, 226, figs. 1-7, 10.
- Trouessart, E. L. 1905 A, 753.
- True, F. W. 1908 B, 386.  
1908 C, 67.  
1912 D, 199.  
1912 E, 779.
- Wallace, A. R. 1876 A, II, 210.
- Weber, M. 1886 A.  
1904 A, 554, 555, 557, 581.
- Weber and Abel 1928 A, 396, fig. 244.
- Williston, S. W. 1902 L, 918 (Basilosaurus, Zeuglodon).  
Wiman, C. 1905 A, 248.
- Winge, H. 1919 A, 63, 72, 103.
- Winge and Miller 1921 A, 10, 14, 56, 62, 81.
- Woodward, A. S. 1898 D, 330.  
1923 A, 33.
- Woodward, H. 1904 B, 154.
- Wyman, J. 1848 A, 152.
- Zigno, A. de 1876 A, 17.
- Zittel and Schlosser 1911 A, 406.  
1923 A, 488, fig. 612.
- Basilosaurus brachyspondylus (Müller).**  
Hay, O. P. 1902 A, 586.  
Abel, O. 1901 A, 8 (Zeuglodon).  
1913 C, 203, 204 (Zeuglodon).  
Fraas, E. 1904 A, 19 (Zeuglodon).  
1905 B, 385 (Zeuglodon).  
Pompeckj, J. F. 1922 A, 45.  
Seeley, H. G. 1876 D, 432.  
Sellards, E. H. 1915 D, 33, 84.  
1916 B, 81.
- Stromer, E. 1908 B, 136, pl. v, fig. 27 (This species?).
- Trouessart, E. L. 1905 A, 753.  
Upper Eocene (Jackson); Alabama: (Ocala); Florida.
- Basilosaurus cetoides (Owen).**  
Hay, O. P. 1902 A, 587.  
Abel, O. 1901 A, 17, 24 (Zeuglodon).  
1901 B, 303, pl. xxi; text-figs. 19-22 (Zeuglodon).  
1906 B, 450 (Zeuglodon); 458, figs. 3, 4 (Alabamornis gigantea).  
1913 C, 203, 204 (Zeuglodon).  
Beddard, F. E. 1900 A, 311 (Zeuglodon).  
Buckley, S. B. 1866 A, 44 ("Zeuglodon").  
Carus, C. G. 1847 A, 5-8, pls. i-vii (Hydrarchus harlani).  
Conrad, T. A. 1832 A, 35.  
1842 A, 178 ("Zeuglodon or Basilosaurus").  
Cope, E. D. 1891 N, 69, fig. 38 (Zeuglodon).  
Dall and Harris 1892 A, 105 ("Zeuglodon?").  
Fraas, E. 1904 A, 4 (B. macrospondylus); 8 (Zeuglodon cetoides).  
Gernitz, H. B. 1847 B, 1 (Hydrarchos harlani).  
Gidley, J. W. 1909 B, 519.  
1913 A, 649, pls. lxxii, lxxiii; text-figs. 1-3.  
Günther, A. C. 1847 A, 9 (Hydrarchus).  
Harris, G. D. 1899 A, 17, 19, 32, 92 ("Basilosaurus," Zeuglodon).  
Hopkins, F. V. 1870 A, 10 ("Zeuglodon"); 99 (Z. macrospondylus).  
Kellogg, R. 1924 C, 758 (Zeuglodon).  
1928 A, 40.
- Koch, A. 1845 C, 2 (Hydrargos sillimanii).  
1845 D, 1 (Hydrargos harlani).
- Lambrech, K. 1921 A, 43 (Alabamornis gigantea).  
Lapham, I. A. 1895 A, 653 ("zeuglodon").  
Lönnerberg, E. 1910 B, 243.  
1911 A, 67.
- Lucas, F. A. 1901 J, 58, 60, figs. 11, 12.  
1906 D, 317 (Alabamornis gigantea).  
1908 A, 311 (Alabamornis gigantea).
- Lyell, C. 1855 A, I, 101 ("Zeuglodon"); II, 8, 75 (Zeuglodon).  
Mantell, G. A. 1844 A, 826, fig. 152 (Zeuglodon).  
Merrill, G. P. 1907 A, 24.
- Oshorn, H. F. 1910 B, 171, fig. 70 (Zeuglodon).  
Palacký, J. 1902 C, 251 (Zeuglodon).  
Reichenbach, H. G. L. 1847 A, 13 (B. cetoides, B. kochii).  
Ruschenberger and Tryon 1879 A, 14 (Zeuglodon).  
Schlosser, M. 1899 E, 166 (Zeuglodon).  
Sellards, E. H. 1916 B, 81.
- Shufeldt, R. W. 1889 D, 15, fig.  
Smith, E. A. 1894 A, 626 (Zeuglodon).  
Steinmann, G. 1908 A, 251, fig. 160 (Zeuglodon).  
Stromer, E. 1908 B, 165 (Zeuglodon).  
1915 A, 134 (Zeuglodon).  
1921 A, 54, fig. 5 (Zeuglodon).
- Trouessart, E. L. 1905 A, 753.
- True, F. W. 1908 C, 67.  
1912 D, 198 (Zeuglodon).
- Underhill, B. M. 1910 A, 77 ("Zeuglodon").  
Veatch, A. C. 1902 B, 121 ("Zeuglodon").  
1902 C, 164.  
1906 A, pl. xxi.

Weber and Abel 1928 A, 399, fig. 246 (Zeuglodon).

Winge and Miller 1921 A, 62 (Zeuglodon).  
Upper Eocene (Jackson); Alabama, Louisiana:  
(Ocala); Florida.

**PONTOBASILEUS** Leidy. Type *P. tuberculatus* Leidy.

Hay, O. P. 1902 A, 588.

Palmer, T. S. 1904 A, 557; 791.

Stromer, E. 1903 D, 88.

Trouessart, E. L. 1905 A, 754.

**Pontobasileus tuberculatus** Leidy.

Hay, O. P. 1902 A, 588.

Eocene? or Miocene?; Alabama?.

**Suborder MYSTICETE** Flower.

Unless otherwise stated the following authors employed the name *Mystacoceti*.

Flower, W. H. 1864 A, 388 (*Mysticete*).

Hay, O. P. 1902 A, 598 (*Mysticete*).

Abel, O. 1902 B, 517 ("bartenwale").

1905 C, 375 ("bartenwale").

1912 F, 194, 470.

1913 B, 719, 721.

1913 C, 155 ("bartenwale"); 197 (*Mystacoceti*).

1914 A, 81, 89.

1914 C, 390 ("bartenwale").

1914 D, 30.

1920 A, 424.

Allen, G. M. 1916 A, 110.

Anderson, R. J. 1912 D, 253 (*Mystacoceti*).

Andrews, C. W. 1908 B, 209.

Anthony, R. 1912 A ("mysticète").

Ardit, T. 1907 D, 82, 144.

Beddard, F. E. 1900 A, 317.

1902 A, 353.

Case, E. C. 1904 D, 33 (*Mystacoceti*).

Cope, E. D. 1891 N, 69 (*Mysticeti*).

Cuvier, G. 1825 A, v, pt. 1, 359-396, pls. xxv-xxvii ("baleines").

Fraas, E. 1905 B, 381.

Guérin, R. 1874 A, 63 ("mysticètes").

Guldberg, G. 1904 A, 371 ("bartenwale").

Hanke, H. 1914 A, 487 ("bartenwale").

Hepburn, D. 1901 A, 681.

Holmes, R. 1886 A, 700 (*Mysticete*).

1912 A, 661.

Housay, F. 1910 A, 17 ("mysticètes").

Howes, G. B. 1903 A, 329.

Jaekel, O. 1903 C, 40 ("bartenwale").

1908 B, 464 ("mystacoceten").

1911 A, 232.

Kellogg, R. 1924 A, 11.

1928 A, 29, 37, 181, 191 (*Mysticeti*).

Kükenthal, W. 1908 A, 611 ("bartenwale").

1908 C, 245 ("bartenwale").

1909 B, 8 ("bartenwale").

1914 B, 2 ("bartenwale").

1913 A, 682.

Kunze, A. 1912 A, 613 ("bartenwale").

Larger, R. 1913 A, 721 ("mysticètes").

Leunis and Ludwig 1883 A, 281.

Lillie, D. G. 1910 A, 781 (*Mystacocete*).

Lockington, W. N. 1884 A, 195 (*Balaenoidea*).

Lönnberg, E. 1924 A, 1.

Lydekker, R. 1901 B, 653 ("whalebone whales").

1909 D, 11.

Miller, G. S. 1923 A, 14, 40 (*Mysticeti*).

Osborn, H. F. 1902 E, 365, fig. 1.

1907 H, 613 (*Mysticete*).

1925 B, 18.

Osburn, R. C. 1903 A, 653.

Parker and Haswell 1897 A, 451.

Reche, O. 1905 B, 150 (*Mysticeta*).

Rehs, J. 1914 A, 41.

Reynolds, S. H. 1897 A, 547 (*Mystacoceti*, *Balaenoidea*).

Rogenhofer, A. 1908 A, (42) ("bartenwale").

Smith, G. E. 1903 A, 326.

1903 B, 46.

Steinmann, G. 1907 A, 468.

1908 A, 237, 240.

1912 B, 721.

Sterling, S. 1910 B, 231 (*Mysticeti*).

1910 C, 667 ("bartenwale").

Stromer, E. 1908 B, 37 (*Mysticeti*).

1908 B, 160 (*Mysticeti*).

1912 A, 135 (*Mysticeti*).

Terra, P. 1911 A, 344.

Thomas, O. 1888 A, 458 ("mystacocetes").

Van Beneden, P. J. 1880 A, 49 ("mysticètes").

1885 A, 10 ("mystacocètes").

Weber, M. 1886 A (*Mystacocete*).

1904 A, 574, 576, 583.

Weber and Abel 1928 A, 389, 390, 409.

Weber and Burlet 1927 A, xv.

Winge, H. 1919 A, 68, 73.

Winge and Miller 1921 A, 10, 16, 50.

Woodward, M. F. 1894 B, 443.

Ziegler, H. E. 1901 A, 237 ("bartenwale").

Zittel and Schlosser 1911 A, 409.

1923 A, 492.

**CETOTHERIIDÆ** Miller.

Miller, G. S. 1923 A, 21, 24, 40.

Kellogg, R. 1928 A, 35, 181, 185.

**MESOCETUS** Van Beneden. Type *M. longirostris* Van Beneden.

Hay, O. P. 1902 A, 800.

Cabrera, A. 1926 B, 369.

Kellogg, R. 1924 C, 763.

1925 D, 7.

Winge, H. 1910 A, 24.

**Mesocetus siphunculus** Cope.

Hay, O. P. 1902 A, 800.

Clark and Miller 1912 A, 167, 168.

Winge, H. 1910 A, 24.

Upper Miocene; Virginia.

SIPHONOCETUS Cope. Type *Balæna priscus* Leidy.

Hay, O. P. 1902 A, 599.

Case, E. C. 1904 D, 49.

Kellogg, R. 1928 A, 35.

Palmer, T. S. 1904 A, 633, 791.

Trouessart, E. L. 1905 A, 780.

True, F. W. 1912 A, 5.

1912 E, 780.

Winge, H. 1910 A, 25.

**Siphonocetus clarkianus** Cope.

Hay, O. P. 1902 A, 599.

Case, E. C. 1904 D, 47, pl. xxv, fig. 4.

Shattuck, G. B. 1904 A, xciv.

Upper Miocene (St. Mary's); Maryland.

**Siphonocetus expansus** Cope.

Hay, O. P. 1902 A, 599.

Case, E. C. 1904 D, 45, pl. xxv, fig. 3.

Clark and Miller 1912 A, 167, 168.

Shattuck, G. B. 1904 A, xciv.

Upper Miocene (St. Mary's?); Maryland.

**Siphonocetus priscus** (Leidy).

Hay, O. P. 1902 A, 599.

Case, E. C. 1904 D, 46, pl. xxv, fig. 5.

Clark and Miller 1912 A, 167, 168.

Dall and Harris 1892 A, 56 (Balæna).

Shattuck, G. B. 1904 A, xciv.

Van Beneden, P. J. 1880 A, 31 (Balæna).

Upper Miocene (St. Mary's); Virginia.

PARIETOBALÆNA Kellogg. Type *P. palmeri* Kellogg.

Kellogg, R. 1924 A, 1.

Cabrera, A. 1926 B, 370.

Kellogg, R. 1928 A, 35, 188.

**Parietobalæna palmeri** Kellogg.

Kellogg, R. 1924 A, 2, pls. i-iv.

1928 A, 188, fig. 18.

Upper Miocene (Calvert); Maryland.

PLESIOCETOPSIS Brandt. Type *P. hupschii* Van Beneden.

Brandt, J. F. 1873 A, 143-148.

Hay, O. P. 1902 A, 598 (Cetotherium, in part).

Abel, O. 1913 C, 178 (Plesiocetus).

Kellogg, R. 1925 B, 36, 51 (Plesiocetus).

1928 A, 35 (Plesiocetus).

Palmer, T. S. 1904 A, 548 (Plesiocetus, Plesioetopsia).

Van Beneden, P. J. 1859 A, 139 (Plesiocetus).

Weber, M. 1904 A, 584 (Plesiocetus).

**Plesiocetopsis megalophyllum** (Cope).

Andrews, R. C. 1914 A, 290 (Plesiocetus).

Hay, O. P. 1902 A, 599 (Cetotherium).

Case, E. C. 1904 D, 41, pl. xx, fig. 1 (Cetotherium).

Kellogg, R. 1925 B, 51 (Plesiocetus).

Shattuck, G. B. 1904 A, xciv (Cetotherium).

Winge, H. 1910 A, 28 (Cetotherium).

Upper Miocene (Calvert); Maryland.

**Plesiocetopsis occidentalis** Kellogg.

Kellogg, R. 1925 B, 50, figs. 7-10.

Upper Miocene; California.

CETOTHERIUM Brandt. Type *C. rathkii* Brandt.

Hay, O. P. 1902 A, 598.

Abel, O. 1913 C, 181, 213, pl. viii.

1914 A, 91, fig. 53.

1919 A, 761, fig. 570.

Ardt, T. 1907 D, 644.

Brandt, J. F. 1871 A, 568.

Cabrera, A. 1926 B, 369.

Case, E. C. 1904 D, 36.

Heilprin, A. 1887 A, 345.

Kellogg, R. 1924 A, 5, 12.

1924 C, 764 ("cetotheres").

1928 A, 35, 184, 187, 188, fig. 17.

Lönnerberg, E. 1911 A, 80.

Lydekker, R. 1894 B, 124.

Miller, G. S. 1923 A, 5, 18, pl. viii, fig. 2.

Newton, E. T. 1891 A, 63.

Palmer, T. S. 1904 A, 175, 790.

Pictet, F. J. 1838 A, 388.

Strobel, P. 1875 A, 133.

Taschenberg, O. 1899 A, 4563 (Eschrichtius).

Trouessart, E. L. 1905 A, 779.

True, F. W. 1912 A, 6.

Van Beneden, P. J. 1880 A, 31 (Eschrichtius).

1885 A, 6.

1885 B, 281.

Weber and Abel 1928 A, 409.

Winge, H. 1910 A, 10.

Winge and Miller 1921 A, 22.

Zittel and Schlosser 1911 A, 410.

1923 A, 493.

**Cetotherium cephalum** Cope.

Hay, O. P. 1902 A, 599.

Case, E. C. 1904 D, 44; pl. xxi, fig. 1; pl. xxii, figs. 1, 2; pl. xxiii, fig. 1; pl. xxv, figs. 8, 13.

Cope, E. D. 1891 N, 64, fig. 37.

Ruschenberger and Tryon 1879 A, 92 (Eschrichtius cephalus).

Shattuck, G. B. 1904 A, xciv.

Upper Miocene (Calvert); Maryland.

**Cetotherium davidsoni** Cope.

Hay, O. P. 1902 A, 599.

1927 D, 194 (Eschrichtius).

Kellogg, R. 1922 A, 61 (Eschrichtius davidsoni).

1922 D, 1 (Eschrichtius).

1925 B, 35, 41 (Eschrichtius).

Pleistocene; California.

**Cetotherium furlongi** Kellogg.

Kellogg, R. 1925 B, 38, figs. 1, 6.

1928 A, 188, fig. 18.

Middle Miocene (Temblor); California.

**Cetotherium leptocentrum** Cope.

- Hay, O. P. 1902 A, 599.  
 Clark and Miller 1912 A, 167, 168.  
 Miocene; Virginia.

**Cetotherium parvum** Trouessart.

- Hay, O. P. 1902 A, 599.  
 Case, E. C. 1904 D, 44, pl. xxv, fig. 1.  
 Shattuck, G. B. 1904 A, xciv.  
 Upper Miocene (St. Mary's?); Maryland.

**METOPOCETUS** Cope. Type *M. durinasus* Cope.

- Hay, O. P. 1902 A, 598.  
 Cabrera, A. 1926 B, 369.  
 Case, E. C. 1904 D, 35, 36.  
 Kellogg, R. 1928 A, 35.  
 Schlosser, M. 1899 N, 147.  
 True, F. W. 1912 A, 5, 7.  
 1912 E, 780.  
 Winge, H. 1910 A, 27.

**Metopocetus durinasus** Cope.

- Hay, O. P. 1902 A, 598.  
 Case, E. C. 1904 D, 36, pl. xviii, figs. 1, 2.  
 Kellogg, R. 1924 A, 8.  
 Schlosser, M. 1899 N, 147.  
 Shattuck, G. B. 1904 A, xciv.  
 Winge, H. 1910 A, 28.  
 Upper Miocene (Calvert); Maryland.

**CEPHALOTROPIS** Cope. Type *C. coronatus* Cope.

- Hay, O. P. 1902 A, 598 (Cephalotropus).  
 Case, E. C. 1904 D, 36, 38.  
 Kellogg, R. 1928 A, 35.  
 Palmer, T. S. 1904 A, 170, 789.  
 True, F. W. 1912 A, 5, 7.  
 1912 E, 780.  
 Schlosser, M. 1899 N, 147.  
 Winge, H. 1910 A, 28.

**Cephalotropis coronatus** Cope.

- Hay, O. P. 1902 A, 598 (Cephalotropus).  
 Case, E. C. 1904 D, 39, pl. xix, fig. 1.  
 Kellogg, R. 1928 A, 188.  
 Schlosser, M. 1899 N, 147.  
 Shattuck, G. B. 1904 A, xciv.  
 Winge, H. 1910 A, 28.  
 Upper Miocene (Chesapeake group); Maryland?

**ULIAS** Cope. Type *U. moratus* Cope.

- Hay, O. P. 1902 A, 599.  
 Case, E. C. 1904 D, 49.  
 Kellogg, R. 1928 A, 35.  
 Palmer, T. S. 1904 A, 700, 791.  
 True, F. W. 1912 A, 5, 6.  
 1912 E, 780.  
 Winge, H. 1910 A, 26.

**Ulias moratus** Cope.

- Hay, O. P. 1902 A, 599.  
 Case, E. C. 1904 D, 50, pl. xxiv, fig. 1; pl. xxv, fig. 6.  
 Shattuck, G. B. 1904 A, xciv.  
 Upper Miocene (Chesapeake); Maryland or Virginia.

**TRETULIAS** Cope. Type *T. buccatus* Cope.

- Hay, O. P. 1902 A, 600.  
 Case, E. C. 1904 D, 52.  
 Kellogg, R. 1928 A, 35.  
 Palmer, T. S. 1904 A, 687, 791.  
 True, F. W. 1912 A, 5, 6.  
 1912 E, 780.  
 Winge, H. 1910 A, 27, 29.

**Tretulias buccatus** Cope.

- Hay, O. P. 1902 A, 600.  
 Case, E. C. 1904 D, 53, pl. xxv, fig. 2.  
 Shattuck, G. B. 1904 A, xciv.  
 Winge, H. 1910 A, 29.  
 Miocene (Chesapeake); Maryland or Virginia.

**RHEGNOPSIS** Cope. Type *Balæna palæatlanticus* Leidy.

- Hay, O. P. 1902 A, 600.  
 Kellogg, R. 1928 A, 35.  
 True, F. W. 1912 A, 7.  
 1912 E, 780.  
 Winge, H. 1910 A, 28.

**Rhegnopsis palæatlanticus** (Leidy).

- Hay, O. P. 1902 A, 600.  
 Clark and Miller 1912 A, 167, 168.  
 Ruschenberger and Tryon 1879 A, 14.  
 Van Beneden, P. J. 1880 A, 31 (Balæna).  
 Miocene (St. Mary's); Virginia.

**Superfamily BALÆNOIDÆ**, new form.

- Turner, W. 1870 B, 276 (Balænoidea).

- | Turner, W. 1871 A, 859 (Balænoidea).

**BALÆNOPTERIDÆ** Gray.

- Abel, O. 1901 B, 311 ("balænoptæriden").  
 1912 F, 662 ("balænoptæriden").  
 1913 B, 722.  
 1913 C, 213.  
 1914 A, 91.  
 1919 A, 759.

- Allen, G. M. 1916 A, 110.  
 Arldt, T. 1907 D, 641.  
 Beddard, F. E. 1900 A, 144, 318.  
 1902 A, 355.  
 Cabrera, A. 1926 A.  
 Carus, V. 1875 A, 172 (Balænoptærida).

Kampfen, P. N. 1905 A, 649.  
 Kellogg, R. 1928 A, 35, 190.  
 Leunis and Ludwig 1883 A, 232.  
 Lockington, W. N. 1884 A, 195.  
 Miller, G. S. 1923 A, 22, 40.  
 1924 B, 9.  
 Reche, O. 1905 B, 153.  
 Rehs, J. 1914 A, 41.  
 Turner, W. 1871 A, 348.

Van Beneden, P. J. 1885 A, 10 ("balænoptères").  
 1888 A, 1-145 ("balænoptères").  
 Wallace, A. R. 1876 A, II, 207.  
 Weber, M. 1904 A, 575 (Balænopteridæ); 576  
 (Balænopternæ).  
 Weber and Abel 1928 A, 389 (table), 390, 391.  
 Zittel and Schlosser 1911 A, 409.  
 1923 A, 492.

## BALÆNOPTERINÆ Flower.

Flower, W. H. 1887 A, 115.  
 Miller, G. S. 1923 A, 22, 40.  
 Trouessart, E. L. 1905 A, 779.

Van Beneden, P. J. 1882 A, 4.  
 Winge, H. 1919 A, 68, 77 (Balænopteroni).  
 Winge and Miller 1921 A, 20, 22 (Balænopteroni).

BALÆNOPTERA Lacépède. Type *B. acutorostrata* Lacépède.

Hay, O. P. 1902 A, 600.  
 Abel, O. 1901 B, 311.  
 1902 A, 183.  
 1902 B, 517.  
 1907 G, 33, fig. 26.  
 1908 A, 474, fig. 1.  
 1908 B, 148, 170.  
 1909 A, 248.  
 1909 D, 224.  
 1912 F, 194, 458, 662, fig. 346.  
 1913 C, 162, 178, 212.  
 1919 A, 756.  
 1921 A, 299, fig. 115  
 1923 B, 271.  
 Ahrens, H. 1912 B, 49.  
 Allen, G. M. 1916 A, 110.  
 Anderson, J. 1879 A, 551, pl. xlv; text-fig. 21-28.  
 Andrews, R. C. 1916 A, pls. xxix-xlii; text-figs.  
 1-38.  
 Anthony, R. 1912 A ("rorqual").  
 Augustine, W. 1913 A, 537.  
 Beddard, F. E. 1900 A, 145, 312, figs. 2, 10, 17,  
 18, 20, 22.  
 1901 A, 93.  
 1902 A, 355.  
 1919 A, 131.  
 Bertelli, D. 1909 A, 158.  
 Boas, J. E. V. 1914 A, 380.  
 Bonsdorff, E. J. 1871 A, 318.  
 Bouvier, L. E. 1889 A, 232.  
 Braun, M. 1908 A, 407.  
 Bronn, H. G. 1843 A, 145.  
 1849 A, 701.  
 Burlet, H. M. 1914 A, 119.  
 1916 A, 1, figs. 1, 2.  
 1917 A, 376, figs. 2-16.  
 Cabrera, A. 1926 B.  
 Cuvier, G. 1825 A, v, pt. 1, 370-387, pl. xxvii,  
 figs. 1-6 ("rorqual").  
 Doran, A. H. G. 1878 A, 453, pl. lxii.  
 Elliot, D. G. 1901 A, 11.  
 Eschricht, D. F. 1849 A, 7, pls. (Ogmobalæna).  
 Giebel, C. G. 1883 A, pls. xxxix, xl.  
 Gray, J. E. 1846 A, 18, 48, pl. ii.  
 1863 A, 199.  
 1870 A, 195.  
 Gregory, W. K. 1920 A, 160.  
 Guérin, R. 1874 A, 64.  
 Guildberg, G. 1904 A, 380, 391.  
 Hanke, H. 1914 A, 438.  
 Hepburn, D. 1901 A, 681.

Howes, G. B. 1894 A, 79.  
 Kampfen, P. N. 1905 A, 648.  
 Kellogg, R. 1928 A, 35, 48, 190, figs. 2, 20.  
 Klaauw, C. J. 1924 B, 600.  
 Köstlin, O. 1844 A.  
 Kükenthal, W. 1891 C, 380.  
 1900 A, 211, figs. 3-6.  
 1908 A, 611.  
 1914 B, 63.  
 1922 A, 59.  
 Kunze, A. 1912 A, 619.  
 Leboucq, H. 1889 A, 574.  
 Leche, W. 1887 A.  
 1900 A, 1027, fig. 110.  
 Le Damany, P. 1906 A, 64 ("baleinoptère").  
 Leunis and Ludwig 1883 A, 233.  
 Lillie, D. G. 1910 A, 775, 783, fig. 71.  
 Lockington, W. N. 1884 A, 200.  
 Lönnberg, E. 1910 B, 231.  
 1911 A, 40.  
 1911 D, 7, figs. 6, 7.  
 1924 A, 1.  
 Lydekker, R. 1887 B, 11.  
 1909 D, 21, figs. 4, 6, 7.  
 M'Intosh, — 1917 A, 39.  
 Matthes, E. 1921 C.  
 Miller, G. S. 1923 A, 5, 19, 22, pl. i, fig. 2;  
 pl. iii, fig. 3; pl. iv, fig. 3; pl. vi, fig. 3;  
 pl. viii, figs. 4-6.  
 1924 C, 505.  
 Newton, K. T. 1886 B, 320.  
 Osborn, H. F. 1917 B, 234, fig.  
 Osburn, R. C. 1906 A, pl. ix, figs. 33, 34.  
 Owen, R. 1866 B, 426, figs. 283, 289.  
 1868 A, 868.  
 Palacký, J. 1902 C, 262.  
 Palmer, T. S. 1904 A, 132, 789.  
 Perrin, J. B. 1870 A, 805.  
 Pompeckj, J. F. 1910 A, 134.  
 1922 A, 49-100.  
 Pouchet and Chabry 1884 A, 182.  
 Pütter, A. 1923 A, 223.  
 Reche, O. 1905 B, 153, 204, 241, figs. 5-8, 28-30.  
 Rehs, J. 1914 A, 41.  
 Reynolds, S. H. 1897 A, 533, fig. 87.  
 Ridewood, W. G. 1922 A, 209, figs. 12-15.  
 Rosenthal, F. C. 1822 A, 127 (Balæna).  
 Ryder, J. 1887 B, 462, 481, pl. iii.  
 Schulte, H. W. 1916 A, pls. xliii-lvii.  
 Slater, P. L. 1887 A, 352.  
 Seeley, H. G. 1881 A, 790, figs. 1-3.

- Steinmann, G. 1909 A, 82, figs. 14, 17.  
 Sterling, S. 1910 A, 190, fig. 6.  
     1910 B, 231.  
     1910 C, 669.  
 Stromer, E. 1908 B, 163.  
     1915 A, 133.  
 Struthers, J. 1894 A, 684.  
 Taschenberg, O. 1899 A, 4472.  
 Trouessart, E. L. 1903 A, 306.  
     1905 A, 782.  
 True, F. W. 1904 A, 320.  
     1912 A, 3.  
 Turner, W. 1870 B, 271, figs. 1-4.  
     1871 A, 349.  
     1871 B, 361.  
     1882 B, 471.  
 Van Bambeke, C. 1868 A, 55, figs. (Pterobalana).  
 Van Beneden, P. J. 1836 A, 159 ("rorqual").  
     1836 B, 318 ("rorqual").  
     1880 A, 42.  
     1888 A, 5.  
 Weber, M. 1886 A.  
     1904 A, 573, 575, 576.  
 Weber and Abel 1928 A, 367, 372, 391, figs. 229, 230, 380, 381.  
 Weber and Burlet 1927 A, 143.  
 Wilder, B. 1872 B, 316.

- Winge, H. 1919 A, 68.  
 Winge and Miller 1921 A, 10, 45, 73, 74.  
 Ziegler, H. E. 1901 A, 238, fig. 3.

### **Balaenoptera polyporum (Cope).**

- Hay, O. P. 1902 A, 599 (Cetotherium).  
 Miocene; North Carolina.

### **Balaenoptera ryani Hanna and McLellan.**

- Hanna and McLellan 1924 A, 237, pls. v-ix.  
 Kellogg, R. 1925 B, 71.  
     1928 A, 190.  
 Miocene (Monterey); California.

### **Balaenoptera sursiplana Cope.**

- Hay, O. P. 1902 A, 600.  
 Allen, G. M. 1916 A, 232, pl. xv (This species?).  
 Case, E. C. 1904 D, 54, pl. xxiv, fig. 2.  
 Shattuck, G. B. 1904 A, xciv.  
 Miocene (Chesapeake); Maryland or Virginia, Massachusetts.

### **Balaenoptera sp. indet.**

- Hay, O. P. 1923 A, 19, 189. Pleistocene; Quebec, Florida.  
 Sellards, E. H. 1916 B, 105 (This genus?).  
 Pleistocene; Daytona, Florida.

### **MEGAPTERA Gray. Type *M. nodosa* Bonaterre.**

- Gray, J. E. 1846 B, 83.  
 Hay, O. P. 1902 A, 600.  
 Abel, O. 1907 G, 4, fig. 3.  
     1908 A, 475, fig. 3.  
     1908 B, 167.  
     1912 F, 684.  
     1913 C, 162, 178.  
 Allen, G. M. 1916 A, 110.  
 Augustin, W. 1913 A, 566.  
 Beddard, F. E. 1900 A, 161, 317, fig. 10.  
     1902 A, 356.  
     1919 A, 131, 139.  
 Braun, M. 1908 A, 400.  
 Cuvier, F. 1836 A, 303 (Rorqualus).  
 Doran, A. H. G. 1878 A, 455, pl. lxii.  
 Elliott, D. G. 1901 A, 9.  
 Eschricht, D. F. 1849 A, 56, 146 (Kypobalæna).  
     1869 A, 8, pls. iii, iv.  
 Gray, J. E. 1846 A, 16.  
     1863 A, 199.  
     1870 A, 195.  
     1870 B, 391.  
 Guérin, R. 1874 A, 63.  
 Guldberg, G. 1904 A, 371.  
 Heilprin, A. 1887 A, 341.  
 Honigsmann, H. 1915 A, 113, figs. 1-3.  
 Kellogg, R. 1922 D, 2.  
     1924 A, 8.  
     1928 A, 35, 190, 191.  
 Kükenthal, W. 1914 B, 2.  
 Kunze, A. 1912 A, 613, figs. P-T.  
 Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 282.  
 Lockington, W. N. 1884 A, 196.  
 Lönnberg, E. 1910 B, 232.  
     1911 A, 40.  
 Lydekker, R. 1887 B, 11.

- Lydekker, R. 1909 D, 12.  
 Matthes, E. 1921 C, 245.  
 Miller, G. S. 1923 A, 19.  
     1924 B, 9.  
 Newton, E. T. 1886 B, 320.  
 Osburn, R. C. 1906 A, 455.  
 Palacký, J. 1902 C, 262.  
 Palmer, T. S. 1904 A, 406, 790.  
 Ridewood, W. G. 1922 A, 209.  
 Ryder, J. 1887 B.  
 Selater, P. L. 1897 A, 352.  
 Struthers, J. 1894 A, 684.  
     1895 A, 153.  
 Trouessart, E. L. 1905 A, 785.  
 True, F. W. 1904 A, 327.  
 Turner, W. 1871 A, 352.  
     1880 A, 30.  
 Van Beneden, P. J. 1832 A, 26.  
     1888 A, 12.  
 Weber, M. 1886 A.  
     1904 A, 575, 576.  
 Weber and Abel 1928 A, 389 (table), 391.  
 Weber and Burlet 1927 A, 243.  
 Wilder, B. 1875 A, 107.  
 Winge, H. 1919 A, 68.  
 Winge and Miller 1921 A, 10, 21, 45, 74.

### **Megaptera brachychira "Cope."**

- Ruschenberger and Tryon 1879 A, 14 (No description).  
 Cetacean bones said to have come from the Miocene of Maryland.

### **Megaptera miocæna Kellogg.**

- Kellogg, R. 1922 D, 3, pls. i-iv; text-figs. 1, 3, 5-10.  
     1924 A, 9.



Kellogg, R. 1925 B, 72, foot-note.  
1928 A, 190.

Upper Miocene (Lompoc); California.

**Megaptera mysticetoides** (Emmons).

Hay, O. P. 1902 A, 599 (Cetotherium).  
Miocene; North Carolina.

**Megaptera nodosa** (Bonnaterre).

Bonnaterre, J. 1789, Tableau Encyclop. Cétol.,  
5 (Balæna).

Hay, O. P. 1902 A, 600 (M. boöps; not of  
Linnaeus, *vide* True).

Abel, O. 1908 B, 167, figs. 38-41 (M. boöps).  
1912 F, 179, fig. 124 (M. boöps).

Allen, G. M. 1916 A, 288, pl. xi, fig. 5; pl. xvi.

Andrews, R. C. 1921 A, 1, figs. 1-4.

Billings, E. 1856 A, 345 ("whale").

Brown, R. 1868 A, 548 (M. longimana).

Burlet, H. M. 1917 A, 381 (M. longimana).

Coleman, A. P. 1901 B, 133 (M. longimana).

1901 C, 217, 224 (M. longimana).

Cuvier, F. 1836 A, 321, 386, pl. xx (Rorqualus  
boöps).

Dawson, J. W. 1894 C, 31, 203, 268 (M. longi-  
mana).

Fischer, J. B. 1829 A, 524 (Balæna boöps).

Gray, J. E. 1846 A, 18 (Balænoptera physalus);  
51 (B. boöps).

1868 C, 247 (Balæna).

Guldberg, G. 1904 A, 371 (M. boöps).

Hay, O. P. 1923 A, 490 (M. boöps).

Kellogg, R. 1922 D, 3, text-figs. 2, 4.

1928 A, 193, 204, figs. 19, 24.

Kükenthal, W. 1900 A, 217, fig. 7 (M. boöps).

Lambe, L. M. 1904 C, 30, 39, 50 (M. boöps).

1912 A, 14 (M. boöps).

Lockington, W. N. 1884 A, 196, fig. (M. longi-  
mana).

Lydekker, R. 1909 D, 15, fig. 8 (M. boöps).

Miller, G. S. 1924 B, 10.

1924 C, 506.

Palacký, J. 1902 C, 264 [Balænoptera (M.  
boöps)].

Pander and Alton 1827 A, 6, pls. iii, iv.

Perkins, G. H. 1908 A, 83 (M. longimana).

1910 A, 157 (M. longimana).

Ridewood, W. G. 1922 A, 214, figs. 1-11.

Rudolphi, C. A. 1832 A, 133, pls. i-v (Balæna  
longimana).

Ryder, J. 1887 B, 460, 481, pl. iii (M. longi-  
mana).

Struthers, J. 1885 C, 766 (M. longimana).

Taylor, F. B. 1915 A, 333 ("whale").

Trouessart, E. L. 1905 A, 785.

True, F. W. 1904 A, 211, pls. xxix-xxxiii; pls.  
xxxvi-xli; text-figs. 68-83.

Turner, W. 1871 A, 349 (Balænoptera boöps).

Van Beneden, P. J. 1880 A, 32 (M. boöps).

1882 A, 35, 50 (M. boöps).

Recent; North Atlantic: Pleistocene (Cham-  
plain); Ontario: Pleistocene?; Louisiana.

**Megaptera sp. indet.**

Dall, W. H. 1909 A, 17 (This genus?). Mio-  
cene (Coos Bay); Oregon.

Van Beneden and Gervais 1880 A, 265. Re-  
cent?.

**MESOTERAS** Cope. Type *M. kerrianus* Cope.

Hay, O. P. 1902 A, 600.

Kellogg, R. 1928 A, 35.

Palmer, T. S. 1904 A, 416, 790.

True, F. W. 1912 E, 780.

Winge, H. 1910 A, 19.

**Mesoteras kerrianus** Cope.

Hay, O. P. 1902 A, 600.

Emmons, E. 1852 A, 99 ("whale").

Harlan, R. 1834 B, 89 ("shark").

McLennan, S. 1852 A, 71 ("whale").

Merrill, G. P. 1907 A, 48.

Miller and Stephenson 1912 A, 47, 54 ("whale").

Mitchell, S. L. 1818 A, 400 ("whale," "shark").

1826 A, 15 ("sea-serpent," "shark").

Palacký, J. 1902 C, 250.

Upper Miocene; North Carolina.

**BALÆNIDÆ** Gray.

Gray, J. E. 1825 B, 336.

Hay, O. P. 1902 A, 598.

Abel, O. 1907 G, 2 ("bartenwale").

1913 B, 722.

1914 A, 91.

1919 A, 762.

1921 A, 299 ("bartenwale").

Adloff, P. 1904 B, 55 ("bartenwale").

Allen, G. M. 1916 A, 110.

1921 B, 240.

Andrews, R. C. 1914 A, 289 ("balcen whales").

Arlt, T. 1907 D, 641.

Augustin, W. 1913 A, 533 ("bartenwale").

Beddard, F. E. 1900 A, 121, 312.

1901 A, 93 ("right whales").

1902 A, 358.

Bonaparte, C. L. 1832 A, 294 (Balænina; Balæn-  
idæ, in part; Physeteridæ, in part).

Braun, M. 1908 A, 406 ("bartenwale").

Cabrera, A. 1926 B.

Cahall, W. C. 1890 A, 231 ("whalebone  
whales").

Carus, V. 1875 A, 171 (Balænida).

Case, E. C. 1904 D, 34.

Cuvier, F. 1836 A, 303 ("baleines").

Durand, J. P. 1898 A, 293 ("baleines").

Eastman, C. R. 1906 E, 95.

Eimer, G. H. T. 1901 A, 159 ("bartenwale").

Elliot, D. G. 1901 A, 7.

Gervais, P. 1859 A, 312 ("balenidés").

Giebel, C. G. 1883 A ("bartenwale").

Gilbert, J. Z. 1908 A, 20.

Gray, J. E. 1821 A, 310 (Balænadæ).

1846 A, 15, 46.

1863 A, 198.

1868 C, 242.

1870 B, 391.

Guérin, R. 1874 A, 63.

Guldberg, G. 1903 A, 805.

Howes, G. B. 1894 A, 79.

Huxley, T. H. 1863 F, 634 (Balænoidea).  
 Kampfen, P. N. 1905 A, 649.  
 Kellogg, R. 1928 A, 35.  
 Kostlin, O. 1844 A ("balänen").  
 Kükenthal, W. 1891 C, 381 ("bartenwale").  
 1894 B, 72 ("bartenwale").  
 Leche, W. 1887 A ("bartenwale").  
 1900 A, 1027 ("bartenwale").  
 Leunis and Ludwig 1883 A, 281.  
 Lockington, W. N. 1884 A, 201.  
 Lydekker, R. 1887 B, 8.  
 Martins, C. 1857 A, 69, 91 ("balcines").  
 Meunier, S. 1903 A, 777 ("balemes").  
 Miller, G. S. 1923 A, 20, 40.  
 1924 B, 9.  
 Mivart, St. G. 1879 B, 511 ("whales").  
 Owen, R. 1845 B, 345.  
 1845 F, 38.  
 1868 A, 866.  
 Palacký, J. 1902 C, 261 ("balániden").

Pictet, F. J. 1853 A, 386 ("balénides").  
 Pompeckj, J. F. 1922 A, 84, 88 ("bartenwale").  
 Pouchet and Chabry 1884 A, 182 ("balénides").  
 Reche, O. 1905 B, 150, 204.  
 Steinmann, G. 1908 A, 242 ("bartenwale").  
 1912 B, 724 ("bartenwale").  
 Taschenberg, O. 1899 A, 4470.  
 Trouessart, E. L. 1905 A, 779.  
 True, F. W. 1912 E, 779.  
 Van Beneden, P. J. 1880 A, 41, 50 ("baleines").  
 Wallace, A. R. 1876 A, II, 207.  
 Weber, M. 1904 A, 574 (Balænidæ); 576 (Balæninæ).  
 Weber and Abel 1928 A, 389 (table), 390.  
 Wilkens, O. 1911 A, 711 ("bartenwale").  
 Winge, H. 1919 A, 68, 73, 120.  
 Winge and Miller 1921 A, 10, 16, 21, 45, 59.  
 Zittel and Schlosser 1911 A, 410.  
 1923 A, 493.

## BALÆNINÆ Flower.

Flower, W. H. 1867 A, 115.  
 Trouessart, E. L. 1905 A, 786.

Winge, H. 1919 A, 79 (Balænini).  
 Winge and Miller 1921 A, 10, 18 (Balænini).

BALÆNA Linnæus. Type *B. mysticetus* Linnæus.

Hay, O. P. 1902 A, 601.  
 Abel, O. 1907 G, 33, fig. 25.  
 1908 A, 474.  
 1908 B, 156.  
 1909 D, (225, 226).  
 1912 F, 178, 661.  
 1913 C, 178, 212.  
 1923 B, 271.  
 Allen, G. M. 1916 A, 110.  
 Arldt, T. 1907 D, 641.  
 Augustin, W. 1913 A, 534.  
 Beddard, F. E. 1900 A, 122, 312, figs. 10, 19.  
 1901 A, 93.  
 1902 A, 358.  
 Bensley, B. A. 1902 A, 7.  
 Braun, M. 1908 A, 407.  
 Bronn, H. G. 1848 A, 145.  
 1849 A, 701.  
 Burlet, H. M. 1917 A, 398, figs. 17-19.  
 Cabrera, A. 1926 B, fig. 2.  
 Carruccio, A. 1913 B, 178 ("balene").  
 Cuvier, F. 1836 A, 354, pls. xxi, xxii.  
 Cuvier, G. 1805 A.  
 Dorn, A. H. G. 1878 A, 450, pl. lxii.  
 Elliot, D. G. 1901 A, 7.  
 Eschricht, D. F. 1869 A, 5, 10, pls. i, ii, v.  
 Fischer, J. B. 1829 A, 520.  
 Gervais, P. 1852 A, 159.  
 1859 A, 312.  
 Giebel, C. G. 1855 A, 85.  
 1883 A, pls. xxxix, lxxvii, lxxiv.  
 Goodsir, J. 1868 A, 54.  
 Gray, J. E. 1846 A, 15, 47.  
 1868 C, 242.  
 1870 A, 194.  
 1870 B, 391.  
 Gregory, W. K. 1920 A, 160.  
 Guérin, R. 1874 A, 63.  
 Huxley, T. H. 1863 F, 634, figs. 59-61.  
 Kampfen, P. N. 1905 A, 650.  
 Kehler, F. A. 1896 A, fig. 33.

Kellogg, R. 1928 A, 35, 191.  
 Kingsley, J. S. 1925 A, 211, fig. 224.  
 Kükenthal, W. 1894 B, 72.  
 1900 A, 203, fig. 1.  
 1914 B, 73.  
 1922 A, 59.  
 Laloy, L. 1907 A, 585 ("baleine").  
 Larger, R. 1913 A, 709 ("baleine").  
 Leche, W. 1887 A, pls. xciii, xcvi.  
 Le Damany, P. 1903 G, 131, 316, figs. 2, 11, 16  
 ("baleine").  
 Leunis and Ludwig 1883 A, 281.  
 Leydig, F. 1859 A, 670.  
 Lillie, D. G. 1910 A, 784.  
 Lönnberg, E. 1910 B, 230.  
 1911 A, 37.  
 1911 D, 1, figs. 1-5.  
 1924 A, 1.  
 Lull, R. S. 1907 A, 477.  
 Lydekker, R. 1887 B, 10.  
 1906 B, 391 ("whale").  
 1909 D, 12, figs. 1-3.  
 Mockel, J. F. 1825 A.  
 Miller, G. S. 1923 A, 16, 21, pl. viii, fig. 9.  
 Newton, E. T. 1886 B, 320.  
 Osburn, R. C. 1906 A, 454.  
 Owen, R. 1843 D, 283.  
 1845 B, 312, 314, pl. lxxvi, figs. 4-7.  
 1845 F, 38.  
 1848 B, 94.  
 1866 B, 426, 428.  
 Palacký, J. 1902 C, 262.  
 Palmer, T. S. 1904 A, 131, 789.  
 Pander and Alton 1827 A, 3, pls. ii, iv.  
 Pictet, F. J. 1853 A, 387.  
 Pompeckj, J. F. 1922 A, 58, 84.  
 Pittler, A. 1923 A, 223.  
 Reche, O. 1905 B, 151, 238, figs. 1-3.  
 Rousseau, L. F. E. 1856 A, 19.  
 Ryder, J. 1887 B, pl. ii.  
 Sclater, P. L. 1897 A, 352.

Steinmann, G. 1908 A, 241, figs. 145, 146.

1909 A, 83, fig. 18.

Stromer, E. 1908 B, 164.

Struthers, J. 1894 A, 684.

Taschenberg, O. 1899 A, 4471.

Trouessart, E. L. 1905 A, 786.

True, F. W. 1904 A, 319.

Van Beneden, P. J. 1836 B, 318 ("baleines").

Wagner, R. 1843 A.

Wallace, A. R. 1876 A, II, 207.

Weber, M. 1886 A.

1904 A, 555, 573, 574, 576, figs. 412, 416.

Weber and Abel 1928 A, 353, 390, figs. 218, 219, 221, 222.

Weber and Burlet 1927 A, 143.

Wilder, B. 1872 B, 316.

Winge, H. 1919 A, 68, 76, 79.

Winge and Miller 1921 A, 18, 45, 74.

### **Balæna affinis?** Owen.

Hay, O. P. 1902 A, 601.

Case, E. C. 1904 D, 55.

Owen, R. 1843 D, 283, fig.

Shattuck, G. B. 1904 A, xciv.

Miocene (Chesapeake); Maryland or Virginia, North Carolina?, England.

### **Balæna sp. indet.**

Allen, G. M. 1926 A, 465 (Eubalæna). Miocene; South Carolina.

Dall, W. H. 1894 A, 297 (This genus?). Miocene; Massachusetts.

### **BALENULA Van Beneden. Type *B. balanopsis* Van Beneden.**

Van Beneden, P. J. 1872 B, 11-12.

Cabrera, A. 1926 B, 365.

Kellogg, R. 1923 A, 35.

Lydekker, R. 1887 B, 8, 10 (Syn. of Balæna).

Newton, E. T. 1891 A, 60 (Balæna).

Van Beneden, P. J. 1880 A, 52, pls. i-xvii; 3 text-figs.

1882 A, 23.

### **Balenula sp. indet.**

Van Beneden, P. J. 1880 A, 31. Miocene?. Mouth of the Potomac.

### **ARCHÆODELPHIS Allen.**

Allen, G. M. 1921 C, 4.

Kellogg, R. 1924 A, 5.

1923 A, 34, 42, 180, 182.

Miller, G. S. 1923 A, 23, 30, 42, pl. v, fig. 3.

The family position of this genus is not determined.

### **Type *A. patrius* Allen.**

### **Archæodelphis patrius Allen.**

Allen, G. M. 1921 C, 4, pl. i.

Kellogg, R. 1924 C, 759.

1923 A, 48, 180, figs. 4, 15.

Eocene? (Jackson?); Alabama?.

## **Suborder ODONTOCETE Flower.**

Flower, W. H. 1864 A, 388.

Hay, O. P. 1902 A, 588.

Abel, O. 1901 A, 7 ("odontocètes").

1901 B, 300, 313 ("odontoceten").

1902 A, 178 ("odontocètes").

1902 B, 510 ("zahnwale").

1903 A, 21 ("odontocètes").

1905 C, 375 ("odontoceten").

1905 E, 84 ("odontoceten").

1907 G, 5 ("zahnwale").

1909 A, 243.

1910 B, (186).

1912 F, 470 (Odontoceti); 725 (Delphinocete).

1913 B, 719; (Odontoceti).

1913 C, 211 (Odontoceti, Odontocetoidea); 221 (Squaloceti, Delphinoceti).

1914 A, 81 (Odontoceti); 99 (Delphinoceti).

1914 C, 390 ("zahnwale").

1919 A, 762 (Squaloceti); 772 (Delphinoceti).

1920 A, 424 (Delphinoceti).

Ameghino, F. 1889 A, 833, 895, 896, 898 (Odontoceta).

Andrews, C. W. 1907 C, 304 (Odontoceti).

1908 B, 209 (Odontoceti).

Anthony, R. 1912 A ("odontocète").

Arlt, T. 1907 D, 82, 144 (Odontoceti).

Beddard, F. E. 1900 A, 172, 317.

1902 A, 362 (Odontoceti).

Boenninghaus, G. 1904 A, 189 ("zahnwale").

Bolk, L. 1922 A, 111, 127 (Odontoceti).

Branca, W. 1908 C, 392 ("zahnwale").

Braun, M. 1908 A, 401 ("zahnwale").

Case, E. C. 1904 D, 4 (Odontoceti).

Cope, E. D. 1891 N, 69 (Odontoceti).

Cuvier, F. 1825 A, 240 ("cétacés piscivores").

Dal Piaz, G. 1916 A, 1-23 (Odontoceti).

1917 A, 3-34 (Odontoceti).

Dollo, L. 1907 C, 181 ("odontocètes").

Eastman, C. R. 1907 B, 90 (Odontocetes).

Fraas, E. 1905 B, 381 (Odontoceti).

Giebel, C. G. 1883 A ("zahnwale").

Ciglioli, E. H. 1872 A, 3 ("cetodonti").

Gregory, W. K. 1910 A, 477 (Odontoceti).

1920 A, 160, 243 (Odontoceti).

Guérin, R. 1874 A, 65 ("cétodontes").

Hepburn, D. 1901 A, 681 (Denticeti).

Houssay, F. 1910 A, 17 ("denticètes").

Howes, G. B. 1894 A, 81 (Odontocetes).

1903 A, 327.

Jackel, O. 1903 C, 40 ("zahnwale").

1911 A, 231 (Odontoceti).

Kellogg, R. 1924 C, 756 ("toothed whales").

1928 B, 406 ("toothed whales").

1928 A, 29, 32, 37, 46.

Kükenthal, W. 1891 C, 397 ("zahnwale").

1905 A, 96 ("zahnwale").

1908 A, 610 ("zahnwale").

1908 C, 245 ("zahnwale").

1909 A, 545 ("zahnwale").

1913 A, 682 (Odontoceti).

- Kunze, A. 1912 A, 579 ("zahnwale").  
 Larger, R. 1913 A, 721 ("denticetes").  
 Leche, W. 1887 A ("zahnwale").  
 1902 A, 45 ("zahnwale").  
 Leunis and Ludwig 1883 A, 277 (Denticete).  
 Lillie, D. G. 1910 A, 781.  
 Lockington, W. N. 1884 A, 182 (Delphinoidea).  
 Lönnerberg, E. 1924 A, 1 (Odontoceti).  
 Lucas, F. A. 1901 C, 618.  
 Lydekker, R. 1901 B, 652 ("toothed whales").  
 1909 D, 22.  
 McIntosh, — 1911 A, 81 (Odontoceti).  
 Matthes, E. 1921 C ("zahnwale").  
 Miller, G. S. 1923 A, 14, 33 (Odontoceti).  
 Osborn, H. F. 1902 E, 356, fig. 1.  
 1907 G, 16 (Odontoceti).  
 1907 H, 613 (Denticete).  
 1925 B, 18.  
 Osburn, R. C. 1903 A, 653 (Odontoceti).  
 Parker and Haswell 1897 A, 451 (Odontoceti).  
 Pompeckj, J. F. 1922 A, 57 ("zahnwale").  
 Reche, O. 1905 B, 162, 212, 242 (Denticeta).  
 Rehs, J. 1914 A, 41 (Odontoceti).  
 Reynolds, S. H. 1897 A, 357, 548 (Odontoceti).  
 Smith, G. E. 1903 A, 326 (Odontoceti).  
 1903 B, 46 (Odontoceti).  
 Steinmann, G. 1907 A, 468 (Odontoceti, Physeteroidea, Delphinoidea).  
 1908 A, 243 (Physeteroidea, Delphinoidea).  
 1912 B, 729 (Odontoceti); 724 (Physeteroidea, Delphinoidea).  
 Sterling, S. 1910 C, 667 ("zahnwale").  
 Stromer, E. 1903 B, 39 (Denticeti).  
 1908 A, 83 ("zahnwale").  
 1908 B, 158 (Denticeti).  
 1915 A, 136 (Denticeti).  
 Terra, P. 1911 A, 342.  
 Thomas, O. 1888 A, 456, 458 ("odontocetes").  
 Trouessart, E. L. 1905 A, 754 (Odontoceti).  
 True, F. W. 1908 B, 391.  
 1912 E, 780 (Odontoceti).  
 Turner, W. 1909 A, 719 (Odontoceti).  
 Weber, M. 1886 A.  
 Weber and Abel 1928 A, 363, 389 (table), 392 (Odontoceti).  
 Weber and Burret 1927 A, xv (Odontoceti).  
 Winge, H. 1919 A, 68 (Odontoceti).  
 Winge and Müller 1921 A, 10, 55. (Odontoceti).  
 Woodward, M. F. 1894 B, 436 (Odontoceti).  
 Zittel and Schlosser 1911 A, 406 (Odontoceti).  
 1923 A, 492 (Delphinoceti).

## AGOROPHIIDÆ Abel.

- Abel, O. 1913 B, 720.  
 1913 C, 219.  
 1914 A, 92 ("agorophiden").  
 1919 A, 751.  
 Allen, G. M. 1921 C, 4.  
 Kellogg, R. 1923 A, 44.  
 1925 B, 37.  
 1928 A, 47.  
 Miller, G. S. 1923 A, 22, 23, 40, 42.  
 Weber and Abel 1928 A, 403.  
 Zittel and Schlosser 1923 A, 488.

AGOROPHIUS Cope. Type *Zeuglodon pygmaeus* Müller.

- Hay, O. P. 1902 A, 589.  
 Abel, O. 1912 G, 68.  
 1913 B, 720.  
 1913 C, 213.  
 1914 A, 86.  
 1919 A, 751.  
 Allen, G. M. 1921 B, 240.  
 1921 C, 6.  
 Kellogg, R. 1923 A, 4.  
 1923 B, 4.  
 1928 A, 32, 42, 47, 182, 183.  
 Miller, G. S. 1923 A, 5, 24, 42, pl. v, fig. 2.  
 Stromer, E. 1903 D, 89.  
 1908 A, 82.  
 1908 B, 159.  
 1915 A, 135, 137.  
 Trouessart, E. L. 1905 A, 756.  
 True, F. W. 1907 A, 2.  
 1908 B, 387.  
 1909 C, 446.  
 1912 E, 780.  
 Weber and Abel 1928 A, 403.  
 Winge, H. 1919 A, 68, 81, 128.  
 Winge and Müller 1921 A, 23, 24, 71.  
 Zittel and Schlosser 1923 A, 488.  
 Agorophius pygmaeus (Müller).  
 Hay, O. P. 1902 A, 589.  
 Abel, O. 1913 B, 720, fig. 23.  
 1913 C, 202, 213, 219, pl. x; text-fig. 15.  
 1914 A, 86, fig. 48. \*  
 1919 A, 753, fig. 560.  
 1920 A, 427, fig. 645.  
 Allen, G. M. 1926 A, 460.  
 Kellogg, R. 1923 A, 3, 4, 45.  
 1924 A, 3.  
 1924 C, 758.  
 1928 A, 48, fig. 4.  
 Lydekker, R. 1892 C, 561 (Doryodon).  
 Müller, J. 1849 A, 29, pl. xxiii, figs. 1, 2 ("kleiner Zeuglodon").  
 Stromer, E. 1908 A, pl. i, fig. 3.  
 1908 B, 173.  
 True, F. W. 1907 A, 2, pl. vi (Phocodon holmesii).  
 Tuomey, M. 1847 A, 283, 2 figs. ("Zeuglodon").  
 1847 B, 151, 2 figs. ("Zeuglodon").  
 1847 C, 16, pl. v. ("Zeuglodon").  
 Weber and Abel 1928 A, 403, fig. 249.  
 Upper Eocene (Cooper marl); South Carolina.

*Xenorophus* Kellogg. Type *X. sloanii* Kellogg.

Kellogg, R. 1923 B, 1.

1928 A, 32, 46, 47, 183.

Miller, G. S. 1923 A, 23, 25, 31, 40, pl. v, fig. 6.

*Xenorophus sloanii* Kellogg.

Kellogg, R. 1923 B, 1, pls. i, ii.

1924 C, 758.

1928 A, 47, 199, fig. 4.

Upper Eocene (Cooper marl); South Carolina.

## SQUALODONTIDÆ Brandt.

Brandt, J. F. 1873, Bull. Acad. Imp. Sci., St. Pétersb., XVIII, 576.

Hay, O. P. 1902 A, 588.

Abel, O. 1905 A, 25, 34, 46.

1905 B, 203 ("squalodontidés").

1905 E, 88 ("squalodontiden").

1918 B, 722.

1913 C, 220, 221.

1919 A, 762.

Allen, G. M. 1921 B, 240.

Ameghino, F. 1889 A, 895.

Ardt, T. 1907 D, 632.

Beddard, F. E. 1900 A, 307.

1902 A, 384.

Boas, J. E. V. 1914 B, 585 ("squalodonten").

Cabrera, A. 1926 B, 373.

Case, E. C. 1904 D, 5, 6.

Dal Piaz, G. 1904 A, 1, 16 (Squalodontidi).

Fraas, E. 1905 B, 382 ("squalodonten").

Gregory, W. K. 1920 A, 161.

Kampfen, P. N. 1905 A, 652.

Kellogg, R. 1925 D, 2.

1928 A, 32, 50.

Lönnerberg, E. 1910 B, 247.

1911 A, 69.

1911 C, 2.

Lortet, L. 1887 A, 318 ("squalodons").

Lydekker, R. 1899 A, 920.

1909 D, 41.

Miller, G. S. 1923 A, 33, 40, 46.

Palacký, J. 1902 C, 256 ("squalodontiden").

Palmer, T. S. 1904 A, 771, 798.

Reche, O. 1905 B, 183.

Stromer, E. 1903 B, 37.

1908 A, 82.

1908 B, 158.

1915 A, 136.

Trouessart, E. L. 1905 A, 754.

True, F. W. 1908 B, 301.

1909 C, 452.

1911 B, 38.

1912 E, 779.

Van Beneden, P. J. 1880 A, 39 ("squalodons").

Weber, M. 1904 A, 582, 583 (Squalodontidæ); 583 (Mesoceti).

Weber and Abel 1928 A, 376, 403 ("squalodontiden").

Winge, H. 1919 A, 68, 80, 104, 127.

Winge and Miller 1921 A, 10, 22, 24, 45.

Zigno, A. de 1876 A, 18 ("squalodonti").

Zittel and Schlosser 1911 A, 407.

1923 A, 489, 672.

SQUALODON Grateloup. Type *Squalodon typicus* Kellogg.

Hay, O. P. 1902 A, 588.

Abel, O. 1901 A, 9.

1902 A, 183.

1902 B, 518, pl., fig. 5.

1905 A, 33, 47.

1905 B, 203.

1905 E, 85.

1907 G, 21, fig. 15.

1908 A, 486, fig. 15.

1912 F, 467, 701, fig. 391.

1912 G, 59.

1913 B, 722, fig. 27.

1913 C, 194.

1914 A, 86, fig. 54.

1919 A, 764, fig. 571.

1920 A, 427, fig. 646.

Ardt, T. 1907 D, 38, 433.

Beddard, F. E. 1900 A, 308.

Bronn, H. G. 1848 B, 1196.

1849 A, 702.

Cabrera, A. 1926 B.

Capellini, G. 1881 A, 413, pl.

Case, E. C. 1904 D, 6.

Dal Piaz, G. 1900 A, 304, pls. xxvi-xxix.

1903 A, 219.

1904 A, 4, 12.

1917 A, 6.

Dollo, L. 1919 A, 12.

Fraas, E. 1904 A, 14.

1905 B, 384.

Gemmellaro, M. 1921 A.

Gervais, P. 1852 A, 151, explan. pls. viii, xli.

1859 A, 309.

1871 B, 79, pls. ii, iii.

Giebel, C. G. 1883 A.

Grateloup, J. P. S. 1840 B, 346.

Gregory and Kellogg 1927 A, 4.

Hall, T. S. 1911 A, 344.

Heilprin, A. 1887 A, 344.

Hoernes, R. 1886 A, 699.

Holmes, F. S. 1870 A, 64 ("squalodons," "phocodons").

Huxley, T. H. 1870 F, 531.

Kampfen, P. N. 1905 A, 652.

Kellogg, R. 1923 A, 1, 18, 35, 40.

1924 C, 764.

1925 C, 4, 10.

1926 A, 7.

1927 A, 6.

1928 A, 32, 53, 58, 201.

Larger, R. 1913 A, 726.

Lönnerberg, E. 1910 B, 248.

1911 A, 70.

1911 C, 13.

Lortet, L. 1887 A, 315, 316, 2 pls. (Rhizoprion).

Lydekker, R. 1887 B, 15.

1892 C, 559.

1894 B, 125.

1899 A, 920.

- Lydekker, R. 1901 B, 653.  
 1909 D, 41, figs. 31, 32.  
 Miller, G. S. 1923 A, 26, 46.  
 Newton, E. T. 1891 A, 75.  
 Osborn, H. F. 1910 B, 251, 561.  
 Palacký, J. 1902 C, 256.  
 Palmer, T. S. 1904 A, 642, 798.  
 Pictet, F. J. 1853 A, 379.  
 Pompeckj, J. F. 1922 A, 83, 87, 88.  
 Reche, O. 1905 B, 183.  
 Reynolds, S. H. 1897 A, 367, 427.  
 Schlosser, M. 1899 I, 346.  
 Schmidt, O. 1886 A, 253, fig. 47.  
 Seeley, H. G. 1878 A, 222.  
 Stromer, E. 1903 B, 37.  
 1903 D, 86, 95.  
 1915 A, 135.  
 Suess, E. 1868 A, 287, pl. x.  
 Trouessart, E. L. 1905 A, 755.  
 True, F. W. 1907 A, 6.  
 1908 B, 386.  
 1909 C, 446.  
 1910 B.  
 1912 D, 200.  
 Wallace, A. R. 1876 A, II, 210.  
 Weber, M. 1886 A, 190, 233.  
 1904 A, 565, 567, 582.  
 Weber and Abel 1928 A, 403, fig. 250.  
 Winge, H. 1910 A, 30.  
 1919 A, 68, 81, 128.  
 Winge and Miller 1921 A, 23, 24.  
 Woodward, A. S. 1898 D, 333.  
 Zigno, A. 1876 A, 19, pl.  
 Zittel, K. A. 1877 A, 233, pl. xxxv.  
 1877 B, 19-46, pl. i.  
 Zittel and Schlosser 1911 A, 407.  
 1923 A, 489, 490, fig. 613.

**Squalodon atlanticus Leidy.**

- Hay, O. P. 1902 A, 589.  
 Allen, G. M. 1916 A, 282 (Basilosaurus).  
 Cabrera, A. 1926 B, 382.

**CETOPHIS Cope. Type *C. heteroclitus* Cope.**

- Hay, O. P. 1902 A, 593.  
 Palmer, T. S. 1904 A, 174, 797.  
 Trouessart, E. L. 1905 A, 783.  
 True, F. W. 1912 E, 780.

**COLOPHONODON Leidy. Type *C. holmesii* Leidy.**

- Leidy, J. 1853 C, 377.  
 Hay, O. P. 1902 A, 589 (Squalodon, in part).  
 Kellogg, R. 1923 A, 20.

**SAUROCETUS Agassiz. Type *S. gibbesii* Agassiz.**

- Hay, O. P. 1902 A, 588.  
 Abel, O. 1907 B, 265.  
 Cabrera, A. 1926 B, 397.  
 Kellogg, R. 1923 A, 32.  
 Stromer, E. 1903 D, 88.

- Case, E. C. 1904 D, 6, pl. x, figs. 1-3 (Squalodon); 7 (Basilosaurus).  
 Kellogg, R. 1923 A, 7, 41.  
 Rhoads, S. N. 1903 A, 247.  
 Shattuck, G. B. 1904 A, xciv.  
 Stromer, E. 1903 B, 158.

Upper Miocene (Calvert); Maryland, New Jersey.

**Squalodon calvertensis Kellogg.**

- Kellogg, R. 1923 A, 41, 45, pls. i-xvi; text-figs. 1, 2.  
 Cabrera, A. 1926 B, 380, 385.  
 Kellogg, R. 1923 B, 2.  
 1928 A, 51.  
 Middle Miocene (Calvert); Maryland.

**Squalodon crassus Allen.**

- Allen, G. M. 1926 A, 462, pl. v.  
 Kellogg, R. 1923 A, 200, fig. 22.  
 Upper Miocene (Edisto marl); South Carolina.

**Squalodon pelagius Leidy.**

- Hay, O. P. 1902 A, 589.  
 Kellogg, R. 1923 A, 3, 28 (Squalodon?).  
 Upper Miocene (Edisto marl); South Carolina.

**Squalodon tiedemani Allen.**

- Hay, O. P. 1902 A, 589.  
 Kellogg, R. 1923 A, 3, 4.  
 Palacký, J. 1902 C, 256.  
 True, F. W. 1910 B, 22.  
 Miocene (Wando River); South Carolina.

**Squalodon sp. indet.**

- Kellogg, R. 1923 A, 3, 29 (Squalodon protervus Leidy, not of Cope) Ashley River, S. Carolina: 63, pls. xvii-xx; Miocene (Calvert); Maryland.  
 Rhoads, S. N. 1903 A, 246. Miocene; New Jersey.

**Cetophis heteroclitus Cope.**

- Hay, O. P. 1902 A, 593.  
 Case, E. C. 1904 D, 23, pl. xiv, fig. 4.  
 Shattuck, G. B. 1904 A, xciv.  
 Van Beneden, P. J. 1880 A, 81.  
 Middle Miocene (Calvert); Maryland.

**Colophonodon holmesii Leidy.**

- Hay, O. P. 1902 A, 589 (Squalodon).  
 Allen, G. M. 1924 A, 121.  
 Kellogg, R. 1923 A, 20.  
 Upper Miocene (Edisto marl); South Carolina.

**Saurocetus gibbesii Agassiz.**

- Hay, O. P. 1902 A, 588.  
 Allen, G. M. 1924 A, 120.  
 1926 A, 461, pl. iv.

Kellogg, R. 1923 A, 15.  
 Trouessart, E. L. 1905 A, 754.

Van Beneden, P. J. 1880 A, 31.  
 Miocene?; South Carolina.

### INIIDÆ Gill.

Gill, T. 1872 B, 14, 94.  
 Abel, O. 1905 A, 41, 129 (Acrodelphidæ).  
 1905 E, 96 ("acrodelphiden").  
 1912 F, 467 ("acrodelphiden").  
 Cabrera, A. 1926 B, 396.  
 Eastman, C. R. 1907 C, 86 (Acrodelphidæ).  
 Gray, J. E. 1883 A, 199 (Iniadæ).  
 Kellogg, R. 1928 A, 32, 54.  
 Miller, G. S. 1923 A, 34, 40, 47.  
 Rovert, C. 1915 A, 141 (Acrodelphidæ).

True, F. W. 1908 B, 388, 391.  
 1909 B, 329 (Acrodelphidæ a syn.).  
 1909 C, 446.  
 1912 E, 779 (Acrodelphidæ a syn.).  
 Van Beneden and Gervais 1880 A, 468, pl. xxix  
 (Inia).  
 Weber and Abel 1928 A, 389 (table), 392 (Ini-  
 inæ).  
 Zittel and Schlosser 1911 A, 408 (Acrodelphidæ).

### INIINÆ Flower.

Flower, W. H. 1867 A, 114.  
 Abel, O. 1905 A, 129.  
 Cuvier, F. 1836 A, 166 ("les inias").  
 Eastman, C. R. 1907 C, 86.

Rovert, C. 1915 A, 141 (Acrodelphinæ).  
 True, F. W. 1908 B, 391.  
 Zittel and Schlosser 1911 A, 408.  
 1923 A, 491.

### HEPEROCETUS True. Type *H. californicus* True.

True, F. W. 1912 B, 1.  
 Miller, G. S. 1923 A, 49.

### *Hesperocetus californicus* Truc.

True, F. W. 1912 B, 1, pls. i, ii.  
 Lydekker, R. 1913 A, 9.  
 Winge and Miller 1921 A, 79.  
 Upper Miocene (Upper San Pablo); Cali-  
 forma.

### ZIPHIIDÆ Gray.

Gray, J. E. 1865, Proc. Zool. Soc. Lond., 528.  
 Abel, O. 1905 A, 40, 88.  
 1905 B, 207 ("ziphiides").  
 1909 A, 247, 252 ("ziphiiden").  
 1909 B, 261 ("ziphiiden").  
 1913 C, 221.  
 1914 A, 95, 96.  
 Arldt, T. 1907 D, 689.  
 Cabrera, A. 1926 B, 391.  
 Gervais, P. 1859 A, 285 ("ziphidés").  
 1868 A, 141, pl. v (Ziphius).  
 Gray, J. E. 1866 A, 326.  
 Harmer, S. F. 1924 A, 546, fig. 1.  
 Kellogg, R. 1924 C, 765.  
 1928 A, 32, 58.

Lockington, W. N. 1884 A, 182.  
 Miller, G. S. 1923 A, 34, 40, 52.  
 Owen, R. 1870 D, 1 (Ziphius).  
 Palmer, T. S. 1904 A, 776, 794.  
 Taschenberg, O. 1899 A, 4708.  
 True, F. W. 1908 B, 387, 388, 391.  
 1910 A, 1-89.  
 Van Beneden, P. J. 1880 A, 39 ("ziphioides").  
 1885 A, 10 ("ziphioides").  
 1888 B, 1-119 ("ziphioides").  
 Weber and Abel 1928 A, 376, 389 (table), 393-  
 405 (Ziphinæ).  
 Winge and Miller 1921 A, 43 (Xiphiini).  
 Zittel and Schlosser 1911 A, 408 (Ziphinæ).  
 1923 A, 491.

### ZIPHIINÆ Gill.

Gill, T. 1871 B, 124.  
 Hay, O. P. 1902 A, 596.  
 Abel, O. 1901 A, 14, 38.  
 1902 A, 184 ("ziphiinés").  
 1905 E, 91 ("ziphiiden").  
 1912 F, 523, 708 ("ziphiiden").  
 1913 B, 724 (Ziphidæ).  
 1914 C, 369.  
 1919 A, 766 (Ziphidæ).  
 Beddard, F. E. 1900 A, 220, 320 ("ziphioids").  
 1902 A, 367.  
 Burmeister, H. 1868 A, 309 (Ziphidæ).  
 Case, E. C. 1904 D, 30.  
 Du Bus, B. 1867 A, 569 ("les ziphius").  
 1868 A, 621 ("ziphiidés").  
 Flower, W. H. 1878 A, 415 ("ziphioid whales").  
 Gervais, P. 1852 A, 153, 154 (Ziphius).  
 1859 A, 285 ("ziphidés").  
 Gregory, W. K. 1920 A, 161.

Harmer, S. F. 1915 A, 559 (Ziphius).  
 Huxley, T. H. 1864 C, 9 (Rhynchoceti).  
 Kampfen, P. N. 1905 A, 646.  
 Kernan, J. D. 1918 A, 349-394, pls. xx-xxiii  
 (Ziphius).  
 Kükenthal, W. 1908 A, 610 ("ziphiinen").  
 Larger, R. 1913 A, 724 ("ziphiidés").  
 Owen, R. 1870 D, 1 ("ziphioid family"); 16  
 (Ziphius).  
 Palmer, T. S. 1904 A, 776, 794 (Ziphini).  
 Reche, O. 1905 B, 167, 169, fig. 14 (Ziphini).  
 Steinmann, G. 1912 B, 728.  
 Sterling, S. 1910 B, 231 (Ziphiniæ).  
 Van Beneden, P. J. 1888 B, 5, 79.  
 Weber, M. 1904 A, 578, 578.  
 Winge, H. 1919 A, 68, 96 (Xiphiini).  
 Winge and Miller 1921 A, 44 (Xiphi).  
 Zittel and Schlosser 1911 A, 408.

**EBORZIPHIUS** Leidy. Type *E. cælops* Leidy.

- Leidy, J. 1876 A, 81.  
 Hay, O. P. 1902 A, 596.  
 Abel, O. 1905 A, 108 (Syn. of *Choneziphius*).  
 Kellogg, R. 1928 A, 33.  
 Leidy, J. 1877 A, 224.

**Eborziphius cælops** Leidy.

- Leidy, J. 1876 A, 81.  
 Hay, O. P. 1902 A, 596 (*Choneziphius*).  
 Abel, O. 1905 A, 108 (*E. cælops*; syn. of *Choneziphius planirostris*).  
 Upper Miocene; South Carolina.

**PRORZIPHIUS** Leidy. Type *P. macrops* Leidy.

- Hay, O. P. 1902 A, 597.  
 Abel, O. 1905 A, 115 (Syn. of *Mesopodon*).  
 Kellogg, R. 1928 A, 33.  
 Palmer, T. S. 1904 A, 575, 796.  
 True, F. W. 1912 E, 780.

**Prorziphius chonops** Leidy.

- Hay, O. P. 1902 A, 597.  
 Abel, O. 1905 A, 115 (*Mesopodon longirostris*).

- Allen, G. M. 1926 A, 464.  
 Upper Miocene (Phosphate beds); South Carolina.

**Prorziphius macrops** Leidy.

- Hay, O. P. 1902 A, 597.  
 Abel, O. 1905 A, 115 (*Mesopodon longirostris*).  
 Miocene (Phosphate beds); South Carolina.

**BELEMNOZIPHIUS** Huxley. Type *B. compressus* Huxley.

- Huxley, T. H. 1864 A, 393.  
 Hay, O. P. 1902 A, 597 (*Mesopodon*, in part).  
 Abel, O. 1905 A, 115 (*Mesopodon*, in part).  
 Du Bus, B. 1868 A, 570.  
 Huxley, T. H. 1864 C, 4, 6.  
 Kellogg, R. 1928 A, 33.  
 Owen, R. 1870 D, 38.

**Belemnziphius prorops** Leidy.

- Hay, O. P. 1902 A, 597 (*Mesopodon*).  
 Abel, O. 1905 A, 115 (*Mesopodon longirostris*).  
 Trouessart, E. L. 1905 A, 777 (*Mesopodon*).  
 Upper Miocene (Phosphate beds); South Carolina.

**CHONEZIPHIUS** Duvernoy. Type *Ziphius planirostris* Cuvier.

- Hay, O. P. 1902 A, 596.  
 Abel, O. 1905 A, 107.  
 1905 E, 93.  
 1912 F, 553.  
 1913 B, 724.  
 1914 A, 97, fig. 59.  
 1919 A, 768, figs. 575, 577.  
 Du Bus, B. 1868 A, 628, 630 (*Ziphiopsis*, *Belemnziphius*).  
 Gervais, P. 1852 A, explan. pl. xl.  
 1859 A, 288.  
 Kellogg, R. 1928 A, 33.  
 Lankester, E. R. 1870 B, 502.  
 Lydekker, R. 1887 B, 14.  
 Newton, E. T. 1891 A, 69.  
 Owen, R. 1870 D, 1 (*Ziphius*, in part); 25 (*Choneziphius*).  
 Palmer, T. S. 1904 A, 187, 794.  
 Pictet, F. J. 1853 A, 385.  
 Trouessart, E. L. 1905 A, 775.  
 Weber and Abel 1928 A, 405.  
 Winge, H. 1919 A, 98 (*Chonoxiphius*).  
 Winge and Miller 1921 A, 44 (*Chonoxiphius*).  
 Zittel and Schlosser 1911 A, 408.  
 1923 A, 491.

**Choneziphius planirostris** Cuvier.

- Cuvier, G. 1823 Oss. foss. 2nd ed., v, 356, pl. xxvii, figs. 4-8 (*Ziphius*).  
 Hay, O. P. 1902 A, 597 (*C. liops*, *C. trachops*).

- Abel, O. 1905 A, 107.  
 1912 A, (53).  
 1912 F, 584, figs. 453, 454.  
 1913 B, 724, fig. 30.  
 1922 D, 33, 42, figs. 8, 9.  
 Allen, G. M. 1926 A, 464 (*Choneziphius trachops*, *C. liops*).  
 Capellini, G. 1885 A, 18-28, pl.  
 Du Bus, B. 1868 A, 628 (*Ziphiopsis phymatodes*).  
 Duvernoy, G. L. 1851 A, 63, 71, pl. ii, fig. 5.  
 Gervais, P. 1859 A, 288, pl. xl, fig. 2.  
 Huxley, T. H. 1864 A, 391, 395 (*Ziphius planirostris*); 393, pl. xix (*Belemnziphius compressus*).  
 Kellogg, R. 1928 A, 59, fig. 8.  
 Lankester, E. R. 1870 B, 503, fig. 1 (*C. planirostris*); 502, pl. xxxiii (*C. packardii*).  
 Larger, R. 1913 A, 729.  
 Lydekker, R. 1887 A, 14, pl. ii, fig. 7.  
 Newton, E. T. 1891 A, 69, pl. viii, fig. 6; text-fig. 70.  
 Owen, R. 1870 D, 5, text-fig. 2 (*Ziphius planirostris*); 16, pl. ii, fig. 1 (*Ziphius planus*).  
 Van Beneden and Gervais 1880 A, 413, pl. xxvii, figs. 4, 5; pl. xxvii bis, fig. 4 (*C. planirostris*); 417, pl. xxvii bis, fig. 1 (*Ziphiopsis phymatodes*).  
 Weber and Abel 1928 A, 405, figs. 252, 253.  
 Upper Miocene (Phosphate beds); South Carolina; Europe.

**PELYCORHAMPHUS** Cope. Type *P. pertortus* Cope.

- Hay, O. P. 1902 A, 597.  
 Kellogg, R. 1928 A, 33.  
 Palmer, T. S. 1904 A, 521, 796.

- Trouessart, E. L. 1905 A, 775.  
 True, F. W. 1907 B, 105.



**Pelycorhamphus pertortus** Cope.

Hay, O. P. 1902 A, 597.  
Miocene; Locality unknown.

**ANOPLONASSA** Cope. Type *A. forcipata* Cope.

Hay, O. P. 1902 A, 597.  
Abel, O. 1905 E, 92.  
1913 B, 724.  
1919 A, 787, fig. 578.  
Eastman, C. R. 1907 C, 87.  
Kellogg, R. 1928 A, 32.  
Lönnerberg, E. 1910 B, 250.  
1911 A, 72.  
Palmer, T. S. 1904 A, 106, 794.  
True, F. W. 1907 B, 98.  
1912 E, 780 (Anaplonassa).

Winge and Miller 1921 A, 91.  
Zittel and Schlosser 1923 A, 491.

**Anoplanassa forcipata** Cope.

Hay, O. P. 1902 A, 597.  
Abel, O. 1904 A, 4.  
1905 E, 92.  
Trouessart, E. L. 1905 A, 775.  
True, F. W. 1907 B, 97, pls. i-iii.  
Upper Miocene (Phosphate beds); South Carolina.

**MESOPLONDON** Gervais. Type *Delphinus sowerbiensis* Blainy. = *Physeter bidens* Sowerby.

Hay, O. P. 1902 A, 597.  
Abel, O. 1901 A, 14, pl. ii, figs. 8, 9.  
1902 B, pl., figs. 4, 7.  
1904 B, 745.  
1905 A, 110.  
1905 B, 202.  
1905 E, 93.  
1907 B, (777).  
1908 B, 179.  
1909 A, 243.  
1912 F, 478, 685, figs. 364, 399.  
1914 C, 389.  
Allen, G. M. 1906 A, 357.  
Anderson, R. J. 1901 A, 682.  
1902 A, 1121, fig. 14.  
Aurivillius, C. W. S. 1886 A, 1-40, pls. i, ii (Micropteron).  
Beddard, F. E. 1900 A, 213, 317, figs. 16, 28.  
1902 A, 369.  
Bouvier, L. E. 1889 B, 302.  
Cabrera, A. 1926 B.  
Capellini, G. 1885 B, 291, pl. (Dioplon, Mesoplon).  
Diener, C. 1909 A, 48.  
Doran, A. H. G. 1878 A, 458, pl. lxiii.  
Dumortier, B. C. 1839 A, 1-12, pls. i-iii ("delphinorhynque").  
Eastman, C. R. 1907 B, 90.  
Elliot, D. G. 1901 A, 17, fig. 5.  
Fitzsimons, F. W. 1907 A, 247, figs. 1, 2.  
Flower, W. H. 1878 A, 415, pls. lxxi-lxxiii; 4 text-figs.  
Gaudry, A. 1892 B, 1283.  
Gervais, P. 1852 A, 153, explan. pl. xxxvii; explan. pl. xl (Dioplon).  
1859 A, 289 (Dioplon); 290 (Mesoplon).  
Giebel, C. G. 1855 A, 85, pl. xxxvii, fig. 11.  
1883 A.  
Gregory, W. K. 1920 A, 161.  
Guérin, R. 1874 A, 87 (Mesoplon, Dioplon).  
Hanke, H. 1915 A, 59, figs. 1, 2.  
Harmer, S. F. 1915 A, 560.  
1924 A, 541, pls. i-iv; text-figs. 1-3.  
Heilprin, A. 1887 A, 342, 345.  
Howell, A. B. 1927 A, 12.  
Huxley, T. H. 1864 C, 4, 6 (Belemnophis).

Kampfen, P. N. 1905 A, 646.  
Kellogg, R. 1928 A, 33, 61.  
Kükenthal, W. 1908 A, 610.  
1914 B, 93.  
Kunze, A. 1912 A, 625.  
Larger, R. 1913 A, 724.  
Lockington, W. N. 1884 A, 183.  
Lönnerberg, E. 1910 B, 229.  
1911 A, 35, 73.  
Lydekker, R. 1887 B, 15.  
1909 D, 27, fig. 11.  
McIntosh, — 1911 A, 90, 94.  
Major, C. J. F. 1899 A, 500.  
Marinelli, W. 1924 A, 39.  
Miller, G. S. 1923 A, 35, pl. v, fig. 5.  
1924 C, 515.  
Newton, E. T. 1891 A, 72.  
Owen, R. 1870 D, 1 (Ziphius, in part); 35 (Mesoplon).  
Palacký, J. 1902 C, 256.  
Palmer, T. S. 1904 A, 415, 795.  
Pütter, A. 1923 A, 224.  
Reche, O. 1905 B, 170.  
Reynolds, S. H. 1897 A, 427.  
Schlatter, P. L. 1897 A, 352.  
Southwell and Harmer 1893 A, 275.  
Taschenberg, O. 1899 A, 4621.  
Trouessart, E. L. 1905 A, 777.  
True, F. W. 1907 B, 99.  
1909 C, 452.  
1910 A, 3, pls. i-xiii.  
1912 E, 780 (Belemnophis).  
1913 A, 651.  
Turner, W. 1880 A, 2, pls. i-iii.  
1882 A, 458.  
1886 A, 38.  
1889 A, 1, fig. 1 (Micropteron).  
1909 A, 687.  
Van Beneden, P. J. 1880 A, 43.  
1888 B, 95 (Micropteron).  
Weber, M. 1904 A, 568, 573, 576, 578, text-fig. 420.  
Weber and Abel 1928 A, 376, 393, 406, fig. 232.  
Winge, H. 1919 A, 97.  
Winge and Miller 1921 A, 44.  
Zittel and Schlosser 1923 A, 491.

**Mesoplodon longirostris.**

- Abel, O. 1905 A, 115 (*Dioplonodon prorops*, *Prozorophius chonops*, *P. macrops*, as syns.).  
 1914 C, 382 (*Ziphius longirostris*).  
 Capellini, G. 1885 B, 204, pl. i, figs. 1-3.  
 Du Bus, B. 1867 A, 570 (*Zyphius*).  
 1868 A, 630 (*Belemnioziphius recurvus*).  
 Gervais, P. 1859 A, 297.  
 Huxley, T. H. 1864 C, 1, 7, pl. i (*Belemnioziphius compressus*).

**HYPEROÖDON** Lacépède. Type *H. butskopf* Lacépède = *H. ampulatus* (Forster).

- Lacépède*, B. G. 1904, Hist. Nat. Cét., etc. XLIV, 319-324.  
 Abel, O. 1913 B, 724.  
 1914 A, 97.  
 Bouvier, E. L. 1892 A, 259, pls. vii, viii.  
 Braun, M. 1908 A, 407.  
 Burlet, H. M. 1917 A, 381.  
 Cabrera, A. 1926 B.  
 Carus, V. 1875 A, 170.  
 Carus and Engelmann 1861 A, 1750.  
 Cuvier, F. 1836 A, 241, pl. ix, figs. 1-3; pl. xvii, fig. 1.  
 Cuvier, G. 1825 A, v, pt. 1, 281, 324, pl. xxiv.  
 Doran, A. H. G. 1878 A, 457, pl. lxi.  
 Elliot, D. G. 1901 A, 15, pl. iv.  
 Eschricht, D. F. 1849 A, 21.  
 1869 A, 11, 12, pls. vi, vii.  
 Eudes-Deslongchamps, E. 1842 A, 1, pl. i.  
 Flower, W. H. 1867 A, 111, 115.  
 1882 C, 392, figs. 1, 2.  
 1883 B, 467.  
 1883 E, 722.  
 Flower and Lydekker 1891 A, 252, fig. 84.  
 Gervais, P. 1852 A, 155, explan. pl. xxxvii.  
 1859 A, 286.  
 Graves, R. J. 1831 A, 88.  
 Gray, D. 1883 A, 726, figs. 1-8.  
 Gray, J. E. 1846 A, 25, 52, pls. iii, iv.  
 1863 A, 200.  
 Guérin, R. 1874 A, 66.  
 Harmer, S. F. 1924 A, 543, 545, fig. 1.  
 Howell, A. B. 1927 A, 12.  
 Huxley, T. H. 1863 F, 636.  
 1870 F, 531.  
 Kampfen, P. N. 1905 A, 645.  
 Kellogg, R. 1928 A, 61, 197, 198.  
 Küstlin, O. 1844 A.  
 Kükenthal, W. 1891 C, 389.  
 1893 B, 56.  
 1900 A, 219, fig. 8.  
 Leunis and Ludwig 1883 A, 280.  
 Lockington, W. N. 1884 A, 183.  
 Linnberg, E. 1924 A, 3.  
 Lull, R. S. 1917 B, 333.

- Lydekker, R. 1887 B, 15, fig. 8 (This species?).  
 Newton, E. T. 1891 A, 72, pl. viii, fig. 7.  
 Trouessart, E. L. 1905 A, 777 (*M. longirostris*, *M. prorops*).  
 Van Beneden, P. J. 1880 A, 31.  
 Winge, H. 1910 A, 1.  
 Inasmuch as Dr. Abel has referred certain American species to *Mesoplodon longirostris* citations to its literature are made.

- Lydekker, R. 1887 A, 63.  
 1887 B, 14, pl. ii, fig. 6.  
 1909 D, 28, fig. 10.  
 McIntosh, — 1911 A, 90, 94.  
 Major, C. J. F. 1899 A, 500.  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1923 A, 26, 28, 30, 35, 52, pl. vii, fig. 4.  
 Newton, E. T. 1891 A, 69.  
 Nopce, F. 1923 B, 356.  
 Owen, R. 1845 F, 37.  
 1866 B, 418, 426, 429.  
 Palmer, T. S. 1904 A, 340, 795.  
 Pander and Alton 1827 A, 4, pls. v, vi.  
 Pompeckj, J. F. 1922 A, 83.  
 Probst, J. 1886 A, 111.  
 Reche, O. 1905 B, 167, fig. 13.  
 Reynolds, S. H. 1897 A, 443, 464, 489.  
 Rousseau, L. F. E. 1856 A, 13 ("hyperoodons").  
 Slater, P. L. 1897 A, 352.  
 Taschenberg, O. 1899 A, 4596.  
 Thompson, W. 1838 A, 221.  
 Trouessart, E. L. 1905 A, 775.  
 True, F. W. 1910 A, 76, pl. xxxii.  
 Turner, W. 1886 A, 25, figs. 1-4.  
 1889 B, 19.  
 1909 A, 698.  
 Van Beneden, P. J. 1888 B, 33.  
 Van Beneden and Gervais 1880 A, 355, pls. xviii, xix, lxiii.  
 Wallace, A. R. 1876 A, ii, 208.  
 Weber, M. 1886 A.  
 1904 A, 573, 578, 578.  
 Weber and Abel 1928 A 389 (table), 393.  
 Wilder, B. 1872 B, 316.  
 Winge, H. 1919 A, 99, 132.  
 Winge and Miller 1921 A, 44, 73.  
 Zittel, K. A. 1893 B, 178.

**HYPEROÖDON** sp. indet.

- Dall, W. H. 1894 A, 297. Miocene; Massachusetts.  
 Lyell, C. 1843 C, 32. Miocene?; Massachusetts.  
 1845 B, i, 258, pl. v, figs. 2, 3 (Hyperoodon, "whale"). Miocene; Massachusetts.

**DELPHINIDÆ** Gray.

- Gray, J. E. 1821 A, 310.  
 Hay, O. P. 1903 A, 593.  
 Abel, O. 1901 A, 35.  
 1901 B, 318 ("delphine").  
 1902 A, 170 ("delphinides").  
 1902 B, 523 ("delphinide").  
 1905 A, 43, 139.

- Abel, O. 1905 B, 207.  
 1905 C, 376.  
 1907 G, 7 ("delphinine").  
 1908 B, 139 ("delphine").  
 1912 F, 196 ("delphinide").  
 1913 B, 725 (Delphinide).  
 Adloff, P. 1913 A, 238 ("meerschweinchen").

- Adloff, P. 1913 C, 13 ("delphine").  
 Arldt, T. 1907 D, 650.  
 Bayer, F. 1897 A, 147 ("dauphins").  
 Beddard, F. E. 1900 A, 237, 314.  
 1902 A, 372.  
 Bonaparte, C. L. 1832 A, 293 (Delphinina).  
 Branca, W. 1908 C, 393 ("delphinide").  
 Burlet, H. M. 1913 A, 523 (Phocæna).  
 1913 C, 645 (Phocæna).  
 1916 A, 1-18, figs. 2, 5-7 (Phocæna).  
 1917 A, 377, fig. 1 (Phocæna).  
 Burmeister, H. 1869 A, 367 ("delfinides").  
 Cabrera, A. 1926 B, 404.  
 Carus, V. 1875 A, 169 (Delphinida).  
 Case, E. C. 1904 D, 5, 29.  
 Cuvier, F. 1825 A, 241 ("dauphins").  
 1836 A, 73 ("dauphins").  
 Cuvier, G. 1825 A, v, pt. 1, 273-328, pls. xxi-xxiv ("dauphins").  
 Denker, A. 1901 A, 658 (Phocæna).  
 Dollo, L. 1913 B, 616.  
 Doran, A. H. G. 1878 A, 459.  
 Eastman, C. R. 1906 E, 96.  
 Elliot, D. G. 1901 A, 18.  
 Fejérváry, G. J. 1920 A, 353.  
 Frassetto, F. 1903 A, 244.  
 Gervais, P. 1859 A, 299 ("delphinidés").  
 Giebel, C. G. 1883 A ("delphininen").  
 Gray, J. E. 1821 A, 310 (Delphinidæ).  
 1846 A, 24.  
 1863 A, 199.  
 1876 B, 391.  
 Harmer, S. F. 1924 A, 554.  
 Hensel, R. 1879 A, 529 ("delphine").  
 Hepburn, D. 1901 A, 681.  
 Hoernes, R. 1912 A, 661.  
 Huxley, T. H. 1863 F, 635 (Delphinoidea).  
 Jaekel, O. 1908 B, 464 ("delphine").  
 Kampfen, P. N. 1905 A, 636.  
 Kellogg, R. 1924 B, 8.  
 1927 A, 6.  
 1928 A, 33, 62.  
 Köstlin, O. 1844 A ("delphininen").  
 Kükenthal, W. 1908 A, 610 ("delphinide").  
 Leunis and Ludwig 1883 A, 277.  
 Lockington, W. N. 1884 A, 188.  
 Lönnberg, E. 1911 C, 14.  
 Lydekker, R. 1887 B, 13.  
 1899 A, 920.  
 1901 B, 652 ("dolphins").  
 McIntosh, — 1911 A, 85.  
 Martins, C. 1857 A, 69 ("dauphins").  
 Meckel, J. F. 1825 A ("delphininen").  
 Miller, G. S. 1923 A, 29, 34, 40.  
 1924 C, 507.  
 Owen, R. 1845 B, 350.  
 1845 F, 37.  
 1848 B, 58.  
 1868 A, 876.  
 1869 D, 17.  
 Palacky, J. 1902 C, 258 ("delphinide").  
 Palmer, W. 1915 A, 261 ("porpoises").  
 Pander and Alton 1827 A, 2.  
 Pictet, F. J. 1853 A, 381 ("delphinides").  
 Pompeckj, J. F. 1922 A, 87 ("delphiniden").  
 Probst, J. 1886 A, 127.  
 Reche, O. 1905 B, 187.  
 Rehs, J. 1914 A, 41.  
 Rogenhofer, A. 1908 A, (42), ("delphine").  
 Rousseau, L. F. E. 1856 A, 11 ("dauphins").  
 Rovereto, C. 1915 A, 139 ("delphinés").  
 Slater, P. L. 1897 A, 352.  
 Steinmann, G. 1908 A, 237.  
 1912 B, 721, 725.  
 Stromer, E. 1908 B, 170.  
 Taschenberg, O. 1899 A, 4538.  
 Terra, P. 1911 A, 343 (Delphinidæ).  
 Trouessart, E. L. 1905 A, 763.  
 True, F. W. 1906 B, 446.  
 1908 B, 289, 391.  
 1909 B, 329.  
 1911 A, 908.  
 1911 B, 38.  
 1912 C, 189.  
 1912 E, 779.  
 Turner, W. 1909 A, 697, 700.  
 Van Beneden and Gervais 1880 A, 521 ("delphinoides").  
 Vrolik, W. 1850 A, 597 (Delphinus).  
 Wagner, R. 1843 A ("delphininen").  
 Wallace, A. R. 1876 A, ii, 208.  
 Weber, M. 1904 A, 577, 579.  
 Weber and Abel 1928 A, 389 (table), 393, 394.  
 Winge, H. 1919 A, 68, 87, 94, 104, 182.  
 Winge and Miller 1921 A, 11, 28, 46, 87.  
 Woodward, A. S. 1898 E, 330 ("porpoises").  
 Wright, G. F. 1911 B, 436 ("dolphins").  
 Zittel and Schlosser 1911 A, 408.  
 1923 A, 492.

## DELPHININÆ Flower.

- Flower, W. H. 1867 A, 115.  
 Hay, O. P. 1902 A, 593.  
 Abel, O. 1905 A, 140.  
 Flower, W. H. 1867 A, 115.  
 Gray, J. E. 1870 B, 392 (Globiocephalidæ).  
 Kellogg, R. 1928 A, 63.  
 Miller, G. S. 1923 A, 34, 40, 48.  
 Pompeckj, J. F. 1922 A, 88 (Beluginæ).  
 Reche, O. 1905 B, 190.  
 True, F. W. 1908 B, 381.  
 Weber, M. 1904 A, 577, 579.  
 Winge and Miller 1921 A, 32 (Delphini).

GLOBIOCEPHALA Lesson. Type *G. melæna* (Traill).

- Lesson, R. P. 1828, Hist. Nat. Mamm., Oiseaux, etc., i, 441.  
 Unless otherwise indicated the following authors use the generic name *Globiocephalus*.  
 Abel, O. 1909 A, 248.  
 Beddard, F. E. 1900 A, 280, 315, fig. 37.  
 Braun, M. 1908 A, 400.  
 Burlet, H. M. 1917 A, 381.  
 Burmeister, H. 1869 A, 367, pl. xxi.  
 Cuvier, F. 1836 A, 190, pl. xiii (Phocæna).  
 Dollo, L. 1913 B, 616.  
 Doran, A. H. G. 1878 A, 460, pl. lxiii.  
 Elliot, D. G. 1901 A, 23.  
 Eschricht, D. F. 1849 A, 7 (Globioceps).

- Flower, W. H. 1867 A.  
1883 B, 508 (Globiceps).  
1883 D, 399.
- Flower and Lydekker 1891 A, 268.
- Gervais, P. 1853 B, 37 (Delphinus).
- Giebel, C. G. 1883 A, pl. lxxviii.
- Grant, R. E. 1883 A, 65 (Delphinus).
- Gray, J. E. 1846 A, 32.  
1863 A, 201.  
1870 B, 392.
- Guérin, R. 1874 A, 72.
- Hase, A. 1913 A, 141, fig. 61.
- Heilprin, A. 1887 A, 342.
- Kampfen, P. N. 1905 A, 638.
- Kehrer, F. A. 1896 A, 357, fig. 38.
- Kellogg, R. 1928 A, 33, 63, 69, 194.
- Kükenthal, W. 1888 A, 642, figs. 3, 4.  
1891 C, 394.  
1900 A, 230.  
1908 A, 610.
- Lebedinsky, N. G. 1917 A, 317, fig. 1.
- Leboucq, H. 1889 A, 574.
- Leche, W. 1900 A, 1026 (Beluga).
- Le Damany, P. 1906 A, 64 ("globicephale").
- Leunis and Ludwig 1883 A, 278.
- Lockington, W. N. 1884 A, 187.
- Lönnberg, E. 1910 B, 223.  
1911 A, 26.  
1911 C, 16, fig. 7.  
1911 D, 14, figs. 11, 12.
- Lull, R. S. 1917 B, 338.
- Lydekker, R. 1887 A, 81.  
1887 B, 16.  
1909 D, 31, 37, fig. 17.
- McIntosh, — 1911 A, 81.
- Matthes, E. 1921 C.
- Miller, G. S. 1923 A, 25.  
1924 C, 512.
- Murie, J. 1873 A, 235.
- Newton, E. T. 1891 A, 77, pl. vii, figs. 5, 6; pl. viii, fig. 8.
- Nopcea, F. 1923 H, 161 (Globicephalus).
- Oswald, F. 1911 A, 410.
- Palacký, J. 1902 C, 261.
- Palmer, T. S. 1904 A, 296, 792 (Globicephala).
- Parker and Haswell 1897 A, 501, fig. 1081.
- Pompeckj, J. F. 1922 A, 63, 71, 75.
- Pouchet and Chabry 1884 A, 181 (Globiceps).
- Reche, O. 1905 B, 190, fig. 22.
- Reynolds, S. H. 1897 A, 354, 463, 506, figs. 67, 93.
- Ryder, J. 1885 G, 1014.  
1887 B, 442, pls. i, ii.
- Sellards, E. H. 1916 B, 107.
- Stannius, H. 1850 A, 508 (Delphinus).
- Sterling, S. 1910 A, 180.  
1910 B, 231.  
1910 C, 669.
- Taschenberg, O. 1899 A, 4535.
- Trouessart, E. L. 1905 A, 771.
- True, F. W. 1889 A, 10, 183.
- Turner, W. 1909 A, 707.
- Van Bambeke, C. 1868 A, 41 (Delphinus).
- Van Beneden and Gervais 1880 A, 554, pls. li- liii.
- Weber, M. 1886 A.  
1904 A, 580.
- Weber and Abel 1928 A, 369, 394, fig. 225.
- Wilder, B. 1872 B, 316.
- Winge and Miller 1921 A, 34, 70 (Globiceps).
- Zittel, K. A. 1893 A, 161, 175, figs. 127, 128.

#### **Globicephala bærekeii (Sellards).**

- Sellards, E. H. 1916 B, 107, pl. xiv (Globicephalus).
- Hay, O. P. 1923 A, 20, 378.  
Pliocene or Pleistocene; Florida.

#### **Lophocetus Cope. Type *Delphinus calvertensis* Harlan.**

- Hay, O. P. 1902 A, 590.
- Abel, O. 1913 B, 723.
- Case, E. C. 1904 D, 25.
- Eastman, C. R. 1907 C, 79.
- Kellogg, R. 1928 A, 83.
- Palmer, T. S. 1904 A, 383, 797.
- Trouessart, E. L. 1905 A, 761.
- True, F. W. 1908 B, 390.
- Weber, M. 1904 A, 574, 579 (Pontoporia).
- Winge, H. 1919 A, 135.
- Winge and Miller 1921 A, 85.

#### **Lophocetus calvertensis (Harlan).**

- Hay, O. P. 1902 A, 590.
- Case, E. C. 1904 D, 26, pl. xvi, fig. 1.
- Eastman, C. R. 1907 C, 80, pls. i-iii; pl. iv, fig. 2; 2 text-figs.
- Gervais, P. 1852 A, 183 (Delphinus).
- Shattuck, G. B. 1904 A, xciv.
- Van Beneden, P. J. 1880 A, 31 (Delphinus).  
Upper Miocene (Calvert?); Maryland.

#### **DELPHINODON Leidy. Type *Squalodon mento* Leidy.**

- Hay, O. P. 1902 A, 591.
- Abel, O. 1905 A, 41.  
1914 A, 99.
- Case, E. C. 1904 D, 27.
- Dal Piaz, G. 1917 A, 3-34.
- Kellogg, R. 1924 C, 763.  
1928 A, 33.
- Miller, G. S. 1923 A, 47, 49.
- Palmer, T. S. 1904 A, 220, 797.
- Stromer, E. 1915 A, 133.
- Trouessart, E. L. 1905 A, 762.
- True, F. W. 1911 B, 38.  
1912 C, 165, 185, 188.  
1912 E, 780.

- Winge, H. 1919 A, 88.
- Winge and Miller 1921 A, 30, 35.
- Zittel and Schlosser 1923 A, 492.

#### **Delphinodon? debilis (Leidy).**

- Hay, O. P. 1902 A, 589 (Squalodon).
- Cope, E. D. 1867 C, 144 (Squalodon); 153 (Phocodon).
- Kellogg, R. 1922 A, 127 (Squalodon).  
1923 A, 3 (Squalodon); 13 (Delphinodon?).
- Palacký, J. 1902 C, 256 (Squalodon).
- Van Beneden, P. J. 1877 A, 28 (Phoca).  
Eocene marl or Upper Miocene; South Carolina.

**Delphinodon dividum** True.

True, F. W. 1912 C, 188, pls. xvii-xxvi.

Kellogg, R. 1925 C, 3.

1925 D, 6.

1927 A, 1-42.

1928 A, 68.

Lydekker, R. 1913 A, 10.

Stromer, E. 1915 A, 133 (D. leidydividum).

Weber and Abel 1928 A, 408.

Middle Miocene (Calvert); Maryland.

**Delphinodon leidyi** (Hay).

Hay, O. P. 1902 A, 591.

Abel, O. 1905 A, 41.

Case, E. C. 1904 D, 29, pl. xvi, figs. 3-5.

Dal Piaz, G. 1917 A, 3.

Kellogg, R. 1922 A, 130.

Shattuck, G. B. 1904 A, xciv.

Trouessart, E. L. 1905 A, 762.

True, F. W. 1911 B, 38 (D. wymani).

1912 C, 186.

Middle Miocene (Calvert); Maryland.

**Delphinodon mento** Cope.

Hay, O. P. 1902 A, 591.

Abel, O. 1905 A, 41.

1905 E, 94.

Case, E. C. 1904 D, 28, pl. xvii, figs. 1, 2.

Dal Piaz, G. 1917 A, 3.

Shattuck, G. B. 1904 A, xciv.

True, F. W. 1911 B, 38.

1912 C, 186.

Van Beneden, P. J. 1877 A, 28.

Middle Miocene (Calvert); Maryland.

**Delphinodon venustus** (Leidy).

Hay, O. P. 1902 A, 591.

Clark and Miller 1912 A, 167, 168.

Middle Miocene (Calvert); Virginia.

**KENTRIODON** Kellogg. Type *K. pernix* Kellogg.

Kellogg, R. 1927 A, 4.

1928 A, 33, 68.

**Kentriodon pernix** Kellogg.

Kellogg, R. 1927 A, 4, pls. i-xiv; text-figs. 5-20.

1928 A, 68, fig. 10.

Weber and Abel 1928 A, 408.

Middle Miocene (Calvert); Maryland.

**DELPHINAVUS** Lull. Type *D. newhalli* Lull.

Lull, R. S. 1914 A, 211.

Kellogg, R. 1928 A, 33, 63.

Winge, H. 1919 A, 137.

Winge and Miller 1921 A, 87.

Zittel and Schlosser 1923 A, 492.

**Delphinavus newhalli** Lull.

Lull, R. S. 1914 A, 211, pl. viii; text-figs. 1-7.

Kellogg, R. 1928 A, 63.

Stromer, E. 1915 A, 138 (Delphinurus).

Lower Miocene; California.

**DELPHINUS** Linnæus. Type *D. delphis* Linnæus.

Hay, O. P. 1902 A, 593.

Abel, O. 1902 B, 518.

1909 A, 248.

1909 D, (225) ("delphin").

1912 F, 198, 513, 668.

1915 A, 415 ("delphin").

1921 A, 203, fig. 63.

Anderson, R. J. 1908 A, 547 ("dolphin").

Anthony, R. 1912 A ("dauphin").

Ardt, T. 1911 A, 217.

Beddard, F. E. 1900 A, 253, 314, figs. 9, 32.

1902 A, 377.

Bertelli, D. 1909 A, 158, fig. 3.

Beyer, H. 1908 A, 82 ("delphin").

Boenninghaus, G. 1904 A, 283, fig. 5.

Bouvier, L. E. 1889 B, 302.

Branca, W. 1908 C, 392 ("delphine").

Bronn, H. G. 1848 A, 408.

1849 A, 702.

Burllet, H. M. 1917 A, 376.

Cleland, J. 1863 A, 120 ("dolphin").

Cuvier, F. 1826 A, 122.

Cuvier, G. 1805 A.

1825 A, v, pt. 1, 295, 304, pl. xxi.

Denker, A. 1902 A, 431, 438.

Doran, A. H. G. 1878 A, 459, pl. lxiii.

Eastman, C. R. 1906 E, 96, pl. iii, fig. 32.

Eimer, G. H. T. 1901 A, 159, 191 ("delphine").

Elliot, D. G. 1901 A, 27.

Eschricht, D. F. 1849 A, 1.

Fuchs, H. L. 1914 A, 29 ("delphin").

Gervais, P. 1852 A, 147.

1859 A, 301.

Giebel, C. G. 1855 A, 84, pl. xxxvii.

1883 A, pls. xxxviii, lxxiv.

Gottlieb, H. 1914 A, 211.

Gray, J. E. 1846 A, 36, pls. x, xv-xxvi.

1863 A, 200.

1870 B, 391.

Guérin, R. 1874 A, 71.

Guldberg, G. 1894 A, 93.

Hanke, H. 1914 A, 500.

Hasse and Schwarck 1870 A, 145.

Heilprin, A. 1887 A, 342.

Hennicke, C. 1902 A, 160.

Kampfen, P. N. 1905 A, 638.

Kehrer, F. A. 1896 A, 337, fig. 39.

Kellogg, R. 1924 C, 766.

1928 A, 33, 36, 63.

Klaauw, C. J. 1924 B, 601.

Knox, R. 1831 A, 405.

Köstlin, O. 1844 A.

Kükenthal, W. 1908 A, 614.

1908 C, 242, fig. 1.

1909 A, 547.

1909 B, 9.

Larger, R. 1913 A, 721.

Leboucq, H. 1889 A, 573.

Leche, W. 1887 A.

Leunis and Ludwig 1833 A, 278.

- Lockington, W. N. 1884 A, 189.  
 Lönnerberg, E. 1910 B, 221.  
     1911 A, 23.  
     1911 C, 14.  
 Lucae, J. C. 1875 A, 393.  
 Lull, R. S. 1914 A, 211.  
 Lydekker, R. 1909 D, 38, figs. 27, 28.  
 Mayer, A. F. 1849 A, 583.  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1923 A, 11, 27, pl. v, fig. 4.  
     1924 C, 508.  
 Mivart, St. G. 1871 B, 376.  
 Nopcsa, F. 1926 A, 637, text-fig. 2.  
 Osborn, H. F. 1910 B, 317, 562.  
 Owen, R. 1845 B, 350, pl. lxxxviii, fig. 2.  
     1868 A, 876.  
     1869 E, 17.  
 Palacký, J. 1902 C, 258.  
 Palmer, T. S. 1904 A, 221, 792.  
 Pander and Alton 1827 A, 5, pl. i.  
 Peter, K. 1924 B, 497, figs. 11, 12 ("meer-  
 schweine").  
 Pouchet and Chabry 1884 A, 181 ("dauphin").  
 Reche, O. 1905 B, 198, fig. 25.  
 Rehs, J. 1914 A, 41.  
 Retzius, A. 1837 A, 491, pl. xxii, fig. 4.  
     1849 A, 671.

- Reynolds, S. H. 1897 A, 357, 448, 462.  
 Schlesinger, G. 1909 A, (141, 142).  
 Schwalbe, G. 1904 A, 207.  
 Steinmann, G. 1908 A, 247, fig. 155.  
 Sterling, S. 1910 A, 189, fig. 5.  
     1910 B, 231.  
 Symington, J. 1905 A, 107.  
 Toldt, C. 1905 A, 343, figs.  
 Trouessart, E. L. 1905 A, 765.  
 Turner, W. 1909 A, 700, figs. 4-6.  
 Van Bambeke, C. 1868 A, 22.  
 Wagner, R. 1843 A ("delphin").  
 Wallisch, W. 1922 A, 533, fig. 3 ("delphin").  
 Weber, M. 1886 A.  
     1904 A, 555, 574, 577, 580, fig. 411.  
 Weber and Abel 1928 A, 358, 395, fig. 217.  
 Wilder, B. 1872 B, 316.  
     1875 A, 107.  
 Winge, H. 1919 A, 91.  
 Winge and Miller 1921 A, 36.  
**Delphinus sp. indet.**  
 Hay, O. P. 1902 A, 594.  
 Ducatel, J. T. 1837 A, 10, 11, 25, 34. Miocene  
 (Calvert); Maryland.  
 Lyell, C. 1845 B. i, 258, pl. v, figs. 4, 5 (Del-  
 phinus). Miocene; Massachusetts.

#### PHOCÆNA Cuvier. Type *Delphinus Phocæna* Linnæus.

- Cuvier, G. 1817, Nouv. Dict. Nat., éd. 2, ix,  
 163.  
 Allen, J. A. 1881 H, 399-562.  
 Palmer, T. S. 1904 A, 532, 793.  
 True, F. W. 1889 A, 117, pls. xxxv-xxxvii.  
 Weber, M. 1904 A, 574, 577, 579.  
 Weber and Abel 1928 A, 394, 408.

- Phocæna occidua** Jordan and Gilbert.  
*Jordan and Gilbert* 1919 A, 59, pl. ix, fig. 2; pl.  
 xxviii, figs. 1, 3 (Syn.? of *Delphinus occi-  
 duus* Leidy.  
 Palmer, W. 1922 A, 70 (P. occidua).  
 Pliocene (Merced); California.

#### AGABELUS Cope. Type *A. porcatus* Cope.

- Hay, O. P. 1902 A, 593.  
 Beddard, F. E. 1900 A, 306.  
 Case, E. C. 1904 D, 9.  
 Kellogg, R. 1928 A, 33.  
 Palmer, T. S. 1904 A, 83, 797.  
 Steinmann, G. 1912 B, 725.  
 Trouessart, E. L. 1905 A, 762.

- True, F. W. 1912 E, 780.  
 The family position of this genus is not well  
 known.  
**Agabelus porcatus** Cope.  
 Hay, O. P. 1902 A, 593.  
 Rhoads, S. N. 1903 A, 248.  
 Upper Miocene; New Jersey.

#### TRETOSPHYS Cope. Type *T. gabbii* Cope.

- Cope, E. D. 1868 I, 186, 190.  
 Hay, O. P. 1902 A, 591 (Priscodelphinus).  
 Kellogg, R. 1925 D, 7.  
     1928 A, 34.

- Tretosphys gabbii** Cope.  
 Hay, O. P. 1902 A, 591 (Priscodelphinus).  
 Abel, O. 1901 A, 61 (Priscodelphinus).  
 Case, E. C. 1904 D, 9, pl. x, fig. 6 (Priscodel-  
 phinus).  
 Kellogg, R. 1925 D, 7.  
 Shattuck, G. B. 1904 A, xciv (Priscodelphinus).  
 Middle Miocene (Calvert); Maryland.

#### BELOSPHYS Cope. Type *B. spinosus* Cope.

- Cope, E. D. 1875 H, 384.  
 Hay, O. P. 1902 A, 592 (Ixacanthus, in part).  
 Kellogg, R. 1925 C, 2.  
     1928 A, 33.

- Belosphys atropius** (Cope).  
 Hay, O. P. 1902 A, 592 (Ixacanthus).  
 Abel, O. 1901 A, 61 (Priscodelphinus).  
 Case, E. C. 1904 D, 13, pl. xiii, figs. 5, 6 (Ix-  
 acanthus).  
 Kellogg, R. 1927 A, 4 ("atropius").  
 Shattuck, G. B. 1904 A, xciv (Ixacanthus).  
 Middle Miocene (Calvert); Maryland.

**Belosphyx conradi** (Cope).

- Hay, O. P. 1902 A, 592 (Ixacanthus).  
 Abel, O. 1901 A, 61 (Priscodelphinus).  
 Case, E. C. 1904 D, 16 (Ixacanthus).  
 Clark and Miller 1912 A, 167, 168 (Ixacanthus).  
 Kellogg, R. 1927 A, 4 ("conradi").  
 Shattuck, G. B. 1904 A, xciv (Ixacanthus).  
 Middle Miocene (Calvert); Maryland.

**Belosphyx spinosus** (Cope).

- Hay, O. P. 1902 A, 592 (Ixacanthus).  
 Abel, O. 1901 A, 61 (Priscodelphinus).  
 Case, E. C. 1904 D, 17, pl. xiii, figs. 2-4 (Ixacanthus).  
 Kellogg, R. 1925 C, 8 (Ixacanthus).  
 1927 A, 4 ("spinosus").  
 Shattuck, G. B. 1904 A, xciv (Ixacanthus).  
 Middle Miocene (Calvert); Maryland.

**ACRODELPHIS** Abel. Type *Champsodelphis letochæ* Brandt.

- Abel, O. 1899 A, 18.  
 1900 A, 850.  
 1905 A, 130.  
 1912 F, 467.  
 Eastman, C. R. 1907 C, 84, 85.  
 Kellogg, R. 1923 A, 33.  
 Trouessart, E. L. 1906, Rev. crit. Paléozool., x, 205.

- True, F. W. 1912 E, 781.  
 Zittel and Schlosser 1911 A, 408.  
 1923 A, 491.

**Acrodelphis** sp. indet.

- True, F. W. 1912 E, 781.  
 Middle Miocene (Calvert); Maryland.

**CHAMPSODELPHIS** Gervais. Type *Delphinus macrogenius* Fischer.

- Hay, O. P. 1902 A, 590.  
 Abel, O. 1899 A, 8.  
 1900 A, 839, 840 (Champsodelphis).  
 1901 A, 47.  
 1905 A, 130 (Syn. of Acrodelphis).  
 1905 E, 91.  
 1913 C, 212.  
 Brandt, J. F. 1873 A, 262.  
 Cabrera, A. 1926 B, 405.  
 Capellini, G. 1887 A, 106.  
 Du Bus, B. 1872 A, 498.  
 Gervais, P. 1852 A, 152 pl. xli, fig. 5.  
 1859 A, 311, pl. xli, fig. 5 (Squalodon grate-loupii).  
 Kellogg, R. 1924 C, 762.  
 1925 D, 4.  
 1928 A, 33, 67.  
 Miller, G. S. 1923 A, 48.

- Pictet, F. J. 1853 A, 383.  
 Reche, O. 1905 B, 183.  
 Rovereto, C. 1915 A, 141 (Campsodelphis).  
 Trouessart, E. L. 1905 A, 758.  
 True, F. W. 1908 B, 388.  
 Van Beneden and Gervais 1880 A, 482, 496, pls. lviii, lix, lx.  
 Winge, H. 1919 A, 88, 136.  
 Winge and Miller 1921 A, 30, 35, 86.  
 Zittel and Schlosser 1911 A, 408 (Syn. of Acrodelphis).  
 1923 A, 490 (Syn. of Cyrtodelphis), 491 (Syn. of Acrodelphis).

**Champsodelphis? acutidens** (Cope).

- Hay, O. P. 1902 A, 590.  
 Abel, O. 1901 A, 61 (Priscodelphinus).  
 Middle Miocene (Calvert); Maryland.

**RHABDOSTEUS** Cope. Type *R. latiradix* Cope.

- Hay, O. P. 1902 A, 593.  
 Beppard, F. E. 1900 A, 306.  
 Kellogg, R. 1924 C, 763.  
 Palmer, T. S. 1904 A, 603, 797.  
 Trouessart, E. L. 1905 A, 763.  
 True, F. W. 1908 A, 24.  
 1912 E, 780.  
 Winge, H. 1919 A, 135.  
 Winge and Miller 1921 A, 85.

- Rhabdosteus latiradix** Cope.  
 Hay, O. P. 1902 A, 593.  
 Case, E. C. 1904 D, 24, pl. xv, figs. 1-4, 5?  
 Gregory and Kellogg 1927 A, 4.  
 Kellogg, R. 1925 C, 1.  
 Shattuck, G. B. 1904 A, xciv.  
 True, F. W. 1908 A, 24, pl. vi.  
 Middle Miocene (Calvert); Maryland.

**CYRTODELPHIS** Abel. Type *Delphinorhynchus sulcatus* Gervais.

Unless otherwise indicated the authors, as cited, use for this genus the name *Schizodelphis*.

- Abel, O. 1899 A, 11, 12 (Cyrtodelphis).  
 1900 A, 839, 846, 859 (Cyrtodelphis).  
 1901 A, 47, pl. i, fig. 3; pl. ii, fig. 3; pl. v, figs. 1, 2 (Cyrtodelphis).  
 1902 A, 184 (Cyrtodelphis).  
 1905 A, 124, 126 (Cyrtodelphis).  
 1909 A, 247.  
 1912 G, 60.  
 Brandt, J. F. 1873 A, 253.  
 Cabrera, A. 1926 B, 405.  
 Capellini, G. 1887 A, 106.

- Dal Piaz, G. 1905 A, 253, pls. xviii-xxi; text-figs. 17-26 (Cyrtodelphis).  
 Eastman, C. R. 1907 A, 83.  
 Gervais, P. 1861, Mém. Acad. Montpellier, v, pt. 1, 125.  
 Kellogg, R. 1924 C, 762, 763, 764.  
 1925 C, 3, 4.  
 1928 A, 33 (Cyrtodelphis).  
 Miller, G. S. 1923 A, 48 (Cyrtodelphis).  
 Palmer, T. S. 1904 A, 623, 798.  
 Paquier, V. 1894 A, 10.  
 Pompeckj, J. F. 1922 A, 89.  
 Probst, J. 1886 A, 118.  
 Trouessart, E. L. 1905 A, 758.

True, F. W. 1908 A, 451.  
1909 C, 451.

Van Beneden and Gervais 1880 A, 503, pl. lvii.  
Winge, H. 1919 A, 88, 136.  
Winge and Miller 1921 A, 30, 35.  
Zittel, K. A. 1890 A, 173.

**Cyrtodelphis crassangulum** (Cope).

Cope, E. D. 1895 A, 148 (Cetotherium).  
Hay, O. P. 1902 A, 599 (Cetotherium leptocentrum, in part).  
Case, E. C. 1904 D, 12, pl. xi, figs. 1-3 (Priscodelphinus?).  
Gregory and Kellogg 1927 A, 4 (Schizodelphis).  
Kellogg, R. 1925 C, 3 (Priscodelphinus?).  
Lydekker, R. 1909 C, 458 (Priscodelphinus crassirotis).  
Shattuck, G. B. 1904 A, xciv (Priscodelphinus?).

True, F. W. 1908 D, 451, 452, pls. lx, lx (Schizodelphis).  
1910 B, 26 (Schizodelphis).  
1912 E, 781 (Schizodelphis).  
Middle Miocene (Calvert); Maryland.

**Cyrtodelphis depressus** (Allen).

Allen, G. M. 1921 A, 145, pl. ix, figs. 1-5 (Schizodelphis).  
Case, E. C. 1904 D, 24, pl. xv, fig. 1 (Rhabdos-teus latiradix. This species?).  
Leidy, J. 1869 A, 434 (Tetropsys grandævus, in part. This species?).  
True, F. W. 1908 A, 28, figs. 1-3 (Priscodelphinus sp. This species?).  
Miocene or Pliocene (Bone Valley); Florida: Miocene?; New Jersey?.

**POMATODELPHIS** Allen. Type *P. inaequalis* Allen.

Allen, G. M. 1921 A, 148.  
Kellogg, R. 1928 A, 33, 67.

**Pomatodelphis inaequalis** Allen.

Allen, G. M. 1921 A, 148, pls. x, xi.  
Kellogg, R. 1924 C, 765.  
Miocene or Pliocene (Bone Valley); Florida.

**EURHINODELPHINÆ** Trouessart.

Trouessart, E. L. 1905 A, 761.  
Abel, O. 1901 A, 60 (Eurhinodelphidæ).  
1902 B, 523 ("eurhinodelphiden").  
1905 E, 94 (Eurhinodelphidæ, Eurhinodelphinae).  
1909 A, 251 ("eurhinodelphiden").  
1912 F, 467 ("eurhinodelphiden").  
1913 B, 723.  
1914 A, 96.  
1919 A, 767.  
Kellogg, R. 1925 C, 6.

Kellogg, R. 1928 A, 62.  
Lydekker, R. 1909 D, 29.  
Miller, G. S. 1923 A, 34, 40, 49 (Eurhinodelphinae).  
Palmer, T. S. 1904 A, 796.  
True, F. W. 1908 B, 383, 391.  
1912 E, 779.  
Winge and Miller 1921 A, 31, 35 (Eurhinodelphini).  
Zittel and Schlosser 1911 A, 408.  
1923 A, 491.

**ARGYROCETUS** Lydekker. Type *A. patagonicus* Lydekker.

Lydekker, R. 1894 B, 125.  
Cabrera, A. 1926 B, 405.  
Lydekker, R. 1893 D, art. 2, 10.  
Palmer, T. S. 1904 A, 120, 797.  
Winge and Miller 1921 A, 31, 35.

Zittel and Schlosser 1911 A, 408.  
1923 A, 491.

**Argyrocetus** sp. indet.

True, F. W. 1912 E, 781.  
Middle Miocene? (Calvert?); Maryland?

**CETERHINOPS** Leidy. Type *C. longifrons* Leidy.

Hay, O. P. 1902 A, 590.  
Kellogg, R. 1925 C, 10.  
1926 A, 7.  
1928 A, 33.  
Palmer, T. S. 1904 A, 174, 796.  
Trouessart, E. L. 1905 A, 756.  
True, F. W. 1907 A, 7 (Syn? of Squalodon).

**Ceterhinops longifrons** Leidy.

Hay, O. P. 1902 A, 590.  
Kellogg, R. 1923 A, 3, 23.  
1924 C, 761.  
Upper Miocene (Edisto marl); South Carolina.

**EURHINODELPHIS** Du Bus. Type *E. cocheteuxii* Du Bus.

Du Bus, B. 1867 A, 569.  
Abel, O. 1901 C, 316.  
1902 B, 519.  
1904 A, 184.  
1905 E, 94.  
1907 G, 27, fig. 27.  
1909 A, 241.  
1912 F, 467, 515, fig. 354.  
1913 G, 60.  
1913 B, 724, fig. 28.

Abel, O. 1921 A, 175.  
1923 B, 271.  
Beddard, F. E. 1900 A, 50, 51, fig. 11.  
Brandt, J. F. 1873 A, 284.  
Cabrera, A. 1926 B, 405.  
Capellini, G. 1887 A, 108.  
Eastman, C. R. 1907 C, 87.  
Kellogg, R. 1924 C, 763, 764.  
1925 C, 1-40.  
1927 B.



- Kellogg, R. 1928 A, 33, 46, 62, 63.  
 Lönnberg, E. 1911 A, 73 (Eurinodelphis).  
 Matsumoto, H. 1926 B, 21, pl. ix; text-fig. 3.  
 Miller, G. S. 1923 A, 26, 49.  
 Pompeckj, J. F. 1922 A, 53.  
 1925 A, 17.  
 Reche, O. 1905 B, 183.  
 Steinmann, G. 1912 B, 725.  
 Stromer, E. 1915 A, 137.  
 Trouessart, E. L. 1905 A, 751.  
 True, F. W. 1908 B, 388 (Eurinodelphis).  
 1909 C, 453.  
 1910 B, 22, 24.  
 1912 E, 780, 781.  
 Van Beneden and Gervais 1880 A, 492.  
 Weber and Abel 1928 A, 407, fig. 255.  
 Winge, H. 1919 A, 89.  
 Winge and Miller 1921 A, 31, 35.

- Zittel and Schlosser 1911 A, 408.  
 1923 A, 491.

### **Eurhinodelphis bossi Kellogg.**

- Kellogg, R. 1925 C, 1-40, pls. i-xvii; text-figs. 1-4.  
 Gregory and Kellogg 1927 B, 5.  
 Kellogg, R. 1926 A, 16.  
 1928 A, 65, fig. 9.  
 True, F. W. 1912 E, 781 (E. sp. indet.).  
 Middle Miocene (Calvert); Maryland.

### **Eurhinodelphis sp. indet.**

- Hanna, G. D. 1923 A, 65 (Eurhinodelphia).  
 Miocene?; California.  
 Hay, O. P. 1927 D, 173, 174. Miocene?; California.

### **IXACANTHUS Cope. Type *I. celospondylus* Cope.**

- Hay, O. P. 1902 A, 592.  
 Abel, O. 1909 A, 253.  
 Case, E. C. 1904 D, 15.  
 Kellogg, R. 1925 C, 2 (Ixacanthus).  
 1928 A, 33.  
 Lydekker, R. 1892 C, 562.  
 Palmer, T. S. 1904 A, 355, 797.  
 Trouessart, E. L. 1905 A, 762.

- True, F. W. 1912 E, 780.  
 Van Beneden, P. J. 1880 A, 31 (Xacanthus).

### **Ixacanthus celospondylus Cope.**

- Hay, O. P. 1902 A, 592.  
 Case, E. C. 1904 D, 19, pl. xiv, figs. 1-2.  
 Rhoads, S. N. 1903 A, 249.  
 Shattuck, G. B. 1904 A, xciv.  
 Middle Miocene (Calvert); Maryland.

### **PRISCODELPHINUS Leidy. Type *P. harlani* Leidy.**

- Hay, O. P. 1902 A, 591.  
 Abel, O. 1901 A, 61.  
 1909 A, 253.  
 1912 F, 467.  
 1914 A, 96.  
 Beddard, F. E. 1900 A, 306.  
 1902 A, 384.  
 Capellini, G. 1887 A, 107.  
 Du Bus, B. 1872 A, 492.  
 Heilprin, A. 1887 A, 345.  
 Kellogg, R. 1925 C, 2.  
 1928 A, 33.  
 Miller, G. S. 1923 A, 49.  
 Trouessart, E. L. 1905 A, 762.  
 True, F. W. 1908 A, 28, figs. 1-3.  
 1908 D, 449, 451.  
 1909 C, 447.  
 1912 E, 780.  
 Zittel and Schlosser 1923 A, 491.

### **Priscodelphinus grandævus Leidy.**

- Hay, O. P. 1902 A, 591.  
 Abel, O. 1901 A, 61.  
 Case, E. C. 1904 D, 15, pl. xii, fig. 1.  
 Kellogg, R. 1924 B, 27.  
 1925 C, 7.  
 Reche, O. 1905 B, 183, fig. 20.  
 Shattuck, G. B. 1904 A, xciv.  
 Stromer, E. 1908 B, 155.  
 True, F. W. 1908 A, 24, 28.  
 1908 D, 450.  
 Middle Miocene (Calvert); Maryland.

### **Priscodelphinus harlani Leidy.**

- Hay, O. P. 1902 A, 591.  
 Abel, O. 1901 A, 61.

- Kellogg, R. 1925 C, 2 (*P. harlani*).  
 1927 A, 4 ("*harlani*").  
 Rhoads, S. N. 1903 A, 247.  
 True, F. W. 1908 D, 450.  
 Van Beneden, P. J. 1880 A, 31.  
 Upper Miocene; New Jersey.

### **Priscodelphinus lacertosus Cope.**

- Hay, O. P. 1902 A, 591.  
 Abel, O. 1901 A, 61.  
 Case, E. C. 1904 D, 11.  
 Rhoads, S. N. 1903 A, 247.  
 Shattuck, G. B. 1904 A, xciv.  
 Middle Miocene (Calvert); Maryland.

### **Priscodelphinus stenus Cope.**

- Hay, O. P. 1902 A, 593 (Ixacanthus).  
 Abel, O. 1901 A, 61.  
 Case, E. C. 1904 D, 16, pl. xiii, fig. 1 (Ixacanthus).  
 Kellogg, R. 1927 A, 3, text-figs. 3, 4.  
 Shattuck, G. B. 1904 A, xciv (Ixacanthus).  
 Middle Miocene (Calvert); Maryland.

### **Priscodelphinus uræus Cope.**

- Hay, O. P. 1902 A, 592.  
 Abel, O. 1901 A, 61.  
 Case, E. C. 1904 D, 13.  
 Rhoads, S. N. 1903 A, 247.  
 Shattuck, G. B. 1904 A, xciv.  
 Middle Miocene (Calvert and St. Mary's); Maryland; Miocene; New Jersey.

### **Priscodelphinus sp. indet.**

- Allen, G. M. 1921 A, 145 (*Schizodelphis du-*  
*pressus?*).

- Matson and Clapp 1909 A, 136. Miocene? | Spencer, J. W. 1895 A, 137.  
(Peace Creek); Florida. | True, F. W. 1908 A, 24, fig. 1.

## STENODELPHININÆ Miller.

- Miller, G. S. 1923 A, 34, 40, 51. | Gregory and Kellogg 1927 A, 1.

LONCHODELPHIS G. M. Allen. Type *Delphinus occiduous* Leidy.

Allen, G. M. 1924 B, 194.

Kellogg, R. 1928 A, 34.

**Lonchodelphis occiduous** (Leidy).

Hay, O. P. 1902 A, 594 (Delphinus).

Allen, G. M. 1924 B, 194.

Eastman, C. R. 1907 C, 93; pl. iv, fig. 1 (Delphinus).

Gregory and Kellogg 1927 A, 1.

Pliocene (Merced); California.

STENODELPHIS Gervais. Type *Delphinus blainvillei* Gervais.

Gervais, P. 1847, D'Orbigny's Voy. dans l'Amér. Mérid., iv, pt. 2, Maum. 31-32.

Abel, O. 1909 A, 252.  
1909 B, 264.

Allen, G. M. 1921 B, 241.

Beddard, F. E. 1900 A, 180, 301.

Cabrera, A. 1926 B, 392.

Eastman, C. R. 1907 C, 79, 82.

Flower, W. H. 1867 A, 106, pl. xxviii (Pontoporia).

Gregory and Kellogg 1927 A, 3, 4 (Pontopora, a syn.).

Kampfen, P. N. 1905 A, 643.

Kellogg, R. 1928 A, 8.

1928 A, 34, 71.

Lönningberg, E. 1910 B, 230, 250.

Lönningberg, E. 1911 A, 36.

Miller, G. S. 1923 A, 23, 25, 28, 35, pl. vi, fig. 2.

Rovereto, C. 1915 A, 141 (Syn. of Pontoporia).

Schlosser, M. 1899 I, 346.

Trouessart, E. L. 1905 A, 758.

True, F. W. 1908 A, 20.

1909 B, 329.

Winge and Miller 1921 A, 26, 28, 45 (Syn. of Pontoporia).

**Stenodelphis sternbergi** Gregory and Kellogg.

Gregory and Kellogg 1927 A, 1, figs. 1-3.

Kellogg, R. 1928 A, 71.

Pleistocene; California.

## DELPHINAPTERINÆ Gill.

Gill, T. 1871 B, 124.

Hay, O. P. 1902 A, 594.

Elliot, D. G. 1901 A, 18.

Flower, W. H. 1867 A, 115 (Beluginae).

Frassetto, F. 1903 A, 244.

Kampfen, P. N. 1905 A, 636 (Delphinapteridæ).

Kellogg, R. 1923 A, 63.

Lönningberg, E. 1911 C, 14 (Delphinapteridæ).

Miller, G. S. 1923 A, 34, 40, 51.

Reche, O. 1905 B, 135 (Delphinapteridæ).

Rousseau, L. F. E. 1856 A, 13 ("delphinaptères").

Trouessart, E. L. 1905 A, 771.

True, F. W. 1908 B, 391.

Weber, M. 1904 A, 577, 579 (Delphinapteridæ).

Zittel and Schlosser 1911 A, 408 (Beluginae).

1923 A, 491 (Beluginae).

DELPHINAPTERUS Lacépède. Type *D. leucas* Pall.

Lacépède, B. G. E. 1804, Hist. Nat. Cétacés, Tableau etc., xli, 243-249.

Hay, O. P. 1902 A, 594.

Abel, O. 1901 B, 311 (Beluga).

1909 A, 243 (Beluga).

1912 F, 467 (Beluga).

1914 A, 95 (Beluga).

Ardt, T. 1907 D, 38 (Beluga).

Beddard, F. E. 1900 A, 242, 314, fig. 16 (Beluga).

1902 A, 372.

Bouvier, L. E. 1849 B, 302 ("delphinaptère").

Braun, M. 1903 A, 402 (Beluga).

Doran, A. H. G. 1878 A, 460, pl. lxiii.

Eastman, C. R. 1906 E, 87.

Elliot, D. G. 1901 A, 19.

Fachricht, D. F. 1849 A, 7 (Beluga).

1869 A, 13, pl. viii.

Flower, W. H. 1867 A, 96 (Beluga).

Frassetto, F. 1903 A, 244, pl. xii, fig. 72.

Freund, L. 1906 A, 116 (Beluga).

Giebel, C. G. 1855 A, 84, pl. xxxv, figs. 10, 13.

Giebel, C. G. 1853 A, pl. xxxviii.

Gray, J. E. 1846 A, 29 (Beluga).

1863 A, 200 (Delphinapterus); 201 (Beluga).

1870 B, 392 (Beluga).

Guérin, R. 1874 A, 74.

Heilprin, A. 1887 A, 342.

Hennicke, C. 1902 A, 160 (Beluga).

Huxley, T. H. 1863 F, 636, fig. 63.

Kampfen, P. N. 1905 A, 637.

Kellogg, R. 1925 C, 2, 16.

1928 A, 34, 69.

Kükenthal, W. 1893 B, 56, pl. iii (Beluga).

1909 A, 556 (Beluga).

Leboucq, H. 1889 A, 574 (Beluga).

Leunis and Ludwig 1883 A, 278 (Beluga).

Lockington, W. N. 1884 A, 184.

Lönningberg, E. 1910 B, 251.

1911 A, 30, 74.

1911 C, 1-18.

McIntosh, — 1911 A, 89.

Miller, G. S. 1923 A, 27, 51.

- Miller, G. S. 1924 C, 513.  
 Osburn, R. C. 1903 A, 656.  
     1906 A, 452, 454.  
 Oswald, F. 1911 A, 410.  
 Palmer, T. S. 1904 A, 220, 792.  
 Pander and Alton 1827 A, 5 (Beluga).  
 Perkins, G. H. 1910 A, 150.  
 Probst, J. 1836 A, 130 (Delphinus, Beluga).  
 Pyecraft, W. P. 1909 A, 204 (Beluga).  
 Rovereto, C. 1915 A, 141 (Beluga).  
 Ryder, J. 1887 B, pl. ii (Beluga).  
 Slater, P. L. 1897 A, 353.  
 Steinmann, G. 1908 A, 246.  
     1912 B, 725.  
 Sterling, S. 1910 A, 180.  
     1910 C, 669.  
 Trouessart, E. L. 1905 A, 771.  
 True, F. W. 1908 B, 389.  
     1909 B, 329.  
 Wallace, A. R. 1876 A, ii, 209 (Beluga).  
 Watson and Young 1879 A, 393.  
 Weber, M. 1904 A, 573, 577, 579.  
 Weber and Abel 1928 A, 216, 393.  
 Weber and Burlet 1927 A, 133 (Beluga).  
 Wiman, C. 1913 A, 153.  
 Winge, H. 1919 A, 89, 104.  
 Winge and Miller 1921 A, 31, 35, 46, 73, 80.
- Delphinapterus leucas Pallas.**  
*Pallas, P. S.* 1776, Reise Russ. Reiches, iii, 85, footnote.  
*Hay, O. P.* 1902 A, 594.  
*Abel, O.* 1901 A, 35.  
     1909 A, 243 (Beluga).  
     1912 F, 196 (Beluga).  
*Allen, J. A.* 1903 A, 119.  
*Ardley, E.* 1916 A, 490 (Beluga catodon).  
*Beddard, F. E.* 1900 A, 244.  
     1902 A, 373.  
*Braun, M.* 1907 A, 402.  
     1909 A, 409.  
*Brown, R.* 1868 A, 551 (Beluga catodon).  
*Burlet, H. M.* 1917 A, 381.  
*Coleman, A. P.* 1901 C, 217, 219, 224 (Beluga catodon).  
*Collett, R.* 1906 A, 16.  
*Cuvier, F.* 1826 A, 199, pl. xvi (Phocaena).  
*Cuvier, G.* 1825 A, v, pt. 1, 297, 302, pl. xxii.  
*Eastman, C. R.* 1906 E, 89, figs. A-F.  
*Elliot, D. G.* 1901 A, 19, pl. v.  
*Fischer, E.* 1903 A, 709 (Beluga).  
*Fischer, J. B.* 1829 A, 513 (Delphinus).  
*Gray, J. E.* 1846 A, 29 (Beluga catodon).  
*Hay, O. P.* 1923 A, 483.  
*Hitchcock, E. Jr.* 1881 A, 165.  
*Honeyman, D.* 1888 A, 139 ("Beluga." This species?).  
*Hubbard, O. P.* 1887 A, 242 ("whale." This species?).  
*Kükenthal, W.* 1888 A, 638, figs. 1, 2 (Beluga).  
     1900 A, 224, fig. 9.  
*Kunze, A.* 1912 A, 608, figs. N, O.  
*Lambe, L. M.* 1904 C, 30, 39, 50.  
     1910 C, 273.  
     1912 A, 14.  
     1914 F, 299.  
*Lockington, W. N.* 1884 A, 184.
- Lönnberg, E.* 1910 B, 225, 252, fig. 6.  
     1911 C, 1-18, figs. 1-4.  
*Lydekker, R.* 1909 D, 32.  
*Major, C. J. F.* 1899 A, 500 ("Delphinapterus").  
*Miller, G. S.* 1924 C, 513.  
*Newton, E. T.* 1891 A, 79.  
*Osburn, R. C.* 1906 A, pl. ix, fig. 35.  
*Owen, R.* 1845 B, 351 (Delphinus).  
     1868 A, 877 (Delphinus).  
*Palacky, J.* 1902 C, 258.  
*Pander and Alton* 1826 A, 10, pl. vii (Delphinus).  
*Reche, O.* 1905 B, 186, 216.  
*Selwyn, A. R. C.* 1887 A, 46 (D. catodon).  
*Stansfield, J.* 1915 A, 67 (Beluga catodon).  
*Steinmann, G.* 1908 A, 246, fig. 153.  
*Struthers, J.* 1895 A, 124, pl. iv.  
*Taschenberg, O.* 1899 A, 4538.  
*Taylor, F. B.* 1908 A, 652 ("whale").  
*Trouessart, E. L.* 1905 A, 772.  
*True, F. W.* 1909 B, 325, pl. xxiii.  
*Turner, W.* 1909 A, 711.  
*Watson and Young* 1879 A, 393, pls. vii, viii.  
*Weber, M.* 1886 A.  
*Whiteaves, J. F.* 1906 A, 171.  
*Wyman, J.* 1863 A, 603, pl. xiii (Beluga).  
     Recent; Arctic seas south to Cape Cod:  
     Pleistocene (Late); Canada.
- Delphinapterus orcina Cope.**  
*Hay, O. P.* 1902 A, 594.  
     Miocene; North Carolina.
- Delphinapterus ruschenbergi (Cope).**  
*Hay, O. P.* 1902 A, 592 (Priscodelphinus).  
*Abel, O.* 1901 A, 61 (Priscodelphinus).  
*Case, E. C.* 1904 D, 10, pl. x, figs. 7, 8.  
     (Priscodelphinus).  
*Kellogg, R.* 1927 A, 1, text-figs. 1, 2.  
*Shattuck, G. B.* 1904 A, xciv (Priscodelphinus).  
     Middle Miocene (Calvert); Maryland.
- Delphinapterus vermontanus (Thompson).**  
*Hay, O. P.* 1902 A, 594.  
*Ami, H. M.* 1897 A, 25 (Beluga).  
*Baldwin, S. P.* 1894 A, 173 (Beluga).  
*Billings, E.* 1870 A, 438 (Beluga).  
*Dana, J. D.* 1863 F, 919 (Beluga).  
     1896 A, 983, fig. 1561.  
*Dawson, J. W.* 1872 B, 403 (Beluga).  
     1872 C, 99 (Beluga).  
     1894 C, 177, 268 (Beluga).  
*Hager, A. D.* 1861 A, 938, fig. 340.  
*Hay, O. P.* 1923 A, 483.  
*Hitchcock, E.* 1861 B, 162.  
*Kellogg, R.* 1925 D, 7.  
*Packard, A. S.* 1867 A, 261 (Beluga).  
*Pect, C. E.* 1904 A, 462 (Beluga).  
*Perkins, G. H.* 1908 A, 76, pls. x-xvi.  
     1910 A, 161, pls. v-viii.  
     1910 B, 55, pls. iii, iv.  
*Whiteaves, J. F.* 1906 A, 171.  
     1907 A, 214 (Beluga).  
     Pleistocene (Late Wisconsin); Vermont:  
     Ontario; Quebec.

**Delphinapterus** sp. indet.

Hay, O. P. 1923 A, 289. Pleistocene (Late Wisconsin); New Brunswick.

Matthew, G. F. 1879 A, 23 (Beluga sp.). Pleistocene (Leda clay); New Brunswick.

## MONODONTINÆ Miller.

Müller, G. S. 1923 A, 34, 40, 51.

Gray, J. E. 1821 A, 310 (Monodontidæ).

Kellogg, R. 1928 A, 63.

Terra, P. 1911 A, 343 (Monodontidæ).

MONODON Linnæus. Type *M. monoceros* Linnæus.

Hay, O. P. 1902 A, 594.

Abel, O. 1901 B, 311.

1909 A, 251.

1912 F, 467, 686.

1914 A, 95.

Beddard, F. E. 1902 A, 373.

Braun, M. 1908 A, 404.

Bronn, H. G. 1848 A, 741.

1849 A, 702.

Cuvier, F. 1825 A, 245, pl. cii ("narwals").

1836 A, 230.

Cuvier, G. 1805 A.

Doran, A. H. G. 1878 A, 461, pl. lxiii.

Elliot, D. G. 1901 A, 18.

Eschricht, D. F. 1849 A, 7.

Fischer, J. B. 1829 A, 516.

Gervais, P. 1859 A, 319.

Giebel, C. G. 1855 A, 84.

1883 A, 271.

Giglioli, E. H. 1872 A, 10.

Gray, J. E. 1846 A, 29.

1863 A, 201 (Monoceros).

Guérin, R. 1874 A, 73.

Heilprin, A. 1887 A, 344.

Hennicke, C. 1902 A, 160 ("narwal").

Howes, G. B. 1903 A, 329, fig. 3.

Kellogg, R. 1928 A, 34.

Küstlin, O. 1844 A.

Kükenthal, W. 1909 A, 556.

Larger, R. 1913 A, 727.

Leboucq, H. 1889 A, 574.

Leche, W. 1900 A, 1027.

Leunis and Ludwig 1883 A, 280.

Lockington, W. N. 1884 A, 184.

McIntosh, — 1911 A, 90.

Martins, C. 1857 A, 69 ("narval").

Meckel, J. F. 1825 A.

Miller, G. S. 1923 A, 26, 27, 29, 51.

1924 C, 514.

Osburn, R. C. 1906 A, 454.

Owen, R. 1868 A, 893, fig. 220.

Palmer, T. S. 1904 A, 431, 793.

Perkins, G. H. 1910 A, 150.

Pictet, F. J. 1853 A, 384.

Retzius, A. 1849 A, 670.

Reynolds, S. H. 1897 A, 357, 427.

Rovereto, C. 1915 A, 141.

Ryder, J. 1887 B, 466.

Scalater, P. L. 1897 A, 353.

Smith, G. E. 1903 A, 329, fig. 3.

Sterling, S. 1910 A, 180.

1910 B, 231.

Trouessart, E. L. 1905 A, 772.

True, F. W. 1908 B, 389.

Wagner, R. 1843 A.

Weber, M. 1886 A.

1904 A, 573, 577, 579.

Weber and Abel 1928 A, 389 (table), 393.

Weber and Burlet 1927 A, 133

Wherry, G. 1902 A, 974 ("narwhal").

Winge, H. 1919 A, 90, 94.

Winge and Miller 1921 A, 31, 35, 46, 80.

**Monodon monoceros** Linnæus.

Hay, O. P. 1902 A, 594.

Abel, O. 1901 A, 34.

1901 B, 311.

1902 B, 518.

1909 A, 248.

Beddard, F. E. 1902 A, 373.

Brandt and Woldrich 1887 A, 121.

Brown, R. 1868 A, 552.

Cuvier, F. 1836 A, 230, 380, pl. xvii.

Cuvier, G. 1825 A, v, pt. 1, 319, 349 ("narval").

Elliot, D. G. 1901 A, 19, fig. 6.

Fischer, J. B. 1829 A, 516.

Gervais, P. 1859 A, 319.

Gray, J. E. 1846 A, 28.

1870 B, 392.

Hay, O. P. 1923 A, 19, 289.

Kellogg, R. 1928 A, 203, fig. 23.

Knox, R. 1831 A, 401, pl. xv, figs. 1-6.

Kükenthal, W. 1900 A, 227, fig. 12.

Larger, R. 1913 A, 729.

Lataste, F. 1887 A, 267.

Lockington, W. N. 1884 A, 184, fig. 100.

Lönnberg, E. 1911 A, 30, fig. ("narwhal").

Lydekker, R. 1909 D, 33, fig. 12.

Major, C. J. F. 1899 A, 500 ("Monodon").

Miller, G. S. 1924 C, 514.

Mulder, C. 1835 A, 65, pl. ii.

Newton, E. T. 1882 A, 109, pl. ix, fig. 2.

1891 A, 78.

Osburn, R. C. 1906 A, pl. viii, figs. 30, 32.

Palacký, J. 1902 C, 259.

Pander and Alton 1826 A, 10, pl. vi.

1827 A, 3, pl. v ("narwal").

Perkins, G. H. 1908 A, 102, pls. xvii-xx ("Monodon").

1910 A, 150, pls. i-iv.

Porsild, M. P. 1922 A, 8, pl. i.

Reche, O. 1905 B, 135, 212.

Rousseau, L. F. E. 1856 A, 15.

Ryder, J. 1887 B, 466 (M. communis).

Smith, G. E. 1903 B, 50, fig. 3 ("Monodon").

Sterling, S. 1910 B, 235.

Taschenberg, O. 1899 A, 4626.

Turner, W. 1909 A, 712, fig. 10.

Van Bambeke, C. 1868 A, 46, fig.

Weber, M. 1904 A, 566, fig. 421.

Weber and Abel 1928 A, 371, 377, 385, figs. 227, 234, 239.

Ziegler, H. E. 1901 A, 237 ("narhal").

Recent; Arctic seas: Pleistocene; New Brunswick, Ontario.

## PLATANISTIDÆ Flower.

- Flower, W. H. 1867 A, 113.  
 Hay, O. P. 1902 A, 590.  
 Abel, O. 1900 A, 839 ("platanistiden").  
     1901 A, 35.  
     1902 B, 523 ("platanistiden").  
     1905 A, 43.  
     1905 E, 94.  
     1912 F, 467.  
     1913 C, 221.  
     1914 A, 96 (Platanistinae).  
 Allen, G. M. 1921 B, 240.  
 Anderson, J. 1879 A, 417-550, pls. xxv-xli; text-figs. 14-20 (Platanista).  
 Arldt, T. 1907 D, 674.  
 Beddard, F. E. 1900 A, 293, 313.  
     1902 A, 380.  
 Case, E. C. 1904 D, 5, 8.  
 Cuvier, F. 1836 A, 251 ("platanistes").  
 Dal Piaz, G. 1916 A, 4.  
 Doran, A. H. G. 1878 A, 462.  
 Eastman, C. R. 1907 C, 86.  
 Kampfen, P. N. 1905 A, 643.  
 Kellogg, R. 1928 A, 34, 174.  
 Lockington, W. N. 1884 A, 190.  
 Lydekker, R. 1892 C, 562.  
 Miller, G. S. 1923 A, 33, 40, 53.  
 Pompeckj, J. F. 1922 A (Platiniste).  
 Probst, J. 1886 A, 117 (Delphinorhynchidæ).  
 Reche, O. 1905 B, 176.  
 Steinmann, G. 1908 A, 248 ("platanistiden").  
     1912 B, 725 ("platanistiden").  
 Sterling, S. 1910 B, 231.  
 Stromer, E. 1908 A, 83.  
     1908 B, 174 ("platanistiden").  
 Trouessart, E. L. 1905 A, 756.  
 True, F. W. 1912 E, 779.  
 Van Beneden and Gervais 1880 A, 454, pls. xxx-xxxiii ("platanistes").  
 Weber, M. 1904 A, 574, 576, 578, 579, text-fig. 426 (Platanista, Platanistidæ).  
 Weber and Abel 1928 A, 389 (table), 392, 407.  
 Winge, H. 1919 A, 68, 83, 86, 104, 120.  
 Winge and Miller 1921 A, 11, 25, 28, 45.

## PLATANISTINÆ.

- Hay, O. P. 1902 A, 590.  
 Eastman, C. R. 1907 C, 86.  
 Flower, W. H. 1867 A, 114.  
 Gray, J. E. 1846 A, 24, 45 (Platanistina).  
 Guérin, R. 1874 A, 67.  
 Trouessart, E. L. 1905 A, 757.

ZARHACHIS Cope. Type *Z. flagellator* Cope.

- Hay, O. P. 1902 A, 592.  
 Beddard, F. E. 1900 A, 306 (Zarrhachis).  
     1902 A, 384 (Zarrhachis).  
 Kellogg, R. 1924 B, 2.  
     1924 C, 763.  
     1926 A, 2.  
     1928 A, 34, 46, 174.  
 Palmer, T. S. 1904 A, 713, 798.  
 Reche, O. 1905 B, 183.  
 Trouessart, E. L. 1905 A, 762.  
 True, F. W. 1912 E, 780.  
**Zarrhachis flagellator Cope.**  
 Hay, O. P. 1902 A, 592.  
 Case, E. C. 1904 D, 20, pl. xiv, fig. 3.  
 Kellogg, R. 1924 B, 2, pls. i-iv; pl. vii, figs. 2, 4, 6, 8; pl. viii, figs. 2, 4, 5; pls. ix-xviii.  
     1924 C, 763.  
     1925 D, 4.  
     1926 A, 2, pls. i-v.  
 Kellogg, R. 1928 A, 174, 202, figs. 12, 22.  
 Shattuck, G. B. 1904 A, xciv.  
     Middle Miocene (Calvert); Maryland.  
**Zarrhachis tysonii Cope.**  
 Hay, O. P. 1902 A, 592.  
 Case, E. C. 1904 D, 22.  
 Kellogg, R. 1924 B, 3.  
 Shattuck, G. B. 1904 A, xciv.  
     Middle Miocene (St. Mary's); Maryland.  
**Zarrhachis velox Cope.**  
 Hay, O. P. 1902 A, 592.  
 Kellogg, R. 1924 B, 3.  
 Rhoads, S. N. 1903 A, 248.  
     Upper Miocene (Kirkwood); New Jersey.  
**Platanistid sp. indet.**  
 Sellards, E. H. 1915 D, 32. Pliocene; Florida.

## PHYSETERIDÆ Gray.

- Gray, J. E. 1821 A, 310.  
 Hay, O. P. 1902 A, 595 (Physeteridæ, Physeterinae).  
 Abel, O. 1902 A, 170 ("physéterides").  
     1905 A, 39, 51.  
     1905 B, 204 ("physéterides").  
     1905 C, 375 ("physéterides").  
     1905 E, 84 ("physeteriden").  
     1909 A, 247 ("physeteriden").  
     1912 F, 466, 511 ("physeteriden").  
     1913 B, 723.  
     1914 A, 94.  
     1914 C, 389.  
     1919 A, 763.  
 Arldt, T. 1907 D, 673.  
 Beddard, F. E. 1900 A, 182, 318.  
     1902 A, 362 (Physeteridæ); 363 (Physeterinae).  
 Burmeister, H. 1868 A, 308 (Catodontidæ); 309 (Physeteridæ).  
 Cabrera, A. 1926 B, 406.  
 Carus, V. 1875 A, 171 (Physeterina).  
 Case, E. C. 1904 D, 5, 30.  
 Cuvier, F. 1836 A, 250 ("cachalots").  
 Eastman, C. R. 1906 E, 78, 95.  
 Elliot, D. G. 1901 A, 14.  
 Gervais, P. 1859 A, 284 ("physéteridæ").  
 Gray, J. E. 1863 A, 199 (Catodontidæ).  
     1868 C, 246 ("permwhales").  
     1870 B, 391.

- Guérin, R. 1874 A, 65.  
 Hoernes, R. 1912 A, 661.  
 Jaekel, O. 1908 B, 464 ("physeteriden").  
 Kampfen, P. N. 1905 A, 645.  
 Kellogg, R. 1925 B, 2.  
 1928 A, 34, 176.  
 Lockington, W. N. 1884 A, 191.  
 Lydekker, R. 1887 B, 13.  
 Miller, G. S. 1923 A, 29, 33, 40, 44.  
 Owen, R. 1866 B, 419.  
 1869 D, 30.  
 Palacký, J. 1902 C, 257 ("physeteriden").  
 Pictet, F. J. 1853 A, 336 ("physetérides").  
 Pompeckj, J. F. 1922 A, 34 ("physeteriden").  
 Reche, O. 1905 B, 162 (Physeteridæ, Physeterinæ).  
 Ritchie and Edwards 1913 A, 166.  
 Roger, O. 1896 A, 80 (Physeterinæ).  
 Steinmann, G. 1908 A, 237 (Physeteridæ).  
 1912 B, 721 (Physeteridæ).

## AULOPHYSETER Kellogg.

- Kellogg, R.* 1927 B, 4.  
 1928 A, 34, 46.

## IDIOPHYSETER Kellogg.

- Kellogg, R.* 1925 B, 16, 18.  
 1928 A, 34.

## ORYCTEROCETUS Leidy.

- Hay, O. P. 1902 A, 595 (Orycterocetus); 596 (Hypocetus).  
 Allen, G. M. 1921 A, 154.  
 Arldt, T. 1907 D, 82 (Hypocetus).  
 Case, E. C. 1904 D, 32 (Orycterocetus); 30 (Hypocetus).  
 Kellogg, R. 1928 A, 34.  
 Palmer, T. S. 1904 A, 433, 795.  
 True, F. W. 1912 E, 780.

## Orycterocetus cornutidens Leidy.

- Hay, O. P. 1902 A, 595.  
 Case, E. C. 1904 D, 32, pl. xvii, fig. 7 (O. crocodilinus).  
 Shattuck, G. B. 1904 A, xciv (O. crocodilinus?).  
 Middle Miocene (Calvert); Maryland, North Carolina.

## Orycterocetus mediatlanticus (Cope).

- Hay, O. P. 1902 A, 596 (Hypocetus).  
 Allen, G. M. 1921 A, 154, pl. ix, fig. 6; pl. xii.  
 Case, E. C. 1904 D, 30, pl. xvii, figs. 6a, 6b (Hypocetus mediatlanticus); explan. pls. p. 9 (H. atlanticus).

## HOPLOCETUS Gervais.

- Gervais, P. 1852 A, 161, explan. pl. xx.  
 Hay, O. P. 1902 A, 596.  
 Cabrera, A. 1926 B, 406.  
 Gervais, P. 1859 A, 318, pl. xx.  
 Kellogg, R. 1925 B, 1, 2, 5.

Stromer, E. 1908 B, 170.

Terra, P. 1911 A, 344.

Trouessart, E. L. 1905 A, 772 (Physeteridæ, Physeterinæ).

True, F. W. 1908 B, 387, 388, 391 (Physeteridæ); 391 (Physeterinæ).

1912 E, 779.

Van Beneden, P. J. 1877 B, 851 ("cachalots").

Van Beneden and Gervais 1890 A, 302 ("cachalots").

Weber, M. 1904 A, 576, 578 (Physeteridæ, Physeterinæ).

Weber and Abel 1928 A, 389 (table), 392.

Winge, H. 1919 A, 68, 95, 101.

Winge and Miller 1921 A, 11, 37, 46, 87 (Physeteridæ, Physeterini).

Zittel and Schlosser 1911 A, 407 (Physeteridæ, Physeterinæ).

1923 A, 490 (Physeteridæ, Physeterinæ).

Type *A. morricei* Kellogg.

## Aulophyseter morricei Kellogg.

- Kellogg, R.* 1927 B, 4, pls. i-ix.  
 1928 A, 177, fig. 14.  
 Middle Miocene (Tambor); California.

Type *I. merriami* Kellogg.

## Idiophyseter merriami Kellogg.

- Kellogg, R.* 1925 B, 16, 18, pl. i; pl. ii, fig. 2; pl. iii, fig. 2; text-figs. 1-4.  
 1927 B, 6, 11.  
 Middle Miocene (Tambor); California.

Type *O. quadratidens* Leidy.

*Kellogg, R.* 1924 C, 765 (Diaphorocetus).

1925 B, 10, 11, 13, 31 (Paracetus, Orycterocetus).

1927 B, 7 (Orycterocetus).

1928 A, 177 (Orycterocetus).

Miller, G. S. 1923 A, 45 ("Paracetus").

Sellards, E. H. 1915 D, 102, 103, fig. 32 ("cetacean").

Shattuck, G. B. 1904 A, xciv (Hypocetus).

Trouessart, E. L. 1898 A, 1053.

True, F. W. 1908 B, 387 ("Paracetus").

Miocene (St. Mary's); Maryland: Miocene or Pliocene (Bone Valley); Florida.

## Orycterocetus quadratidens Leidy.

Hay, O. P. 1902 A, 596.

Clark and Miller 1912 A, 167, 168.

Gidley, J. W. 1911 A, 436 (Physeter vetus? or Physeterula neolassicus?).

Hay, O. P. 1923 A, 370.

Kellogg, R. 1925 B, 10, 11.

Upper Miocene; Virginia, North Carolina.

*Kellogg, R.* 1928 A, 34.

Palmer, T. S. 1904 A, 331, 745.

Trouessart, E. L. 1905 A, 772.

Winge, H. 1910 A, 1.

1919 A, 69, 100, 108.

Winge and Miller 1921 A, 42.  
Zittel and Schlosser 1911 A, 407 (Syn. of *Scaldicetus*).  
1923 A, 490 (Syn. of *Scaldicetus*).

**Hoplocetus obesus** Leidy.

Hay, O. P. 1902 A, 596.  
Abel, O. 1905 A, 59 (Syn. of *Scaldicetus caretii*).  
Kellogg, R. 1925 B, 8, 9.  
Pleistocene? (Ashley River); South Carolina.

**BALÆNODON** Owen. Type *B. physaloides* Owen.

Owen, R. 1846 B, 536.  
Hay, O. P. 1902 A, 595 (*Hoplocetus*).  
Abel, O. 1905 A, 52 (*Scaldicetus*, *Dinoziphius* as syn.).  
1905 E, 90 (*Scaldicetus*).  
1912 G, 67 (*Scaldicetus*).  
1913 B, 723 (*Scaldicetus*).  
1919 A, 763, fig. 571b (*Scaldicetus*).  
Du Bus, B. 1867 A, 568 (*Scaldicetus*).  
Kellogg, R. 1925 B, 1, 2 (*Balænodon*).  
1928 A, 34.  
Lydekker, R. 1887 A, 58.  
1887 B, 14 (*Scaldicetus*, a syn.).  
Owen, R. 1860 E, 342, fig. 107.  
Palmer, T. S. 1904 A, 131, 794 (*Balænodon*); 620, 796 (*Scaldicetus*).  
True, F. W. 1908 B, 387 (*Scaldicetus*).  
Van Beneden and Gervais 1880 A, 342, pl. xx.  
Winge and Miller 1921 A, 42 (Syn. of *Hoplocetus*).  
Zittel, K. A. 1893 B, 251 (Syn. of *Balænoptera*).  
Zittel and Schlosser 1911 A, 407 (*Scaldicetus*).  
1923 A, 490 (*Scaldicetus*).

**Balænodon physaloides** Owen.

Owen, R. 1846 B, 536, figs. 219, 226, 227.  
Abel, O. 1905 A, 56, 57, 59, figs. 1, 2 (*Scaldicetus caretii*).  
Lydekker, R. 1886 B, 318.  
1887 A, 58.  
Newton, E. T. 1891 A, 66, pl. vii, figs. 2-3b.  
Trouessart, E. L. 1898 A, 1054 (*Hoplocetus*).  
1905 A, 773 (*Hoplocetus*); 774 (*Physeter carolinensis*).  
Van Beneden and Gervais 1880 A, 343.  
Miocene: European; American?

**Balænodon** sp. indet.

Abel, O. 1919 A, 763 (*Scaldicetus*). Miocene and Pliocene; Europe and North America.  
Hanna, G. D. 1923 A, 65, pl. ix, figs. a, b, d (*Scaldicetus*). Miocene?; California.  
True, F. W. 1908 B, 387 (*Scaldicetus*). Miocene of North America.

**GRAPHIODON** Leidy. Type *G. vinearius* Leidy.

Hay, O. P. 1902 A, 590.  
Kellogg, R. 1925 B, 34.  
Palmer, T. S. 1904 A, 299, 798.  
True, F. W. 1907 A, 7.  
1912 E, 780.

**Graphiodon vinearius** Leidy.

Hay, O. P. 1902 A, 590.  
Merrill, G. P. 1907 A, 37.  
Miocene (Gay Head); Massachusetts.

**ONTOCETUS** Leidy. Type *O. emmonsii* Leidy.

Hay, O. P. 1902 A, 596.  
Kellogg, R. 1925 A, 3.  
1925 B, 2, 12.  
1928 A, 34.  
Palmer, T. S. 1904 A, 475, 795.

**Ontocetus emmonsii** Leidy.

Hay, O. P. 1902 A, 596.  
Emmons, E. 1860 A, 219, fig. 187.  
Kellogg, R. 1925 A, 6.  
1925 B, 11, 12.  
Miocene; North Carolina.

**Ontocetus oxymycterus** Kellogg.

Kellogg, R. 1925 A, 2, pls. i, ii.  
1925 B, 30, pl. vii; pl. ix, fig. 1.  
1927 B, 11.  
1928 A, 179.  
Matsumoto, H. 1926 B, 17, pl. viii; text-fig. 1 (This species?).  
Middle Miocene or later; California, Japan?.

**DINOZIPHIOUS** Leidy. Type *D. carolinensis* Leidy.

Hay, O. P. 1902 A, 595 (*Physeter*, in part).  
Abel, O. 1905 A, 56, 57 (Syn. of *Balænodon*).  
Allen, G. M. 1926 A, 463 (*Physeter*).  
Kellogg, R. 1925 B, 8, 9.  
1928 A, 34.

**Dinoziphius carolinensis** Leidy.

Hay, O. P. 1902 A, 595 (*Physeter*).  
Abel, O. 1905 A, 56, 57, figs. 1, 2 (Syn. of *Balænodon physaloides*).  
Kellogg, R. 1925 B, 8, 9.  
Trouessart, E. L. 1905 A, 773 (*Physeter*).  
Upper Miocene; South Carolina.

**PHYSETER** Linnæus. Type *P. catodon* Linnæus.

Hay, O. P. 1902 A, 595.  
Abel, O. 1907 G, 26, fig. 26.  
1908 B, 171.

Abel, O. 1909 A, 243.  
1912 F, 466, 511, 692.  
1914 C, 389.

- Arlt, T. 1911 A, 217.  
 Beddard, F. E. 1900 A, 192, 318, figs. 9, 24, 25.  
     1919 A, 129.  
     1923 B, 1-32.  
 Bennett, F. D. 1840 A, 153.  
 Bronn, H. G. 1849 A, 702.  
 Burlet, H. M. 1917 A, 381.  
 Cuvier, F. 1825 A, 246, pl. ciii ("cachalots").  
     1836 A, 259.  
 Cuvier, G. 1803 A, 166 ("cachalot").  
     1805 A.  
     1825 A, v, pt. 1, 328, 342, pl. xxiv ("cachalot").  
 Deinse, A. B. 1916 B, 521, figs. 1-4.  
 Doran, A. H. G. 1878 A, 456, pl. lxii.  
 Elliot, D. G. 1901 A, 14.  
 Eschricht, D. F. 1849 A, 7.  
 Fischer, J. B. 1829 A, 517.  
 Flower, W. H. 1867 A, 105.  
 Gervais, P. 1852 A, 156, 188.  
     1859 A, 284.  
 Giebel, C. G. 1855 A, 85.  
     1883 A, pls. lxviii, lxxiv.  
 Giglioli, E. H. 1872 A.  
 Gray, J. E. 1846 A, 21 (Catodon); 53 (Physeter).  
     1863 A, 199.  
     1870 B, 391.  
 Guérin, R. 1874 A, 65.  
 Harmer, S. F. 1924 A, 554.  
 Heilprin, A. 1887 A, 342.  
 Housay, F. 1910 A, 15.  
 Huxley, T. H. 1863 F, 635, fig. 62.  
 Kampfen, P. N. 1905 A, 645.  
 Kehler, F. A. 1896 A, 357, fig. 36.  
 Kellogg, R. 1925 A, 5.  
     1925 B, 118.  
     1927 B.  
     1928 A, 34, 46, 179, 198.  
 Küstlin, O. 1844 A.  
 Kükenthal, W. 1908 A, 610.  
     1914 B, 84, pl. iii b, figs. 34-36; pl. iii c, fig. 38.  
 Larger, R. 1913 A, 708, 727.  
 Leche, W. 1887 A.  
 Leunis and Ludwig 1838 A, 281.  
 Lillie, D. G. 1910 A, 788.  
 Lockington, W. N. 1884 A, 191.  
 Lönnerberg, E. 1911 C, 18 ("cachalot").  
     1911 D, 11, figs. 8-10.  
 McIntosh, — 1911 A, 91.  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1923 A, 25, 32, 35, pl. iii, fig. 5; pl. vi, fig. 1.  
     1924 C, 507.  
 Mivart, St. G. 1871 B, 376.  
 Newton, E. T. 1886 B, 320.  
 Owen, R. 1845 F, 37.  
     1866 A, 363.  
 Palacký, J. 1902 C, 257.  
 Palmer, T. S. 1904 A, 536, 796.  
 Pander and Alton 1827 A, 5.  
 Pictet, F. J. 1833 A, 386.  
 Pompeckj, J. F. 1922 A, 67, 71, 88.  
 Rafinesque, C. S. 1832 B, 112 (Nephrosteon).  
 Reynolds, S. H. 1897 A, 426, 444, 448, 464, 505.  
 Ritchie and Edwards 1913 A, 166.  
 Rousseau, L. F. E. 1856 A, 16.

- Ryder, J. 1887 B, 429.  
 Slater, P. L. 1897 A, 352.  
 Steinmann, G. 1908 A, 244, fig. 149.  
 Trouessart, E. L. 1905 A, 775.  
 True, F. W. 1909 C, 455.  
 Van Beneden, P. J. 1888 B, 11.  
 Wallace, A. R. 1876 A, i, 112.  
 Weber, M. 1836 A.  
     1904 A, 573, 576, 578.  
 Weber and Abel 1928 A, 366, 393, fig. 223.  
 Wilder, B. 1872 B, 316.  
 Winge, H. 1919 A, 101.

### Physeter catodon Linnaeus.

- Unless otherwise indicated, the writers as cited employ the name *P. macrocephalus*.  
 Hay, O. P. 1902 A, 595.  
 Abel, O. 1901 B, 311.  
     1902 B, 523.  
     1908 A, 475, fig. 20.  
     1908 B, 171, figs. 44-51.  
     1912 F, 196, fig. 134.  
     1919 A, 765, fig. 573.  
     1926 B, 409.  
 Beddard, F. E. 1902 A, 363.  
     1919 A, 129, pl. xxiii; text-figs. 1-13.  
     1923 A, 641.  
     1923 B, 1, figs. 1-13.  
 Bennett, T. D. 1836 A, 127.  
     1837 A, 39 ("cachalot").  
     1840 A, 153, fig.  
 Cuvier, F. 1836 A, 286, pl. xix.  
 Eastman, C. R. 1906 E, 83.  
 Elliot, D. G. 1901 A, 15, fig. 4.  
 Fischer, J. B. 1829 A, 517.  
 Gervais, P. 1852 A, 156.  
     1859 A, 285.  
 Giebel, C. G. 1855 A, 85, pl. xxxv, figs. 10, 12.  
 Gray, J. E. 1846 A, 21 (Catodon).  
 Hentschel, E. 1910 A, 417, figs. 1, 2.  
 Kampfen, P. N. 1905 A, 645.  
 Kellogg, R. 1925 B, 17, 25, 29 (P. catodon).  
     1927 B, 6 (P. catodon).  
     1928 A, 30, 176, 180, fig. 14.  
 Lockington, W. N. 1884 A, 191, figs. 96-99, 106, 107.  
 Lönnerberg, E. 1910 B, 226 (P. catodon).  
     1911 A, 32 (P. catodon).  
 Lull, R. S. 1917 A, 477.  
 Lydekker, R. 1909 D, 22, fig. 8.  
 Miller, G. S. 1924 C, 507 (P. catodon).  
 Moodie, R. L. 1923 B, 228, fig. 21, pl. xlv.  
 Newton, E. T. 1886 B, 323, pl. xi.  
 Owen, R. 1868 A, 900.  
     1869 D, 35.  
 Pander and Alton 1827 A, 5, pl. 5.  
 Reche, O. 1905 B, 162, fig. 10.  
 Ritchie and Edwards 1913 A, 166, figs. 1-3.  
 Trouessart, E. L. 1905 A, 775.  
 Van Beneden, P. J. 1888 B, 11.  
     Recent in warm seas: Pleistocene?; Louisiana.  
     Not certainly found fossil.
- ### Physeter vetus (Leidy).
- Leidy, J. 1869 A, 437 (Catodon).  
 Hay, O. P. 1902 A, 595.  
 Berry, E. W. 1917 C, 461.  
 Clark and Miller 1912 A, 167, 168.



- Hay, O. P. 1923 A, 493.  
 Holmes, F. S. 1860 A, vi, pl. xxiv, figs. 8, 9 ("spermwhale").  
 Rhoads, S. N. 1903 A, 248.  
 Pleistocene; South Carolina: Miocene (Calvert); Virginia.

**Physeter sp. indet.**

- Leidy, J. 1869 A, 436 (Catodon vetus). Miocene; Virginia.  
 1877 A, 217, pl. xxx, figs. 7-11 ("cetacean teeth").  
 The teeth here described may belong in fact to some other genus or other genera.

*Superorder UNGULATA Gray.*

- Gray, J. E. 1821 A, 305.  
 Hay, O. P. 1902 A, 601.  
 Abel, O. 1906 A, 56 ("ungulaten").  
 1913 B, 729, 730.  
 1914 A, 57, 121.  
 1919 A, 787.  
 1920 A, 430.  
 Ameghino, F. 1889 A, 1027.  
 1901 A, 349 ("ongulés").  
 1902 D, 419 ("ongulés").  
 1905 A, 19 ("ungulados").  
 Arldt, T. 1907 A, 239, 243.  
 1907 B, 452 ("ungulaten").  
 1907 D, 687.  
 Baird, S. F. 1876 A, 305.  
 Bardeleben, K. 1904 A, 111 ("hufthiere").  
 Bardenfleth, K. S. 1913 A, 84.  
 Beddard, F. E. 1902 A, 195.  
 Bensley, B. A. 1901 C, 252.  
 Beyer, H. 1908 B ("hufthiere").  
 Black, N. 1900 A, 12.  
 Blainville, H. M. D. 1819 A, 41 ("ongulés").  
 Bluntschli, H. 1912 B, 365 ("hufthiere").  
 1913 A, 42 ("ungulaten").  
 Bonaparte, C. L. 1832 A, 291.  
 Bradley, O. C. 1906 B, 529 ("ungulates").  
 Braus, H. 1906 A, 265 ("ungulaten").  
 Broom, R. 1911 C, 319.  
 Burmeister, H. 1879 B, 450.  
 Case, E. C. 1898 C, 830.  
 Caush, D. E. 1904 A, 157.  
 Chandler, A. C. 1914 B, 134.  
 Clark and Sonntag 1926 A, 481, 482.  
 Cope, E. D. 1885 BB, 72 (Diplarthra).  
 1885 EE, 607 ("hoofed animals").  
 Delafontaine, M. 1875 A, 171 ("ongulés").  
 Dependorf, T. 1907 C, 108 ("ungulaten").  
 Disselhorst, R. 1906 A, 321 ("ungulaten").  
 Dollo, L. 1889 E, 188 ("ongulés").  
 1889 G, 675 ("ongulés").  
 Doran, A. H. G. 1878 A, 419.  
 Eggeling, H. 1904 A, 409 ("hufthiere").  
 Eimer, G. H. T. 1901 A, 258 ("hufthiere").  
 Elliot, D. G. 1901 A, 83.  
 Fairchild, H. L. 1894 A, 206.  
 Fischer, E. 1903 A, 694 ("ungulaten").  
 Flower, W. H. 1873 B, 96.  
 1892 A, 12.  
 Frassetto, F. 1903 A, 183.  
 1915 A ("ungulati").  
 Frech, F. 1906 A, 497 ("hufthiere").  
 Frey, H. 1911 A, 416.  
 Fuchs, H. 1909 B, 142.  
 1914 A, 32 ("ungulaten").  
 Gadow, H. 1902 B, 347.  
 Gaudry, A. 1901 B, 100 ("ongulés").  
 Geoffroy St. Hilaire, E. F. 1824 F, 80 ("mammi-fères à sabots").  
 Gervais, P. 1852 A, 42 ("ongulés").  
 1853 B, 50 ("ongulés").  
 Ghigi, A. 1900 B, 99 ("ungulati").  
 Giebel, C. G. 1878 C, 853 ("ungulaten").  
 1883 A ("hufthiere").  
 Gottlieb, H. 1914 A, 189.  
 Gray, J. E. 1825 B, 342.  
 Gregory, W. K. 1910 A, 18, 30, 342-353, 354-406, 409, 468.  
 1912 F, 269 ("ungulates").  
 1922 A, 110 ("ungulates").  
 1925 A, 751 ("ungulates").  
 Gregory and Camp 1913 A.  
 Haeckel, E. 1868 A, 476 ("ungulaten").  
 1873 A, 544, 554.  
 Hay, O. P. 1912 D, 579.  
 1914 A, 143.  
 Hayek, H. 1926 A, 177 ("hufthiere").  
 Heilprin, A. 1887 A, 373.  
 Hensel, R. 1879 A, 554 ("ungulaten").  
 Filzheimer, M. 1913 A, 570.  
 Hoernes, R. 1886 A, 665.  
 Hogben, L. T. 1919 A, 74, 75 ("ungulates").  
 Hrdlička, A. 1920 A, 463 ("ungulates").  
 Huxley, T. H. 1856 A, 53.  
 1856 B, 191 ("ungulates").  
 1863 F, 580.  
 1868 C, 314.  
 1870 F, 637.  
 1880 E, 459 ("ungulates").  
 Jaekel, O. 1911 A, 237 (Ungulati).  
 Kampfen, P. N. 1905 A, 573.  
 Kingsley, J. S. 1925 A, 213, 296.  
 Kottnerus-Meyer, T. 1907 A, 1, 06, 101.  
 Knoken, E. 1893 B, 481, 500 ("hufthiere").  
 1901 B, 222 ("hufthiere").  
 Laloy, L. 1907 A, 584 ("ongulés").  
 Lankester, E. R. 1903 A, 327.  
 Lataste, F. 1887 A, 266 ("ongulés").  
 Lavocat, A. 1885 A, 47 ("ongulés").  
 Leche, W. 1887 A.  
 1900 A, 1032.  
 1907 A, 50.  
 Lobley, J. L. 1903 A, 195.  
 Loomis, F. B. 1910 C, 294.  
 Lull, R. S. 1917 B, 295, 322, 333.  
 Lydekker, R. 1902 B, 375 ("ungulates").  
 1903 D, 123 ("ungulates").  
 1907 B, 1.  
 1913 B, 1.  
 Major, C. J. F. 1880 A, 21 ("ungulaten").  
 1899 B, 66.  
 Matthew, W. D. 1904 D, 816.  
 1910 G, 152 ("ungulates").  
 1915 A, 187 ("ungulates").  
 Mettam, A. E. 1894 A, 341 ("ungulates").  
 Middleton, J. 1844 A, 236.  
 Mivart, St. G. 1878 B, 282 ("hoofed beasts").

- O'Harra, C. C. 1910 A, 88.  
1920 A, 90.
- Osborn, H. F. 1898 S, 684.  
1899 J, 415.  
1907 G, 67, 76, 83, 101, 163.  
1909 D, 86 (Herbivora); 137 (Ungulata).  
1910 D, 737.  
1912 D, 596 ("hoofed mammals").  
1925 C, 749 ("ungulates").  
1925 F, 961 ("hoofed animals").
- Owen, R. 1857 E.  
1858 A, 26.  
1868 A, 913.
- Palacký, J. 1902 B, 142 ("ungulaten").  
1903 B, 303.
- Paquier, V. 1894 A, 20 ("ongulés").
- Paramore, R. H. 1910 A, 1460.
- Parker and Haswell 1897 A, 452, 504.
- Pavlov, M. 1903 B, 200 ("ongulés").
- Popowa, N. 1913 A, 280 ("ungulaten").
- Puccioni, N. 1908 A, 41.
- Rafinesque, C. S. 1815 A, 52 (Podoplia).
- Reynolds, S. H. 1897 A, 501, 514, 519, 553.
- Rosenberg, A. 1873 A, 120.
- Roth, S. 1903 A, 1-36.
- Schlosser, M. 1899 I, 349 ("ungulaten").  
1900 C, 133 ("ungulaten").  
1903 A, 288 ("ongulés").
- Schmidt, O. 1886 A, 126.
- Schwalbe, G. 1904 A, 208 ("ungulaten").
- Schwarz, E. 1924 A, 419.
- Slater, P. L. 1875 A, 209.
- Scott, W. B. 1896 C, 308.  
1896 D, 57.  
1913 A, 513, 516, 692.
- Sedgwick, A. 1894 A, 43 ("ungulates").
- Sceley, H. G. 1878 A, 224.
- Sefve, I. 1913 A, 362 ("ungulaten").
- Smith, G. E. 1907 A, 163 ("ungulate").
- Spurrell, H. G. F. 1906 A, 123 (Herbivora).
- Steinmann, G. 1907 A, 479.  
1909 A, 81 ("huftiere").
- Strecker, C. 1887 A, 312 ("huftiere").
- Stromer, E. 1902 B, 559, 561 ("ungulaten").  
1912 A, 193.  
1924 A, 255 ("huftiere").
- Taschenberg, O. 1899 A, 4334.
- Terra, P. 1911 A, 305.
- Tims, H. W. 1905 B, 1786 ("ungulates").
- Tredgold, A. F. 1897 A, 295.
- Underhill, B. M. 1910 A, 78 ("ungulates").
- Vallois, H. V. 1921 B, 975 ("ongulés").
- Van Bemmelen, J. F. 1918 A, 570 ("ungulates").
- Van den Broeck, A. J. P. 1912 A, 782.
- Van den Broeck, E. 1900 A, 61 ("ongulés").
- Wallace, A. R. 1876 A, i, 503; ii, 211, 226, 542.
- Weber, M. 1886 A, 232, 240.
- Weber and Abel 1928 A, 410, 426, 897.
- Weber and Burlet 1927 A.
- Wilckens, O. 1911 A, 708 ("huftiere").
- Wilders, B. 1875 A, 107.
- Winz, H. 1890 A, 647 ("ungulaten").
- Winge, H. 1906 A.
- Woodward, A. S. 1897 C, 380.  
1917 D, lxxi.
- Worthmann, F. 1922 A, 307 ("huftiere").
- Wortman, J. L. 1902 A, xiii, 45.  
1920 A, 16.  
1921 A, 181 ("ungulates").
- Wright, R. R. 1883 A, 233.
- Zietzschmann, O. 1917 A, 434 ("huftiere").
- Zittel, K. A. 1895 A, 310 ("ungulates").  
1897 A, 133 ("huftiere").
- Zittel and Schlosser 1911 A, 435.  
1923 A, 519.

## Order CONDYLARTHRA Cope.

- Hay, O. P. 1902 A, 601.
- Abel, O. 1904 B, 741.  
1920 A, 430, 433 (Condylarthra, Protungulata).  
1926 H, (180) (Protungulata).  
1928 B, 21.
- Abel and Cook 1925 A, 33.
- Ameghino, F. 1889 A, 1009 (Condylarthra).  
1893 D, 15.  
1897 B, 261.  
1901 A, 375.  
1904 B, 52.  
1905 C, 351, 403.  
1906 A, 293 ("condylarthres").
- Andrews, C. W. 1908 D, 45.
- Anderson, R. J. 1912 D, 253.
- Ardt, T. 1907 A, 241, 244.
- Bardenfleth, K. S. 1913 A, 84.
- Beddard, F. E. 1902 A, 202.
- Behlen, H. 1906 A, 194 ("condylarthren").
- Bonsley, B. A. 1901 C, 282.
- Branca, W. 1907 A, 9.
- Brown, A. E. 1904 B, 55.
- Case, E. C. 1898 C, 831.
- Chardin, P. T. 1920 A, 1161 ("condylarthrés").
- Clark and Sonntag 1926 A.
- Cope, E. D. 1885 BB, 73.
- Cope, E. D. 1885 EE, 607.  
1891 N, 79, 90.
- Depéret, C. 1902 A, 324 ("condylarthrés").  
1904 B, 16, 23, 43 ("condylarthrés").  
1905 C, 703 ("condylarthrés").  
1907 B ("condylarthrés").  
1908 A, 111.  
1912 A, 706 ("condylarthrés").
- Earle, C. 1897 B, 311.
- Fairchild, H. L. 1894 A, 207.
- Fischer, E. 1903 A, 694, 713.
- Gawrilenko, A. 1924 A, 222 ("condylarthren").
- Granger, W. 1915 A, 329.
- Gregory, W. K. 1910 A, 99, 351, 354, 358, 359, 437, 446, 456, 466.  
1912 F, 290 ("condylarthres").  
1920 A, 176, 245.
- Gregory and Hellman 1926 A, 11, 12 ("condylarthres").
- Heilprin, A. 1887 A, 363.
- Hescheler, K. 1906 A, 30.
- Hilsheimer, M. 1913 A, 567.
- Hubrecht, A. A. W. 1897 A, 8.
- Jaekel, O. 1911 A, 238 (Condylarthri).
- Kampfen, P. N. 1905 A, 627.
- Kingsley, J. S. 1925 A, 215.
- Koken, E. 1893 B, 481.

- Kraglievich, L. 1926 C, 75, 77.  
 Leche, W. 1887 A.  
 Lönnberg, E. 1910 B, 238.  
 1911 A, 59.  
 Loomis, F. B. 1922 A, 62.  
 1926 A, 76.  
 Lull, R. S. 1907 A, 163.  
 1917 B, 552.  
 Major, C. J. F. 1899 B, 68.  
 Matthew, W. D. 1906 B, 353.  
 1909 C, 92, 94, 102.  
 1909 D, 333, 551.  
 1910 G, 156.  
 1915 A, 256, fig. 28.  
 1915 E, 311.  
 1916 I, 109.  
 1917 A, 577.  
 1921 D, 212, 214.  
 1926 C, 154.  
 1928 B, 948, 968.  
 Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 1902 E, 356, fig. 1.  
 1905 H, 207, fig. 2.  
 1905 I, 99.  
 1906 C, 851.  
 1907 G, 14, 168.  
 1909 D, 123.  
 1910 B, 610.  
 1925 B, 18.  
 Palacký, J. 1903 B, 304, 306.  
 Parker and Haswell 1897 A, 455.  
 Reynolds, S. H. 1897 A, 502, 537, fig. 107.  
 Schapiro, B. 1913 A, 220.  
 Schlosser, M. 1898 B, 360, 362, 367.  
 1899 I, 349.  
 1900 B, 304.  
 1902 I, 738, 746.  
 1904 C, 97 ("condylarthren").  
 1911 A, 135 ("condylarthren").  
 1921 A, 135.  
 Schwarz, E. 1924 A, 419.  
 Scott, W. B. 1896 C, 308.  
 1913 A, 678.  
 Seeley, H. G. 1886 A, 466, 551 (Condylarthra);  
 466 (Taxeopoda).  
 Shufeldt, R. W. 1889 D, 24.  
 Steinmann, G. 1907 A, 486.  
 1908 A, 233 ("condylarthren").  
 1912 A, 719.  
 Stromer, E. 1902 B, 556, 561 ("condylarthren").  
 1912 A, 208, 244.  
 Terra, P. 1911 A, 306.  
 Thacker, A. G. 1922 A, 603.  
 Trouessart, E. L. 1905 A, 568.  
 Underhill, B. M. 1910 A, 84.  
 Weber, M. 1904 A, 586, 588, 691 (Condylarthra);  
 586 (Protungulata).  
 Weber and Abel 1928 A, 90, 412, 426, 626  
 (Protungulata).  
 Winge, H. 1906 A, 68, 69, 78.  
 Woodward, A. S. 1898 D, 329, 335.  
 Woodward, H. 1904 B, 152.  
 Zierler, F. E. 1905 A, 514.  
 Zittel, K. A. 1895 A, 310.  
 1897 A, 133.  
 Zittel and Schlosser 1911 A, 437.  
 1923 A, 521, 667.

## PHENACODONTIDÆ Cope.

- Hay, O. P. 1902 A, 602 (Phenacodontidæ);  
 650 (Eohyidæ).  
 Abel, O. 1913 B, 729, 736.  
 1914 A, 121, 142, 150.  
 1919 A, 798.  
 Ameghino, F. 1901 A, 375.  
 1906 A, 295.  
 Arldt, T. 1907 A, 244.  
 1907 D, 673 (Phenacodontidæ).  
 1912 A, 702, 703.  
 Behlen, H. 1906 A, 194 ("phenacodontiden").  
 Depéret, C. 1904 B, 43 ("phénacodontidés").  
 1905 C, 703 ("phénacodontidés").  
 Fischer, E. 1903 A, 721.  
 Granger, W. 1915 A, 329.  
 Gregory, W. K. 1910 A, 357.  
 1920 A, 246.  
 Matthew, W. D. 1909 C, 92, 94, 102.  
 1909 D, 512.  
 1914 B, 387.  
 Matthew, W. D. 1915 E, 311.  
 1921 D, 212, 214.  
 Osborn, H. F. 1909 D, 133.  
 1910 B, 110, 111, 138, 172, 546.  
 Palacký, J. 1903 B, 304 ("phenacodontiden").  
 Schlosser, M. 1898 B, 362, 367, 370.  
 1900 B, 304.  
 Scott, W. B. 1913 A, 457.  
 Seeley, H. G. 1886 A, 468, 521.  
 Stehlin, H. G. 1906 A, 637 ("phenacodontiden").  
 Trouessart, E. L. 1905 A, 573.  
 Weber, M. 1904 A, 692.  
 Weber and Abel 1928 A, 426, 629.  
 Winge, H. 1906 A, 69, 79.  
 Wortman, J. L. 1921 A, 187 ("phenacodontis").  
 Zierler, F. E. 1905 A, 514.  
 Zittel and Schlosser 1911 A, 439.  
 1923 A, 523, 602, 665, 666.

OXYACODON Osborn and Earle. Type *O. apiculatus* Osborn and Earle.

- Hay, O. P. 1902 A, 602.  
 Haug, E. 1911 A, 1527.  
 Matthew, W. D. 1909 C, 101.  
 Palmer, T. S. 1904 A, 491, 812.  
 Schlosser, M. 1898 B, 364.  
 1900 B, 303.  
 Zittel and Schlosser 1911 A, 438.  
 1923 A, 522.  
 The position of this genus is uncertain.  
 Oxyacodon agapetillus (Cope).  
 Hay, O. P. 1902 A, 602.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 38.  
 Trouessart, E. L. 1904 A, 43.  
 Paleocene (Puerco); New Mexico.

**Oxyacodon apiculatus** Osborn and Earle.

Hay, O. P. 1902 A, 602.

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Osborn, H. F. 1902 C, 171.

Schlosser, M. 1908 B, 364.

Trouessart, E. L. 1904 A, 43.

Paleocene (Puerco); New Mexico.

**TETRACLÆNODON** Scott. Type *Mioclænus floverianus* Cope.

Unless otherwise indicated the authors, as quoted, use for this genus the name *Euprotogonia*.

Hay, O. P. 1902 A, 603 (Tetraclænodon).

Abel, O. 1913 B, 736 (Tetraclænodon).

1914 A, 148, fig. 103 (Tetraclænodon).

1926 B, 411.

Ameghino, F. 1901 A, 375.

1904 A, 530.

1905 A, 33.

1905 C, 405.

1906 A, 295.

Beddard, F. E. 1902 A, 204.

Bensley, B. A. 1901 C, 252.

Clark and Sonntag 1926 A, 460, 479.

Depéret, C. 1908 A, 111.

1912 A, 706.

Floderus, M. 1910 A, 97.

Gidley, J. W. 1912 B, 180.

1919 A, 274 (Euprotogonia).

Granger, W. 1915 A, 332, figs. 1, 2 (Tetraclænodon).

1917 A, *passim* (Tetraclænodon); 827 (Euprotogonia).

Gregory, W. K. 1910 A, 354, 437, 446.

1912 F, 270, 288.

1920 A, 245 (Euprotogonia. *Tetrachodon*, *err. typ.*).

Haug, E. 1911 A, 1528.

Lull, R. S. 1917 B, 554.

Matthew, W. D. 1904 D, 814.

1906 B, 358.

1909 C, 102.

1924 E, 749.

1928 B, 955, fig. 5.

Osborn, H. F. 1898 S, 684.

1902 D, 260, fig. 1.

1903 D, 313.

1907 G, 83, 160, figs. 149-151, 165, 201, 210.

1909 D, 126.

1910 B, 108, 110, 546.

Palacký, J. 1903 B, 306.

Palmer, T. S. 1904 A, 279, 933 (Euprotogonia); 869, 933 (Tetraclænodon).

Petronievics, B. 1921 A, 102.

Schlosser, M. 1898 B, 361, 370.

1898 E, 125.

1900 B, 304, 306.

1902 C, 301.

Scott, W. B. 1913 A, 457, 459.

Simpson, G. G. 1927 B, 10 (Euprotogonia, Tetraclænodon).

1928 A, 1.

Sinclair and Granger 1914 A, 311.

Stehlin, H. G. 1905 A, 555 (Protogonia).

1906 A, 643.

1916 B, 1434 (Protogonia).

Thorpe, M. R. 1927 A, 167.

Trouessart, E. L. 1904 A, 161.

1905 A, 575.

Veith, A. 1912 A, 9.

Weber and Abel 1928 A, 674.

Zittel and Schlosser 1911 A, 439.

1923 A, 523, 543, 550.

**Tetraclænodon minor** (Matthew).

Hay, O. P. 1902 A, 603.

Ameghino, F. 1904 C, 42 (Euprotogonia).

Gardner, J. H. 1910 A, 730.

Gidley, J. W. 1924 B, 47 (This species?).

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 41.

Paleocene (Torrejon); New Mexico: (Fort Union); Montana.

**Tetraclænodon puercensis** (Cope).

Hay, O. P. 1902 A, 603.

Abel, O. 1913 B, 736, fig. 48.

1919 A, 798, fig. 602.

1920 A, 433, fig. 655.

1922 C, 266, fig. 223.

Ameghino, F. 1904 A, 77, 142 (Euprotogonia).

1904 C, 42.

1905 C, 405, fig. 51.

1906 A, 296, figs. 88, 90 (Euprotogonia).

Douglass, E. 1902 C, 217, 222, pl. xxix, figs. 6-8 (Euprotogonia).

Gardner, J. H. 1910 A, 730 (Tetraclænodon);

733, fig. 9 (Euprotogonia).

Gidley, J. W. 1924 B, 47 (This species?).

Granger, W. 1915 A, 332.

Loomis, F. B. 1926 A, 77, fig. 15.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Osborn, H. F. 1904 F, 17, fig. 5 (Euprotogonia).

1916 E, 506, fig. 4 (Euprotogonia).

Pavlov, M. W. 1925 A, 314 (Phenacodus).

Reeside, J. B. 1924 A, 41.

Schlosser, M. 1898 B, 370 (Protogonia).

1900 B, 303 (Euprotogonia).

1902 C, 300 (Euprotogonia).

1921 A, 119 (Protogonodon).

Trouessart, E. L. 1905 A, 575 (Euprotogonia).

Weber and Abel 1928 A, 631, fig. 428.

Wood, H. E. 1927 B, tab. vii (Euprotogonia).

Zittel and Schlosser 1911 A, 439, fig. 604.

1923 A, 523, fig. 644.

Paleocene (Torrejon); New Mexico: (Fort Union); Montana.

**Tetraclænodon subquadratus** Cope.

Hay, O. P. 1902 A, 603.

Ameghino, F. 1904 C, 42 (Euprotogonia).

Schlosser, M. 1898 B, 370 (Protogonia).

1921 A, 119 (Protogonodon).

Paleocene (Puerco); New Mexico.

**Tetraclænodon** sp. indet.

- Douglass, E. 1908 D, 23, pl. i, fig. 4; pl. ii, figs. 11-13 (Euprotogonia). Paleocene (Fort Union); Montana.  
 Gidley, J. W. 1915 E, 538. Paleocene (Fort Union); Montana.

- Gidley, J. W. 1918 B, 59. Lower Eocene (Wasatch); Colorado.  
 1924 B, 47 (This genus?). Eocene (Wasatch); Colorado.  
 Lloyd and Hares 1915 A, 538 (Euprotogonia).  
 Lull, R. S. 1915 D, 328 (Euprotogonia). Paleocene (Fort Union); Montana.

**Eohyus** Marsh. Type *E. distans* Marsh.

- Hay, O. P. 1902 A, 651.  
 Granger, W. 1915 A, 332 (Syn? of Phenacodus).  
 Haug, E. 1911 A, 1528.  
 Schmidt, O. 1886 A, 143.  
 Scott, W. B. 1913 A, 281.  
 Trouessart, E. L. 1905 A, 648.  
 Zittel and Schlosser 1911 A, 473.  
 1923 A, 523 (Syn. of Periptychus).

**Eohyus distans** Marsh.

- Hay, O. P. 1902 A, 651.  
 Granger, W. 1915 A, 347.  
 Matthew, W. D. 1909 C, 94.  
 Sinclair, W. J. 1914 A, 267.  
 Lower Eocene (Wasatch); New Mexico.

**Eohyus robustus** Marsh.

- Hay, O. P. 1902 A, 651.  
 Granger, W. 1915 A, 347.  
 Matthew, W. D. 1909 C, 94.  
 Sinclair, W. J. 1914 A, 267 (To Periptychus).  
 Lower Eocene (Wasatch); New Mexico.

**PHENACODUS** Cope. Type *P. primævus* Cope.

- Hay, O. P. 1902 A, 604 (Phenacodus); 792 (Opisthotomus).  
 Abel, O. 1904 B, 741.  
 1913 B, 736.  
 1914 A, 146.  
 Ameghino, F. 1904 A, 535.  
 1904 C, 43.  
 1905 A, 33.  
 1905 C, 405.  
 1906 A, 295.  
 Arldt, T. 1907 D, 257.  
 Beddard, F. E. 1902 A, 202.  
 Bensley, B. A. 1901 C, 252.  
 Boule, M. 1891 A, 30.  
 1902 B, 910.  
 Case, E. C. 1898 C, 331.  
 Chardin, T. 1922 A, 26, 64, pl. iii.  
 1927 A, 21.  
 Clark and Sonntag 1926 A, 454.  
 Cope, E. D. 1880 U, 149.  
 Depéret, C. 1904 B, 14, 23 (Phænacodus).  
 1907 B.  
 1912 A, 710.  
 Dollo, L. 1889 I, 681.  
 1896 A, 83.  
 Dollo and Chardin 1924 A, 13, 14.  
 Drevermann, F. 1913 B, 203.  
 Earle, C. 1897 B, 311.  
 Fairchild, H. L. 1894 A, 207.  
 Fisher, E. 1903 A, 695, 698.  
 Floderus, M. 1910 A, 97.  
 Flower, W. H. 1892 A, 19, 24, fig. 2.  
 Gaudry, A. 1896 A, 87, 148.  
 1901 B, 95, fig. 3; 524, 525  
 Gidley, J. W. 1912 B, 180.  
 1918 B, 59.  
 Granger, W. 1914 A, 202, 204.  
 1915 A, 332, figs. 1, 2.  
 1917 A, 327.  
 Gregory, W. K. 1910 A, 354, 447.  
 1912 F, 270.  
 1918 A, 7.  
 1920 A, 175, 245, fig. 132.

- Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 368, 372.  
 Hinze, R. 1910 A, 379.  
 Holland and Peterson 1913 A, 238.  
 Keuchenius, P. E. 1913 A, 448.  
 Knipe, H. R. 1912 A, 119, fig.  
 Koken, E. 1893 B, 483.  
 Laloy, L. 1907 A, 585.  
 Lankester, E. R. 1905 A, 141, fig. 96.  
 Lemoine, V. 1899 A, 239.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1926 A, 76.  
 Lucas, F. A. 1901 J, 114.  
 1902 B, 222, fig.  
 Lydekker, R. 1903 D, 123.  
 1904 A, 17.  
 1907 A, 6.  
 1912 A, 276.  
 Matthew, W. D. 1903 E, 18, pl.  
 1909 C, 102.  
 1915 K, 421.  
 1917 A, 573.  
 1921 D, 219.  
 1924 E, 749.  
 1926 C, 154.  
 1928 B, 955, 962, 963, fig. 9.  
 Matthew and Granger 1917 B, 417 ("Phenacodus").  
 1923 A, 4.  
 Natural Science 1898 A, 230.  
 Osborn, H. F. 1898 S, 684.  
 1898 V, 206.  
 1905 N, 235.  
 1907 G, 170, figs. 135, 150, 198.  
 1909 D, 133.  
 1910 A, 205.  
 1910 B, 627, fig. 71.  
 1912 G, 236, fig. 3.  
 Palacký, J. 1903 B, 304, 306 (Phenacodon).  
 Palmer, T. S. 1904 A, 531, 933 (Phenacodus);  
 476, 901 (Opisthotomus); 694, 933 (Trispondylus).  
 Reynolds, S. H. 1897 A, 509, 550, fig. 107.

- Rogers, A. F. 1924 A, 545.  
 Schlesinger, G. 1914 A, 211.  
 Schlosser, M. 1898 B, 365.  
     1900 B, 304, 306.  
     1902 C, 301.  
     1921 A, 122.  
 Schuchert and Levene 1927 A, 333, fig.  
 Scott, W. B. 1913 A, 277, 285, 457.  
 Seeley, H. G. 1886 A, 468.  
 Sefve, I. 1915 A, 79.  
 Shufeldt, R. W. 1889 D, 23.  
 Simpson, G. G. 1927 B, 10.  
 Stehlin, H. G. 1905 A, 555.  
     1906 A, 643, 647.  
     1916 B, 1454.  
 Terra, P. 1911 A, 308.  
 Underhill, B. M. 1910 A, 79, 84.  
 Veith, A. 1912 A, 9.  
 Wallace, A. R. 1876 A, 1, 138.  
 Weber, M. 1904 A, 619, 692.  
 Weber and Abel 1928 A, xxi, 629, 630.  
 Woodward, A. S. 1897 C, 380.  
 Wortman, J. L. 1903 A, xv, 431.  
 Zittel, K. A. 1895 A, 305.  
     1897 A, 126.  
 Zittel and Schlosser 1911 A, 439.  
     1923 A, 523, 665, 666.
- Phenacodus astutus (Cope).**  
 Hay, O. P. 1902 A, 792 (Opisthotomus).  
 Granger, W. 1915 A, 346, 354.  
 Matthew, W. D. 1909 C, 94.  
 Reeside, J. B. 1924 A, 46.  
     Lower Eocene (Wasatch); Wyoming, New Mexico.
- Phenacodus brachypternus Cope.**  
 Hay, O. P. 1902 A, 604.  
 Granger, W. 1915 A, 333, 344, 354, figs. 4, 6, 8, 10.  
 Gregory, W. K. 1922 A, 109, figs. 47, 48.  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 94.  
     Lower Eocene (Wasatch); Wyoming, New Mexico.
- Phenacodus copei Granger.**  
 Granger, W. 1915 A, 333, 344, 354, figs. 3, 5, 7.  
     Lower Eocene (Wasatch); Wyoming, New Mexico.
- Phenacodus flagrans (Cope).**  
 Hay, O. P. 1902 A, 792 (Opisthotomus).  
 Granger, W. 1915 A, 347 (Opisthotomus flagrans; =?P. primævus).  
 Matthew, W. D. 1909 C, 94.  
 Reeside, J. B. 1924 A, 46.  
     Lower Eocene (Wasatch); New Mexico.
- Phenacodus intermedius Granger.**  
 Granger, W. 1915 A, 333, 340, 354, figs. 3, 5, 7, 9.  
     Lower Eocene (Wasatch); Wyoming.
- Phenacodus nunienus Cope.**  
 Hay, O. P. 1902 A, 604.  
 Granger, W. 1915 A, 335, 337 (Syn. in part, of P. primævus).  
 Matthew, W. D. 1909 C, 94.

- Trouessart, E. L. 1905 A, 576.  
     Lower Eocene (Wasatch); Wyoming.
- Phenacodus primævus Cope.**  
 Hay, O. P. 1902 A, 604 (P. primævus, P. omnivorus).  
 Abel, O. 1913 B, 736, fig. 47.  
     1914 A, 148, fig. 102.  
     1919 A, 793, figs. 597, 602.  
     1920 A, 434, fig. 656.  
     1922 C, 271, fig. 227.  
 Ameghino, F. 1904 A, 233, fig. 308.  
     1906 A, 294, fig. 81 (P. primævus); fig. 82a (P. trilobatus).  
 Beddard, F. E. 1902 A, 196, fig. 110.  
 Boule, M. 1891 A, 31, fig. 9.  
 Chardin, T. 1922 A, 26, fig. 11 (P. primævus, P. trilobatus).  
 Cope, E. D. 1885 EE, 609, fig. 1.  
     1885 FF, 798, fig. 8.  
     1891 N, 62, 78, figs. 32a, 50.  
 Cossmann, M. 1901 B, 187.  
 Drevermann, F. 1913 B, 203, fig.  
 Gidley, J. W. 1924 B, 47 (This species?).  
 Granger, W. 1915 A, 333, 335, 338, 354, figs. 3, 5, 7 (P. trilobatus a syn.).  
 Gregory, W. K. 1912 F, 288.  
     1920 A, 246.  
 Leuthardt, F. 1891 A, 97, pl. i, fig. 2.  
 Loomis, F. B. 1907 B, 357.  
 Lull, R. S. 1907 A, 163, fig. 3.  
     1917 B, 552, pl. xxviii (P. resartus).  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 54 (P. primævus, P. omnivorus).  
 Moodie, R. L. 1923 B, 223.  
 Neumayer, L. 1906 A, 103.  
 Osborn, H. F. 1898 S, 684.  
     1899 K, 273, fig. 4.  
     1904 F, 16, 27, 47, fig. 7.  
     1909 D, 39.  
     1910 B, 126, fig. 40.  
     1912 G, 235, fig. 2.  
 Reeside, J. B. 1924 A, 46.  
 Reynolds, S. H. 1897 A, 510, 525, fig. 107.  
 Salensky, W. 1903 A, 797.  
 Schlosser, M. 1902 C, 300.  
 Scott, W. B. 1913 A, 278, 457, fig. 141.  
 Seeley, H. G. 1886 A, 468, fig.  
 Shufeldt, R. W. 1889 D, 23, fig.  
 Sinclair and Granger 1912 A, 59, 60 (This species?).  
 Stehlin, H. G. 1906 A, 643, 647.  
 Stromer, E. 1908 B, 169.  
     1912 A, 208, figs. 195, 196.  
 Trouessart, E. L. 1905 A, 576.  
 Underhill, B. M. 1910 A, 79.  
 Weber, M. 1904 A, 691, fig. 484.  
 Weber and Abel 1928 A, 630, fig. 426.  
 Woodward, A. S. 1898 B, 290, fig. 165.  
     1923 C, 52, figs. 39, 40.  
     Lower Eocene (Fort Union?, Wasatch, Wind River); Wyoming, New Mexico.
- Phenacodus primævus hemiconus Cope.**  
 Hay, O. P. 1902 A, 604 (P. hemiconus).  
 Granger, W. 1915 A, 333, 339, 354, figs. 3, 5, 7.  
 Matthew, W. D. 1909 C, 94 (P. hemiconus).

Sinclair and Granger 1912 A, 60 (This species?).  
Paleocene (Fort Union); Wyoming: (Wasatch); Wyoming.

**Phenacodus primævus robustus** Granger.

Granger, W. 1915 A, 333, 340, 354, figs. 3, 5, 7.  
Lower Eocene (Wasatch); Wyoming.

**Phenacodus sulcatus** Cope.

Hay, O. P. 1902 A, 605.  
Granger, W. 1915 A, 347.  
Matthew, W. D. 1909 C, 94 ("Incertæ sedis").  
Merrill, G. P. 1907 A, 54.  
Reeside, J. B. 1924 A, 46 (This species?).  
Trouessart, E. L. 1905 A, 576.  
Lower Eocene (Wasatch); New Mexico.

**Phenacodus wortmani** Cope.

Hay, O. P. 1902 A, 605.  
Ameghino, F. 1906 A, 294, fig. 82b.  
Chardin, P. T. 1927 A, 22.  
Granger, W. 1915 A, 333, 343, 354, figs. 4, 6, 8  
(P. wortmani).

**Ectocion** Cope. Type *Oligotomus osbornianus* Cope.

Hay, O. P. 1902 A, 605.  
Ameghino, F. 1904 A, 82, 84, 105.  
Arlt, T. 1907 A, 241.  
Fairchild, H. L. 1894 A, 209.  
Granger, W. 1914 A, 204.  
1915 A, 330, 348, figs. 1, 2.  
Gregory, W. K. 1920 A, 245.  
Haug, E. 1911 A, 1523.  
Matthew, W. D. 1909 C, 102.  
Osborn, H. F. 1910 B, 132, 546.  
Palmer, T. S. 1904 A, 251, 933.  
Schlosser, M. 1900 B, 306.  
Simpson, G. G. 1927 B, 10.  
Weber and Abel 1923 A, 630.  
Zittel and Schlosser 1923 A, 523.

**Ectocion osbornianum** Cope.

Hay, O. P. 1902 A, 605.  
Ameghino, F. 1904 A, 82-84.  
1906 A, 307, fig. 114.

Gregory, W. K. 1912 F, 288.  
Loomis, F. B. 1907 B, 357.  
Matthew, W. D. 1909 C, 94.  
Osborn, H. F. 1904 F, 30.  
1909 D, 49.  
Seeley, H. G. 1886 A, 469.  
Sinclair, W. J. 1914 A, 275.  
Trouessart, E. L. 1905 A, 576.  
Lower Eocene (Wind River, Wasatch); Wyoming.

**Phenacodus** sp. indet.

Gidley, J. W. 1924 B, 47 (This genus?). Lower Eocene (Wasatch); Colorado.  
1928 E, 41. Lower Eocene (Wasatch); Wyoming.  
Matthew, W. D. 1909 C, 94. Lower Eocene (Wind River); Wyoming.  
Simpson, G. G. 1927 B, 7, fig. 7 (This genus?). Upper Cretaceous (Paskapoo); Alberta.  
Sinclair and Granger 1912 A, 60. Paleocene (Fort Union?); Wyoming.

Granger, W. 1915 A, 351, 352, 354, figs. 11-13.

Loomis, F. B. 1907 B, 357.  
Matthew, W. D. 1909 C, 94.  
Trouessart, E. L. 1905 A, 576 (Ectocion); 611 (Ectocyon).  
Lower Eocene (Wasatch, Wind River); Wyoming.

**Ectocion parvum** Granger.

Granger, W. 1915 A, 351, 353, 354, figs. 12, 13.  
Lower Eocene (Wasatch); Wyoming.

**Ectocion ralstonense** Granger.

Granger, W. 1915 A, 351, 353, 354, figs. 11-14.  
Lower Eocene (Wasatch); Wyoming.

**Ectocion superstes** Granger.

Granger, W. 1915 A, 351, 352, 354, figs. 11-13.  
Lower Eocene (Wind River); Wyoming.

**MENISCOTHERIIDÆ** Cope.

Hay, O. P. 1902 A, 605.  
Abel, O. 1913 B, 729, 734.  
1914 A, 121, 142, 148.  
Ameghino, F. 1893 B, 442.  
1893 D, 14.  
1901 A, 382.  
1902 B, 9 (Meniscotheridæ).  
Arlt, T. 1907 A, 244 (Meniscotheridæ).  
1912 A, 702, 703 (Meniscotheridæ).  
Depéret, C. 1904 B, 43 ("meniscotheridés").  
Granger, W. 1915 A, 329, 354.  
Gregory, W. K. 1910 A, 357.  
1920 A, 175, 246, fig. 133.  
Matthew, W. D. 1909 C, 94, 102.

Matthew, W. D. 1914 B, 387.  
1915 E, 312.  
1921 D, 214.  
Osborn, H. F. 1909 D, 40.  
Schlosser, M. 1898 B, 367.  
1900 B, 304.  
Scott, W. B. 1913 A, 457, 591.  
Seeley, H. G. 1886 A, 469, 521.  
Trouessart, E. L. 1905 A, 577.  
Weber, M. 1904 A, 693.  
Weber and Abel 1923 A, 426, 437, 630.  
Winge, H. 1906 A, 69, 78.  
Zittel and Schlosser 1911 A, 439.  
1923 A, 524, 666.

**MENISCOTHERIUM** Cope. Type *M. chamense* Cope.

Hay, O. P. 1902 A, 605 (Meniscotherium); 606 (Hyracops).  
Beddard, F. E. 1902 A, 203.  
Chardin, P. T. 1920 A, 1161.

Chardin, P. T. 1922 A, 46.  
Clark and Sonntag 1926 A, 478, 483.  
Depéret, C. 1904 B, 43.  
Granger, W. 1910 A, 243.

- Granger, W. 1914 A, 206.  
1915 A, 354, 356 (Hyracops a syn.).  
Gregory, W. K. 1910 A, 355, 399, 447.  
1912 F, 270, 288.  
Haug, E. 1911 A, 1523.  
Holland and Peterson 1913 A, 214.  
Koken, E. 1901 B, 223.  
Leche, W. 1904 A, 220.  
Lull, R. S. 1917 B, 554.  
Matthew, W. D. 1909 C, 102 (Hyracops a syn.).  
1915 K, 421.  
1921 H, 510.  
1928 B, 963, fig. 9.  
Osborn, H. F. 1907 G, 87, 184, figs. 135, 183.  
1910 B, 108, 125, 132, 546.  
1912 G, 236, fig. 3.  
Palmer, T. S. 1904 A, 344, 932 (Hyracops); 410, 932 (Meniscotherium).  
Salensky, W. 1903 A, 797 (Hyracops).  
Schlosser, M. 1902 J, 257.  
1911 A, 101.  
Scott, W. B. 1913 A, 457, 459.  
Seeley, H. G. 1886 A, 469.  
Weber, M. 1904 A, 694 (Meniscotherium); 694, 714 (Hyracops).  
Weber and Abel 1928 A, 437, 631.  
Winge, H. 1906 A, 78, 165.  
Wortman, J. L. 1904 A, 207.  
Zittel and Schlosser 1911 A, 439.  
1923 A, 524.

**Meniscotherium chamense Cope.**

- Hay, O. P. 1902 A, 605.  
Granger, W. 1915 A, 358, fig. 16.  
Gregory, W. K. 1922 A, 109, figs. 47, 48.  
Matthew, W. D. 1909 C, 94.  
Merrill, G. P. 1907 A, 46.  
Reeside, J. B. 1924 A, 46.

- Trouessart, E. L. 1905 A, 577 (M. chamense);  
578 (Hyracops socialis).  
Lower Eocene (Wasatch); New Mexico.

**Meniscotherium chamense terrærubræ Cope.**

- Hay, O. P. 1902 A, 606 (M. terrærubræ; Hyracops socialis).  
Abel, O. 1913 B, 737, fig. 49 (M. terrærubræ).  
Granger, W. 1914 A, 206 (M. terrærubræ).  
1915 A, 359, fig. 15 (Hyracops socialis a syn.).  
Matthew, W. D. 1909 C, 94 (M. chamense, M. terrærubræ).  
Osborn, H. F. 1910 B, 125, fig. 39 (M. terrærubræ).  
1916 E, 506, fig. 4 (M. terrærubræ).  
Reeside, J. B. 1924 A, 46 (M. terrærubræ).  
Weber and Abel 1928 A, 630, fig. 427 (M. terrærubræ).  
Woodward, A. S. 1898 B, 289, fig. 164 (Hyracops socialis).  
Zittel and Schlosser 1911 A, 439, fig. 605 (M. terrærubræ).  
1923 A, 524, fig. 645 (M. terrærubræ).  
Lower Eocene (Wasatch); New Mexico.

**Meniscotherium priscum Granger.**

- Granger, W. 1915 A, 360, fig. 18 (Meniscotherium?).  
Lower Eocene (Wasatch); Wyoming.

**Meniscotherium tapiacitis Cope.**

- Hay, O. P. 1902 A, 605.  
Granger, W. 1915 A, 360, fig. 17.  
Matthew, W. D. 1909 C, 94.  
Reeside, J. B. 1924 A, 46.  
Lower Eocene (Wasatch); New Mexico.

**MIOCLÆNIDÆ Osborn and Earle.**

- Hay, O. P. 1902 A, 606.  
Abel, O. 1913 B, 729, 735.  
1914 A, 121, 142, 145.  
1926 B, 396.  
Ardit, T. 1907 D, 620.  
1912 A, 702.  
Beddard, F. E. 1902 A, 205.  
Gregory, W. K. 1920 A, 246.  
Matthew, W. D. 1909 D, 512.  
1914 B, 387.  
1915 F, 311.  
1918 H, 608.

- Matthew, W. D. 1921 D, 212.  
Osborn, H. F. 1910 B, 109, 546.  
Palmer, T. S. 1904 A, 754, 933.  
Schlosser, M. 1898 B, 362, 367, 368.  
1900 B, 304, 305.  
Trouessart, E. L. 1905 A, 569.  
Weber, M. 1904 A, 693.  
Weber and Abel 1928 A, 124, 426, 628.  
Winge, H. 1923 A, 197.  
Zittel and Schlosser 1911 A, 438.  
1923 A, 522, 602, 665.

**MIOCLÆNUS Cope. Type *M. turgidus* Cope.**

- Hay, O. P. 1902 A, 606 (Mioclænus); 746 (Ellipædon).  
Abel, O. 1913 B, 735.  
Barileuth, K. S. 1913 A, 76.  
Beddard, F. E. 1902 A, 205.  
Haug, E. 1911 A, 1527.  
Matthew, W. D. 1901 A, 5, 6.  
1909 C, 101.  
1918 H, 567, 609.  
1924 E, 749.  
1928 B, 956 (Mioclænus, Ellipædon).  
Osborn, H. F. 1908 D, 213.  
1907 G, 169, fig. 147.

- Osborn, H. F. 1909 D, 34.  
1910 B, 107, 546.  
1912 G, 233, fig. 1.  
Palmer, T. S. 1904 A, 426, 933.  
Schlosser, M. 1898 B, 362, 365.  
1903 A, 289.  
1900 B, 307.  
Seeley, H. G. 1886 A, 418.  
Stehlin, H. G. 1906 A, 673.  
1916 B, 1484.  
Trouessart, E. L. 1904 A, 43 (Promioclænus).  
1905 A, 569.  
Weber and Abel 1928 A, xxiv, 628.



Winge, H. 1917 A, 102, 180.

1923 A, 131, 196, 215, 216, 217.

Zittel and Schlosser 1911 A, 438.

1923 A, 522.

### **Mioclanus acolytus Cope.**

Hay, O. P. 1902 A, 606.

Douglass, E. 1902 B, 278.

1902 C, 217, 222, pl. xxix, figs. 9, 10.

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1901 A, 6.

1909 C, 92.

1909 D, 512.

1914 B, 385.

Osborn, H. F. 1902 C, 170, 171, fig. 1.

Reeside, J. B. 1924 A, 41.

Trouessart, E. L. 1904 A, 43 (*Promioclanus*).

Paleocene (Torrejon); New Mexico, Montana.

### **Mioclanus inæquidens Cope.**

Hay, O. P. 1902 A, 746 (*Ellipsodon*).

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 41.

Trouessart, E. L. 1904 A, 160 (*Ellipsodon*).

Paleocene (Torrejon); New Mexico.

### **Mioclanus lemuroides Matthew.**

Hay, O. P. 1902 A, 606.

Chardin, T. 1922 A, 88.

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1901 A, 6.

1909 C, 92.

1909 D, 512.

1914 B, 385.

Osborn, H. F. 1902 C, 171.

Reeside, J. B. 1924 A, 41.

Schlosser, M. 1911 A, 69.

Trouessart, E. L. 1904 A, 43 (*Promioclanus*).

### **PROTOSELENE Matthew. Type *Mioclanus opisthacus* Cope.**

Hay, O. P. 1902 A, 607.

Beddard, F. E. 1902 A, 205.

Matthew, W. D. 1901 A, 6 (*Mioclanus*).

1909 C, 101.

Palmer, T. S. 1904 A, 585, 933.

Schlosser, M. 1900 B, 307.

1921 A, 123.

Zittel and Schlosser 1911 A, 438.

1923 A, 522.

Zittel and Schlosser 1911 A, 438, fig. 603.

1923 A, 522, fig. 643.

Paleocene (Torrejon); New Mexico.

### **Mioclanus lydekkerianus Cope.**

Hay, O. P. 1902 A, 606.

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 41.

Paleocene (Torrejon); New Mexico.

### **Mioclanus turgidunculus Cope.**

Hay, O. P. 1902 A, 606.

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1901 A, 6.

1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 38.

Paleocene (Puerco); New Mexico.

### **Mioclanus turgidus Cope.**

Hay, O. P. 1902 A, 606.

Abel, O. 1913 B, 735, fig. 43.

1914 A, 144, fig. 96.

Gardner, J. H. 1910 A, 730.

Granger, W. 1917 A, 822, 823, 825.

Matthew, W. D. 1901 A, 6.

1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 41.

Schlosser, M. 1898 B, 371.

Weber and Abel 1928 A, 627, fig. 423.

Paleocene (Torrejon); New Mexico.

### **Mioclanus sp. indet.**

Douglass, E. 1908 D, 23. Paleocene (Fort Union); Montana.

Lull, R. S. 1915 D, 326. Paleocene (Fort Union); Montana.

## **MONODELPHIA OF UNDETERMINED POSITION.**

### **PLANETETHERIUM Simpson. Type *P. mirabile* Simpson.**

Simpson, G. G. 1928 A, 11.

### **Planetetherium mirabile Simpson.**

Simpson, G. G. 1928 A, 11, figs. 7-9.

Upper Cretaceous (Fort Union); Montana.

## **Order AMBLYPODA Cope.**

Hay, O. P. 1902 A, 692.

Abel, O. 1912 F, 573 ("amblypoden").

1913 B, 729, 746.

1914 A, 142, 187.

Abel, O. 1919 A, 816.

1920 A, 438.

Ameghino, F. 1889 A, 1005.

1901 A, 390.

# CATALOGUE

Ameghino, F. 1904 B, 52.  
 1905 A, 63.  
 1906 A, 320 ("amblypodes").  
 Anderson, R. J. 1912 D, 253.  
 Arldt, T. 1907 D, 637.  
 1908 A, 240 ("amblypoden").  
 Beddard, F. E. 1902 A, 205.  
 Behlen, H. 1906 A, 197 ("amblypoden").  
 Branca, W. 1907 A, 9.  
 Case, E. C. 1899 B, 170.  
 Clark and Sonntag 1926 A, 461, 462.  
 Cope, E. D. 1880 U, 151 ("amblypodes").  
 1885 BB, 72.  
 1885 EE, 610.  
 1891 N, 67, 84, 90.  
 Cossmann, M. 1901 B, 186.  
 Depéret, C. 1902 D, 1281 ("amblypodes").  
 1904 B, 23, 41 ("amblypodes").  
 1905 C, 703 ("amblypodes").  
 1912 A, 706 ("amblypodes").  
 Fischer, E. 1903 A, 713.  
 Gaudry, A. 1906 A, 7 ("amblypodes").  
 Gawrilenko, A. 1924 A, 222 ("amblypoden").  
 Gidley, J. W. 1917 A, 433.  
 Gregory, W. K. 1910 A, 99, 356-359, 448.  
 1912 F, 270.  
 1920 A, 180, 243.  
 Heilprin, A. 1887 A, 367.  
 Hescheler, K. 1906 A, 30.  
 Howes, G. B. 1902 A, 523.  
 1903 A, 328.  
 Jackel, O. 1911 A, 239 (Amblypodi).  
 Kampfen, P. N. 1905 A, 627.  
 Koken, E. 1893 B, 485.  
 Lemoine, V. 1889 A, 255 ("amblypodes").  
 Loomis, F. B. 1922 A, 62.  
 Lull, R. S. 1917 B, 555.  
 Major, C. J. F. 1899 B, 66.  
 Matthew, W. D. 1906 B, 361 ("amblypods").  
 1909 C, 92, 94, 97, 99, 102.  
 1909 D, 301, 551.  
 1915 A, 256.  
 1915 K, 463.

Matthew, W. D. 1921 D, 214.  
 1928 B, 948, 956, 963, 968.  
 Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 1902 E, 356, fig. 1.  
 1905 H, 207, fig. 2.  
 1905 I, 99.  
 1906 C, 851.  
 1907 G, 14, 64.  
 1909 D, 121.  
 1910 B, 605.  
 1917 B, 259.  
 1925 B, 18.  
 1925 C, 750.  
 Palacký, J. 1903 B, 305, 306.  
 Parker and Haswell 1897 A, 455.  
 Reynolds, S. H. 1897 A, 509, 531.  
 Schlosser, M. 1898 B, 360, 362, 367.  
 1902 E, 472.  
 1902 I, 738.  
 1911 A, 139 ("amblypoden").  
 Schwarz, E. 1924 A, 419.  
 Scott, W. B. 1896 C, 308.  
 1913 A, 675.  
 Seeley, H. G. 1886 A, 466, 469, 521.  
 Shufeldt, R. W. 1889 D, 11.  
 Smith, G. E. 1903 A, 328 (Amblypoda).  
 1903 B, 49.  
 Steinmann, G. 1907 A, 479.  
 Stromer, E. 1906 A, 214.  
 1912 A, 209, 244.  
 Terra, P. 1911 A, 331.  
 Trouessart, E. L. 1905 A, 578.  
 Weber, M. 1904 A, 588, 699.  
 Weber and Abel 1923 A, 90, 426, 626, 690.  
 Winge, H. 1906 A, 68, 69, 72.  
 Woodward, A. S. 1898 D, 329, 335.  
 1904 D, 157.  
 1923 C, 48.  
 Wortman, J. L. 1903 A, 430.  
 1921 A, 185.  
 Zittel and Schlosser 1911 A, 506.  
 1923 A, 596, 602, 667.

## Suborder PERIPTICHIFORMES, new name.

Hay, O. P. 1902 A, 692 (Taligrada).  
 Ameghino, F. 1889 A, 1025 (Taligrada).  
 Clark and Sonntag 1926 A, 462 (Taligrada).  
 Gregory, W. K. 1910 A, 99, 356, 357, 447, 456, 466.  
 1916 A, 248 (Taligrada).  
 1921 A, 69 (Taligrada).  
 Kingsley, J. S. 1925 A, 215 (Taligrada).  
 Matthew, W. D. 1915 A, 256 (Taligrada).  
 1921 D, 212 (Taligrada).

Matthew, W. D. 1923 B, 948, 959, 970.  
 Osborn, H. F. 1910 B, 546 (Taligrada).  
 Schlosser, M. 1902 E, 474, 476 (Taligrada).  
 Scott, W. B. 1913 A, 453 (Taligrada).  
 Seeley, H. G. 1886 A, 473, 521 (Taligrada).  
 Weber, M. 1904 A, 700 (Taligrada).  
 Zittel and Schlosser 1911 A, 507 (Syn. of Pantolambdidae).  
 1923 A, 597 (Syn. of Pantolambdidae).

## PERIPTYCHIDÆ Cope.

Cope, E. D. 1882 A, 447.  
 Hay, O. P. 1902 A, 693.  
 Abel, O. 1913 B, 729, 735.  
 1914 A, 121, 142, 145.  
 Ameghino, F. 1904 C, 46.  
 Arldt, T. 1907 A, 244.  
 1907 D, 672.  
 1912 A, 702, 703 (Catathlæidae).  
 Behlen, H. 1906 A, 193 ("periptychiden").  
 Chardin, T. 1922 A, 27 ("periptychidés").

Depéret, C. 1904 B, 43 ("periptychidés").  
 Flower, W. H. 1892 A, 20.  
 Gregory, W. K. 1910 A, 357, 454.  
 1920 A, 243.  
 Matthew, W. D. 1909 C, 92, 102.  
 1914 B, 387.  
 1918 H, 608.  
 1921 D, 212.  
 Osborn, H. F. 1909 D, 33, 35.  
 1910 B, 110, 111, 546.

- Schlosser, M. 1898 B, 362, 367, 368.  
 1900 B, 304.  
 1902 E, 473, 477 ("periptychiden").  
 Scott, W. B. 1913 A, 443.  
 Seeley, H. G. 1886 A, 467, 521.  
 Trouessart, E. L. 1905 A, 570 (Catathlæidæ).  
 Weber, M. 1904 A, 700.

- Weber and Abel 1928 A, 124, 426, 690, 694.  
 Winge, H. 1917 A, 91, 101, 103, 179.  
 1923 A, 123, 131, 433, 495, 212.  
 Zierler, F. E. 1905 A, 514.  
 Zittel and Schlosser 1911 A, 433.  
 1923 A, 522, 602, 665.

## PERIPTYCHINÆ Osborn and Earle.

- Hay, O. P. 1902 A, 693.  
 Matthew and Granger 1925 A, 9.

- Schlosser, M. 1898 B, 362, 368.  
 1900 B, 304.  
 Trouessart, E. L. 1905 A, 571 (Catathlæinæ).

PERIPTYCHUS Cope. Type *P. carinidens* Cope.

- Hay, O. P. 1902 A, 693.  
 Ameghino, F. 1893 B, 440, 447.  
 1893 D, 14.  
 1904 A, 534.  
 1905 C, 409.  
 1906 A, 295, 298.  
 Beddard, F. E. 1902 A, 204.  
 Chardin, T. 1922 A, 26.  
 Gaudry, A. 1896 A, 147.  
 1901 B, 525.  
 Granger, W. 1917 A, 828.  
 Gregory, W. K. 1910 A, 437.  
 1912 F, 270.  
 1921 A, 234.  
 Haug, E. 1911 A, 1527, 1528.  
 Koken, E. 1898 B, 482.  
 Matthew, W. D. 1909 C, 102.  
 1924 E, 749.  
 1928 B, 956.  
 Osborn, H. F. 1907 G, 164, figs. 135, 137.  
 1910 B, 107, 546.  
 Palmer, T. S. 1904 A, 524, 908.  
 Rogers, A. F. 1924 A, 545.  
 Schlosser, M. 1898 B, 362, 369.  
 1900 B, 304.  
 1903 A, 291.  
 1911 A, 134.  
 Scott, W. B. 1913 A, 454.  
 Seeley, H. G. 1886 A, 467.  
 Trouessart, E. L. 1905 A, 571.  
 Weber, M. 1904 A, 700.  
 Weber and Abel 1928 A, 690.  
 Winge, H. 1917 A, 103, 180.  
 1923 A, 132, 196, 197, 212, 215, 216.  
 Zittel and Schlosser 1911 A, 439.  
 1923 A, 523, 665.

**Periptychus carinidens** Cope.

- Hay, O. P. 1902 A, 693.  
 Gardner, J. H. 1910 A, 730, fig. 9.  
 Granger, W. 1917 A, 823.  
 Matthew, W. B. 1909 C, 92.  
 1914 B, 385.

ECTOCONUS Cope. Type *Periptychus ditrigonus* Cope.

- Hay, O. P. 1902 A, 694.  
 Ameghino, F. 1904 A, 394, 395.  
 1905 C, 409.  
 1906 A, 298.  
 Eastman, C. R. 1914 B, 689.  
 Gaudry, A. 1901 B, 525.  
 Gregory, W. K. 1910 A, 454, fig. 30.  
 1920 A, 244.  
 1921 A, 69.

- Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1900 B, 304.  
 Trouessart, E. L. 1905 A, 571 (Catathlæus).  
 Paleocene (Torrejon); New Mexico.

**Periptychus coarctatus** Cope.

- Hay, O. P. 1902 A, 693.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 368.  
 1900 B, 304.  
 Trouessart, E. L. 1905 A, 571 (Catathlæus).  
 Paleocene (Puerco); New Mexico.

**Periptychus rhabdodon** Cope.

- Hay, O. P. 1902 A, 693.  
 Ameghino, F. 1893 B, 447.  
 1893 D, 17.  
 1904 A, 392.  
 1905 C, 407, fig. 54.  
 Beddard, F. E. 1902 A, 205.  
 Gardner, J. H. 1910 A, 730.  
 Granger, W. 1917 A, 822, 823, 825.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Neumayer, L. 1906 A, 103.  
 Osborn, H. F. 1904 F, 5.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1898 B, 368.  
 Seeley, H. G. 1886 A, 467, figs.  
 Sinclair and Granger 1914 A, 307, 311.  
 Trouessart, E. L. 1905 A, 571 (Catathlæus).  
 Paleocene (Torrejon); New Mexico.

**Periptychus rhabdodon** var. **fixus**.

- Granger, W. 1917 A, 823 (No description).  
 Paleocene (Torrejon); New Mexico.

**Periptychus** sp. indet.

- Granger, W. 1917 A, 828. Lower Eocene (Wasatch); Colorado.  
 Reeside, J. B. 1924 A, 46. Lower Eocene (Wasatch); Colorado.

- Haug, E. 1911 A, 1527.  
 Matthew, W. D. 1906 B, 358.  
 1909 C, 102.  
 1917 A, 573.  
 1918 H, 608.  
 Matthew, W. D. 1928 B, 955, 956, figs. 5, 7.  
 Matthew and Granger 1925 A, 9.  
 Moodie, R. L. 1923 B, 124.  
 Osborn, H. F. 1910 B, 546.

Palmer, T. S. 1904 A, 251, 908.  
 Schlosser, M. 1898 B, 362, 368.  
 1902 E, 473.  
 Winge, H. 1917 A, 181.  
 Zittel and Schlosser 1911 A, 439.  
 1923 A, 523.

**Ectoconus ditrigonus Cope.**

Hay, O. P. 1902 A, 694.  
 Ameghino, F. 1904 A, 394.

Ameghino, F. 1905 C, 409, fig. 57.  
 1906 A, 297, figs. 92, 95, 515.  
 Gardner, J. H. 1910 A, 730.  
 Gaudry, A. 1901 B, 525.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 38.  
 Schlosser, M. 1898 B, 369.  
 Trouessart, E. L. 1905 A, 571 (Catathlaeus).  
 Paleocene (Puerco); New Mexico.

**PROTOLAMBDA Osborn. Type *P. hatcheri* Osborn.**

Hay, O. P. 1902 A, 692.  
 Arldt, T. 1912 A, 686 (To Protolambidae).  
 Gidley, J. W. 1906 F, 99, 104, fig. 12.  
 Osborn, H. F. 1907 G, 96, fig. 47.  
 Palmer, T. S. 1904 A, 583, 909.

**Protolambda hatcheri Osborn.**

Hay, O. P. 1902 A, 692.  
 Matthew, W. D. 1916 A, 478.  
 Upper Cretaceous (Lance); Wyoming.

**HAPLOCONUS Cope. Type *H. lineatus* Cope.**

Hay, O. P. 1902 A, 694.  
 Gaudry, A. 1901 A, 504.  
 Gregory, W. K. 1910 A, 359.  
 1920 A, 181.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 1924 E, 749.  
 1928 B, 956.  
 Palmer, T. S. 1904 A, 309, 908.  
 Schlosser, M. 1898 B, 362, 369.  
 1900 B, 304.  
 1902 E, 473.  
 Seeley, H. G. 1886 A, 467.  
 Winge, H. 1917 A, 180.  
 1923 A, 132, 216.  
 Zittel and Schlosser 1923 A, 523, 684.

**Haploconus angustus Cope.**

Hay, O. P. 1902 A, 694.  
 Paleocene (Puerco); New Mexico.

**Haploconus corniculatus Cope.**

Hay, O. P. 1902 A, 694.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1898 B, 370 (Hemithlaeus).  
 Paleocene (Torrejon); New Mexico.

**Haploconus lineatus Cope.**

Hay, O. P. 1902 A, 694.  
 Gardner, J. H. 1910 A, 730.  
 Gregory, W. K. 1922 A, 108.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1898 B, 370.  
 1900 B, 304.  
 Winge, H. 1917 A, 102.  
 1923 A, 132.  
 Paleocene (Torrejon); New Mexico.

**ANISONCHINÆ Osborn and Earle.**

Hay, O. P. 1902 A, 694.  
 Schlosser, M. 1898 B, 362, 369.

Schlosser, M. 1900 B, 304.  
 Trouessart, E. L. 1905 A, 570.

**ANISONCHUS Cope. Type *A. sectorius* Cope.**

Hay, O. P. 1902 A, 694.  
 Ameghino, F. 1904 A, 399.  
 Matthew, W. D. 1909 C, 102.  
 1924 E, 749.  
 1928 B, 956.  
 Osborn, H. F. 1903 D, 313.  
 1910 B, 546.  
 Schlosser, M. 1900 B, 304.  
 Seeley, H. G. 1886 A, 467.  
 Winge, H. 1917 A, 102, 180.  
 1923 A, 132, 216.  
 Zittel and Schlosser 1911 A, 438.  
 1923 A, 523, 684.

**Anisonchus gillianus Cope.**

Hay, O. P. 1902 A, 695.  
 Gardner, J. H. 1910 A, 730.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 38.

Schlosser, M. 1898 B, 370.  
 Paleocene (Puerco); New Mexico.

**Anisonchus sectorius Cope.**

Hay, O. P. 1902 A, 695.  
 Douglass, E. 1902 B, 272 (This species?).  
 1902 C, 217, 222, pl. xxix, figs. 3-5. (This species?).  
 Gardner, J. H. 1910 A, 730.  
 Granger, W. 1917 A.  
 Matthew, W. D. 1909 C, 92.  
 1914 B, 385.  
 Reeside, J. B. 1924 A, 41.  
 Schlosser, M. 1898 B, 369, 370 (*A. mandibularis*, *A. sectorius*).  
 1900 B, 304 (*Haploconus mandibularis*).  
 Winge, H. 1917 A, 102.  
 1923 A, 132.  
 Paleocene (Torrejon); New Mexico, Montana?

ZETODON Cope. Type *Z. gracilis* Cope.

Hay, O. P. 1902 A, 695.  
Palmer, T. S. 1904 A, 714, 908.  
Winge, H. 1917 A, 181.

**Zetodon gracilis** Cope.

Hay, O. P. 1902 A, 695.  
Paleocene (Puerco); New Mexico.

HEMITHLÆUS Cope. Type *H. kowalevskianus* Cope.

Hay, O. P. 1902 A, 695.  
Ameghino, F. 1904 A, 400.  
1906 A, 299.  
Gregory, W. K. 1910 A, 402.  
Matthew, W. D. 1909 C, 102.  
1928 B, 955, fig. 5.  
Osborn, H. F. 1907 G, 165, fig. 138.  
1910 B, 546.  
Palmer, T. S. 1904 A, 319, 908.  
Schlosser, M. 1898 B, 362, 369.  
1911 A, 68.  
Seeley, H. G. 1886 A, 467.

Winge, H. 1917 A, 101, 180.  
1923 A, 131, 216.

**Hemithlæus kowalevskianus** Cope.

Hay, O. P. 1902 A, 695.  
Ameghino, F. 1904 A, 399.  
Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.  
Reeside, J. B. 1924 A, 38.  
Schlosser, M. 1898 B, 369.  
Winge, H. 1923 A, 131.  
Paleocene (Puerco); New Mexico.

CONACODON Matthew. Type *Haploconus entoconus* Cope.

Hay, O. P. 1902 A, 695.  
Haug, E. 1911 A, 1527.  
Matthew, W. D. 1909 C, 102.  
1924 E, 749.  
Osborn, H. F. 1907 G, 165, fig. 139.  
1910 B, 546.  
Winge, H. 1917 A, 102.  
1923 A, 132, 216.

Schlosser, M. 1908 C, 370 (*Haploconus*).  
Paleocene (Puerco); New Mexico.

**Conacodon entoconus** (Cope).**Conacodon cophater** (Cope).

Hay, O. P. 1902 A, 695.  
Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.  
Reeside, J. B. 1924 A, 38.

Hay, O. P. 1902 A, 696.  
Abel, O. 1913 B, 735, fig. 44 (*C. entoconum*).  
1914 A, 145, fig. 98 (*C. entoconum*).  
Gardner, J. H. 1910 A, 730.  
Matthew, W. D. 1909 C, 92.  
1914 B, 385.  
Reeside, J. B. 1924 A, 38.  
Schlosser, M. 1900 B, 304 (*Haploconus coniferus*).  
Weber and Abel 1928 A, 692, fig. 482.  
Winge, H. 1917 A, 102 (*Haploconus*).  
1923 A, 132 (*Haploconus*).  
Paleocene (Puerco); New Mexico.

## PANTOLAMBIDIDÆ Cope.

Hay, O. P. 1902 A, 696.  
Abel, O. 1912 F, 573 ("pantolambdiden").  
1913 B, 729, 735.  
1914 A, 121, 142, 145.  
Ameghino, F. 1889 A, 621, 894.  
1901 A, 397.  
1902 B, 9.  
1904 C, 46.  
1906 A, 298.  
Arlt, T. 1907 A, 241, 244.  
1907 D, 671.  
1912 A, 702, 703.  
Gregory, W. K. 1910 A, 357.  
Matthew, W. D. 1909 C, 92, 102.

Matthew, W. D. 1914 B, 387.  
1921 D, 212.  
Osborn, H. F. 1909 D, 35, 40.  
1910 B, 110, 111, 546.  
Schlosser, M. 1898 B, 362.  
1902 E, 477.  
Scott, W. B. 1913 A, 443.  
Seeley, H. G. 1886 A, 521.  
Trouessart, E. L. 1905 A, 572.  
Weber, M. 1904 A, 700.  
Weber and Abel 1928 A, 426, 626, 694.  
Winge, H. 1906 A, 69, 72 (*Pantolambdini*).  
Zittel and Schlosser 1911 A, 507.  
1923 A, 597.

PANTOLAMBDA Cope. Type *P. bathmodon* Cope.

Hay, O. P. 1902 A, 696.  
Abel, O. 1912 F, 229.  
1914 A, 146.  
Ameghino, F. 1889 A, 962.  
1904 A, 534.  
1905 C, 410.  
1906 A, 299.  
Beddard, F. E. 1902 A, 207.

Cossmann, M. 1901 B, 186.  
Dall, W. H. 1898 A, 347.  
Gardner, J. H. 1910 A, 712.  
Gidley, J. W. 1917 A, 433.  
1919 A, 274.  
Granger, W. 1917 A, 825.  
Gregory, W. K. 1910 A, 447.  
1912 F, 270, 285.

Gregory, W. K. 1920 A, 243.

1921 A, 69, pl. xxvii.

Haug, E. 1911 A, 1528.

Lull, R. S. 1917 B, 555.

Matthew, W. D. 1904 D, 814.

1909 C, 102.

1915 K, 465.

1917 A, 573.

1918 H, 609.

1928 B, 956, 969, fig. 11.

Osborn, H. F. 1903 D, 313.

1905 I, pl. i, fig. 1; pl. ii, fig. 1.

1907 G, 87, 165, figs. 135, 140, 144, 145.

1909 D, 23, 35.

1910 B, 107, 108, 110, 111, 546.

1912 G, 233, fig. 1.

1917 B, 259, fig.

Palmer, T. S. 1904 A, 510, 907.

Schlosser, M. 1898 B, 362, 367.

1899 I, 349.

1901 I, 460.

1902 E, 473.

1903 G, 145.

1911 A, 134, 141.

Schuchert, C. 1910 A, 599.

Scott, W. B. 1913 A, 285, 453.

Seeley, H. G. 1886 A, 473.

Sinclair and Granger 1914 A, 311.

Trouessart, E. L. 1905 A, 572.

Weber, M. 1904 A, 700.

Weber and Abel 1928 A, xxiv, 690.

Winge, H. 1906 A, 75.

Wood, H. E. 1923 A, 599, 604.

Wortman, J. L. 1921 A, 186.

Zittel and Schlosser 1911 A, 507.

1923 A, 598, 664.

### ***Pantolambda bathmodon* Cope.**

Hay, O. P. 1902 A, 696.

Abel, O. 1913 B, 736, fig. 46.

1914 A, 145, figs. 99, 101.

Ameghino, F. 1904 A, 357, 401, figs. 470, 525.

1905 C, 380, figs. 20, 59.

### **TITANOIDES Gidley. Type *T. primævus* Gidley.**

Gidley, J. W. 1917 A, 431.

Abel, O. 1922 C, 271.

Matthew, W. D. 1928 B, 969.

Zittel and Schlosser 1923 A, 598.

A genus of uncertain ordinal position.

### **Suborder CORYPHODONTIFORMES, new name.**

Unless otherwise indicated the authors, as cited, use the name *Dinocera*ta.

Hay, O. P. 1902 A, 696 (*Pantodonta*); 701 (*Dinocera*).

Abel, O. 1908 D, (211) ("*dinoceraten*").

1912 F, 581.

1914 A, 187.

1922 C, 261 ("*dinoceratiden*").

Ameghino, F. 1889 A, 1011 (*Dinocera*ta); 1021 (*Pantodonta*).

1905 C, 350.

Beddard, F. E. 1902 A, 210.

Boule, M. 1891 A, 32 ("*dinocératidés*").

Cope, E. D. 1873 FF, 3, 4 (*Dinocera*).

1880 U, 152 (*Dinocera*ta, *Pantodonta*).

Ameghino, F. 1906 A, 300, fig. 98.

Beddard, F. E. 1902 A, 205 (*Pantolambda*); fig. 114 (*Protolambda*).

Gardner, J. H. 1910 A, 730.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Osborn, H. F. 1904 F, 5, 14, 34.

Reeside, J. B. 1924 A, 41.

Schlosser, M. 1902 E, 477.

Scott, W. B. 1913 A, 285, fig. 143.

Seeley, H. G. 1886 A, 474.

Trouessart, E. L. 1905 A, 572.

Weber, M. 1904 A, 700, figs. 495, 497.

Weber and Abel 1928 A, 691, fig. 481.

Zittel and Schlosser 1911 A, 507, fig. 701.

1923 A, 597, fig. 742.

Paleocene (Torrejon); New Mexico.

### ***Pantolambda cavirictus* Cope.**

Hay, O. P. 1902 A, 696.

Abel, O. 1913 B, 736, fig. 45.

1914 A, 146, fig. 100.

Douglass, E. 1902 C, 217, 223 (This species?).

Gardner, J. H. 1910 A, 730.

Gidley, J. W. 1915 E, 538.

Granger, W. 1917 A, 823.

Lloyd and Hares 1915 A, 538.

Matthew, W. D. 1909 C, 92.

1914 B, 385.

Reeside, J. B. 1924 A, 41.

Schlosser, M. 1898 B, 367.

1902 E, 477.

Stanton, T. W. 1909 A, 264 (This species?).

Terra, P. 1911 A, 332, fig. 157.

Trouessart, E. L. 1905 A, 572.

Weber and Abel 1928 A, 691, fig. 480.

Zittel and Schlosser 1911 A, 507, fig. 700.

Paleocene (Torrejon); New Mexico: (Fort Union); Montana.

### ***Pantolambda* sp. indet.**

Lull, R. S. 1915 D, 326. Paleocene (Fort Union); Montana.

### ***Titanoides primævus* Gidley.**

Gidley, J. W. 1917 A, 431, pl. xxxvi, figs. 1, 2; text-fig. 1.

Paleocene (Fort Union); North Dakota.

- Schlosser, M. 1902 E, 474, 476 (Dinocerata, Pantodonta).  
 1903 G, 145.  
 Scott, W. B. 1913 A, 443 (Dinocerata); 451 (Pantodonta).  
 Seeley, H. G. 1886 A, 466, 571.  
 Shufeldt, R. W. 1889 D, 4.  
 1911 A, 73.

- Stenmann, G. 1908 A, 261 ("dinoceraten").  
 Wallace, A. R. 1876 A, r, 139.  
 Weber, M. 1904 A, 700 (Pantodonta).  
 Williston, S. W. 1902 1, 918.  
 Woodward, A. S. 1898 D, 330.  
 1923 A, 32.  
 Wyckoff, W. C. 1874 A, 11.

## CORYPHODONTIDÆ Marsh.

- Hay, O. P. 1902 A, 697.  
 Abel, O. 1913 B, 729, 735, 746.  
 1914 A, 187.  
 1919 A, 817.  
 1920 A, 438 ("coryphodontiden").  
 1922 C, 261 ("coryphodontiden").  
 Ameghino, F. 1889 A, 1009.  
 1902 B, 9.  
 1905 C, 368.  
 1906 A, 324.  
 Arltdt, T. 1907 D, 647.  
 1912 A, 700.  
 Beddard, F. E. 1902 A, 206.  
 Case, E. C. 1899 B, 170.  
 Cope, E. D. 1872 VV, 1 (Bathmodontidæ).  
 Gregory, W. K. 1910 A, 358.  
 Hoernes, R. 1886 A, 665.

- Malaquin, A. G. 1900 A, 262 ("coryphodontides").  
 Matthew, W. D. 1909 C, 94, 102.  
 1914 B, 387.  
 1921 D, 214.  
 Osborn, H. F. 1909 D, 123.  
 Scott, W. B. 1913 A, 443, 678.  
 Steinmann, G. 1907 A, 480.  
 Stromer, E. 1912 A, 210.  
 Trouessart, E. L. 1905 A, 581.  
 Weber, M. 1904 A, 701.  
 Weber and Abel 1928 A, 426, 626, 602, 695.  
 Winge, H. 1906 A, 69, 72 (Coryphodontidæ, Coryphodontini).  
 Wood, H. E. 1923 A, 601, 604.  
 Zittel and Schlosser 1911 A, 508.  
 1923 A, 598, 602.

CORYPHODON Owen. Type *C. eocænus* Owen.

- Hay, O. P. 1902 A, 697.  
 Abel, O. 1912 F, 229, 573, 667.  
 1913 B, 747, fig. 70.  
 1920 A, 439, fig. 667.  
 Ameghino, F. 1889 A, 619, 962.  
 1904 A, 369, 370 (Ectacodon); 529 (Coryphodon).  
 1905 C, 350 (Bathmodon).  
 Anthony, R. 1912 A.  
 Arltdt, T. 1907 D, 253.  
 Baird, S. F. 1876 A, 322 (Bathmodon).  
 Beddard, F. E. 1902 A, 206.  
 Boule, M. 1902 B, 911.  
 Bronn, H. G. 1849 A, 705.  
 Case, E. C. 1899 B, 170.  
 Chardin, P. T. 1920 A, 1161.  
 1921 A, 171.  
 1922 A, 82.  
 1924 A, 13.  
 1927 A, 29, text-fig. 29.  
 Cope, E. D. 1872 VV, 1 (Bathmodon, Metalophodon).  
 1878 JJ, 67.  
 1880 U, 143.  
 Depéret, C. 1902 A, 323.  
 1902 C, 345.  
 1902 D, 1281.  
 1904 B, 23, fig. 8.  
 1905 C, 703.  
 1908 A, 111.  
 1912 A, 706.  
 Dollo and Chardin 1924 A, 15.  
 Flower, W. H. 1873 B, 99.  
 Gaudry, A. 1898 A, 22.  
 1896 A, 63, 148, fig. 58.  
 1906 A, 18.  
 1906 B, 111.  
 Gervais, P. 1859 A, 127.

- Gidley, J. W. 1917 A, 433.  
 1918 B, 59.  
 Giebel, C. G. 1883 A, 114.  
 Granger, W. 1914 A, 202, 204.  
 Gregory, W. K. 1912 F, 285.  
 Haug, E. 1911 A, 1528.  
 Hay, O. P. 1911 B, 400.  
 Heilprin, A. 1887 A, 367.  
 Hoernes, R. 1886 A, 666.  
 Hutchinson, H. N. 1910 A, 251, pl. xl.  
 Huxley, T. H. 1870 F, 537, 544.  
 Knipe, H. R. 1912 A, 122, fig.  
 Leche, W. 1905 A, 538.  
 Lemoine, V. 1889 A, 255.  
 Loomis, F. B. 1905 C, 296.  
 Lucas, F. A. 1902 B, 225, fig.  
 Lull, R. S. 1917 B, 555, 582, fig. 179.  
 1918 C, 134.  
 Lydekker, R. 1903 B, 201.  
 Malaquin, A. G. 1900 A, 261.  
 Matthew, W. D. 1909 B, 361.  
 1909 C, 102.  
 1915 K, 415, 416, 421, 465.  
 1918 H, 609.  
 1921 D, 212, 219.  
 1924 E, 749.  
 1926 D, 453, fig. 4.  
 1928 B, 963, 968, 970, fig. 11.  
 Morgau, L. 1914 A, 83, fig. 1.  
 Osborn, H. F. 1898 V, 206.  
 1904 F, 47.  
 1905 I, pl. i, fig. 2; pl. ii, fig. 2.  
 1907 G, 166, figs. 141, 143.  
 1909 D, 23, 123.  
 1910 A, 205.  
 1910 B, 611, figs. 30, 31, 71c.  
 1912 G, 236, fig. 3.  
 1917 B, 259, fig.

- Osborn, H. F. 1919 B, 558.  
 Owen, R. 1845 B, 607, pl. cxxxv, fig. 9.  
 1868 A, 874.  
 1879 C, 581.  
 Palacký, J. 1903 B, 307.  
 Palmer, T. S. 1904 A, 200, 907 (Coryphodon);  
 251, 907 (Ectacodon); 399, 907 (Manteodon).  
 Peale, A. C. 1876 A, 153 (Bathmodon, Meta-  
 lophodon).  
 Reynolds, S. H. 1897 A, 433, 473, 510, 519, 525.  
 Schlosser, M. 1898 B, 367.  
 1899 I, 349.  
 1901 I, 460.  
 1902 E, 473 (Coryphodon); 478 (Ectacodon,  
 Bathmodon, Metalophodon, Manteodon).  
 1903 G, 145.  
 1911 A, 139.  
 1921 A, 134.  
 Schmidt, O. 1886 A, 132, 192, 284, figs. 13, 14.  
 Schuchert and Levene 1927 A, 334, fig.  
 Scott, W. B. 1913 A, 275, 277, 678.  
 Seeley, H. G. 1886 A, 470 (Coryphodon); 470,  
 471 (Metalophodon).  
 Shufeldt, R. W. 1889 D, 15.  
 Stanton, T. W. 1909 A, 276.  
 Stehlin, H. G. 1905 A, 555.  
 Steinmann, G. 1907 A, 480, fig. 833.  
 1908 A, 259, figs. 186, 167.  
 Stromer, E. 1908 B, 169.  
 Trouessart, E. L. 1905 A, 581.  
 Underhill, B. M. 1907 A, 118.  
 1910 A, 80.  
 Wallace, A. R. 1876 A, i, 126 (Coryphodon);  
 136 (Bathmodon).  
 Weber, M. 1904 A, 700.  
 Weber and Abel 1928 A, xxi, xxiii, 414, 602, figs.  
 257, 483.  
 Weber and Burlet 1927 A, 149, fig. 114.  
 Wegemann, C. H. 1918 A, 58.  
 Winge, H. 1906 A, 76 (Coryphodon, Manteodon).  
 Wood, H. E. 1923 A, 599.  
 Woodward, A. S. 1898 D, 329, 335.  
 1904 C, 192.  
 1923 C, 50.  
 Wortman, J. L. 1903 A, xv, 431.  
 Zittel and Schlosser 1911 A, 508.  
 1923 A, 598, 665, 666.
- Coryphodon anax Cope.**  
 Hay, O. P. 1902 A, 698.  
 Gaudry, A. 1906 A, 13, fig. 20.  
 Schlosser, M. 1902 E, 479 (C. anax, C. pachy-  
 pus).  
 Seeley, H. G. 1886 A, 471 (Bathyopsis pachy-  
 pus).  
 Trouessart, E. L. 1905 A, 581 (Syn. of C. loba-  
 tus).  
 Weber and Abel 1928 A, 693.  
 Zittel and Schlosser 1911 A, 508, fig. 708.  
 1923 A, 598, fig. 744.  
 Lower Eocene (Wasatch); Wyoming.
- Coryphodon armatus (Cope).**  
 Hay, O. P. 1902 A, 698.  
 Cope, E. D. 1874 B, 437.  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 94.  
 Schlosser, M. 1902 E, 478, 479.
- Trouessart, E. L. 1905 A, 582.  
 Lower Eocene (Wasatch); Wyoming.
- Coryphodon cinctus (Cope).**  
 Hay, O. P. 1902 A, 698.  
 Ameghino, F. 1904 A, 369, 370, fig. 482.  
 Loomis, F. B. 1907 B, 357.  
 Schlosser, M. 1902 E, 479.  
 Trouessart, E. L. 1905 A, 581.  
 Lower Eocene (Wasatch); Wyoming.
- Coryphodon curvicristis Cope.**  
 Hay, O. P. 1902 A, 698.  
 Matthew, W. D. 1909 C, 94.  
 Rogers, A. F. 1924 A, 545 (C. curvicristis).  
 Schlosser, M. 1902 E, 479.  
 Trouessart, E. L. 1905 A, 582.  
 Lower Eocene (Wasatch); Wyoming.
- Coryphodon cuspidatus Cope.**  
 Hay, O. P. 1902 A, 698.  
 Loomis, F. B. 1907 B, 357.  
 Merrill, G. P. 1907 A, 25 (Bathmodon); 28  
 (Coryphodon).  
 Schlosser, M. 1902 E, 479.  
 Trouessart, E. L. 1905 A, 582.  
 Lower Eocene (Wasatch); New Mexico.
- Coryphodon elephantopus Cope.**  
 Hay, O. P. 1902 A, 698.  
 Cope, E. D. 1885 FF, 791, 797, figs. 1, 7.  
 1891 N, 62, 63, 81, figs. 32c, 53.  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 25 (Bathmodon); 29  
 (Coryphodon).  
 Neumayer, L. 1906 A, 100.  
 Reeside, J. B. 1924 A, 46.  
 Schlosser, M. 1902 E, 479.  
 Seeley, H. G. 1886 A, 470.  
 Shufeldt, R. W. 1889 D, 14, fig.  
 Trouessart, E. L. 1905 A, 581.  
 Lower Eocene (Wasatch); Wyoming, New  
 Mexico.
- Coryphodon hamatus Marsh.**  
 Hay, O. P. 1902 A, 698.  
 Abel, O. 1912 F, 229, figs. 157, 179.  
 1914 A, 188, fig. 144.  
 1919 A, 817, fig. 616.  
 1920 A, 440, fig. 668.  
 Ameghino, F. 1904 A, 369.  
 Matthew, W. D. 1909 C, 94.  
 Reynolds, S. H. 1897 A, 510, fig. 107.  
 Schlosser, M. 1902 E, 479.  
 Trouessart, E. L. 1905 A, 582.  
 Zittel and Schlosser 1911 A, 509, fig. 704.  
 1923 A, 599, fig. 745.  
 Lower Eocene (Wasatch); Wyoming.
- Coryphodon latidens Cope.**  
 Hay, O. P. 1902 A, 698.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 25 (Bathmodon); 29  
 (Coryphodon).  
 Reeside, J. B. 1924 A, 46.  
 Schlosser, M. 1902 E, 479.



Trouessart, E. L. 1905 A, 582.

Lower Eocene (Wasatch); New Mexico, Wyoming.

**Coryphodon latipes Cope.**

Hay, O. P. 1902 A, 699.

Cope, E. D. 1874 B, 441 (Bathmodon).

Osborn, H. F. 1912 G, 235, fig. 2.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 582.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon lobatus Cope.**

Hay, O. P. 1902 A, 699.

Abel, O. 1912 F, 220.

Ameghino, F. 1905 A, 42.

1905 C, 375, fig. 14.

Gidley, J. W. 1926 E, 41 (This species?).

Loomis, F. B. 1907 B, 357.

Matthew, W. D. 1909 C, 94.

Reeside, J. B. 1924 A, 46.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 581.

Lower Eocene (Wasatch); Wyoming, New Mexico.

**Coryphodon marginatus Cope.**

Hay, O. P. 1902 A, 699.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 581.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon molestus Cope.**

Hay, O. P. 1902 A, 699.

Merrill, G. P. 1907 A, 25 (B. molestus, B. sinus); 29 (Coryphodon molestus, C. sinus).

Schlosser, M. 1902 E, 479 (C. molestus, C. lomas, C. sinus).

Trouessart, E. L. 1905 A, 582 (Syn. of C. cuspidatus).

Wegemann, C. H. 1918 A, 58.

Lower Eocene (Wasatch); New Mexico, Wyoming.

**Coryphodon obliquus Cope.**

Hay, O. P. 1902 A, 699.

Merrill, G. P. 1907 A, 20.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 581 (Syn. of C. elephantopus).

Lower Eocene (Wasatch); New Mexico.

**Coryphodon radians Cope.**

Hay, O. P. 1902 A, 699.

Ameghino, F. 1905 A, 42, fig. 47.

1905 C, 375, fig. 15.

Beddard, F. E. 1902 A, 208, fig. 115.

Cope, E. D. 1874 B, 441 (Bathmodon).

Cossmann, M. 1901 B, 186.

Matthew, W. D. 1909 C, 94.

Merrill, G. P. 1907 A, 29.

Osborn, H. F. 1904 F, 47 ("Coryphodon").

1909 D, 39.

1912 G, 235, fig. 2.

Schlosser, M. 1901 C, 462.

1901 I, 460.

1902 E, 478, 479.

Trouessart, E. L. 1905 A, 582.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon repandus Cope.**

Hay, O. P. 1902 A, 700.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 581.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon semicinctus Cope.**

Hay, O. P. 1902 A, 700.

Cope, E. D. 1874 B, 441 (Bathmodon).

Osborn, H. F. 1905 H, 213 ("Loxolophodon").

1909 D, 39 (Coryphodon); 55 (Loxolophodon).

1912 G, 235, fig. 2.

Schlosser, M. 1902 E, 479.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon singularis Osborn.**

Hay, O. P. 1902 A, 700.

Matthew, W. D. 1909 C, 94.

Schlosser, M. 1902 E, 479.

Lower Eocene (Wind River); Wyoming.

**Coryphodon subquadratus (Cope).**

Hay, O. P. 1902 A, 700.

Ameghino, F. 1904 A, 529, figs. 64, 471, 472, 474, 476, 478.

1906 A, 323, fig. 145.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 582 (Syn. of C. hana-tus).

Lower Eocene (Wasatch); Wyoming.

**Coryphodon testis (Cope).**

Hay, O. P. 1902 A, 700.

Abel, O. 1913 B, 747, fig. 69 (C. teste).

1914 A, 189, fig. 145.

Ameghino, A. 1904 A, 357, fig. 460.

Granger, W. 1910 A, 239 (This species?).

Heilmann, G. 1926 A, 163, fig. 118.

Loomis, F. B. 1907 B, 357.

Matthew, W. D. 1909 C, 94.

Osborn, H. F. 1899 K, 273, fig. 3.

1904 F, 3, 27, fig. 1.

1924 D, 5.

Schlosser, M. 1902 E, 479.

Scott, W. B. 1913 A, 279 (fig. 142).

Stromer, E. 1912 A, 210, figs. 198, 199.

Trouessart, E. L. 1905 A, 581.

Wood, H. E. 1923 A, 600, figs. 1, 2.

Zittel and Schlosser 1911 A, 508, fig. 702.

1923 A, 598, fig. 743.

Lower Eocene (Wasatch); Wyoming.

**Coryphodon ventanus Osborn.**

Hay, O. P. 1902 A, 700.

Matthew, W. D. 1909 C, 94.

Osborn, H. F. 1909 D, 49.

Schlosser, M. 1902 E, 479.

Trouessart, E. L. 1905 A, 582.

Lower Eocene (Wind River); Wyoming, Colorado.

**Coryphodon wortmani Osborn.**

Hay, O. P. 1902 A, 700.

Matthew, W. D. 1909 C, 94.

# CATALOGUE

Schlosser, M. 1902 E, 479.  
 Trouessart, E. L. 1905 A, 581.  
 Lower Eocene (Wind River); Wyoming.

## *Coryphodon* sp. indet.

Gidley, J. W. 1917 B, 59. Lower Eocene (Wasatch); Colorado, Wyoming.  
 1926 E, 41. Lower Eocene (Wasatch); Wyoming.

Loomis, F. B. 1907 B, 357. Lower Eocene (Wasatch); Wyoming.  
 Merrill, G. P. 1907 A, 29-31.  
 Reeside, J. B. 1924 A, 46. Lower Eocene (Wasatch); Wyoming.  
 Sinclair and Granger 1911 A, 91. Lower Eocene (Wasatch); Wyoming.

## EOBASILEIDÆ Cope.

Cope, E. D. 1873 X, 292.  
 Hay, O. P. 1902 A, 701 (Tinoceridæ); 700 (Bathyopsidæ).  
 Abel, O. 1913 B, 729 (Uintatheriidæ).  
 1919 A, 818 (Dinoceratidæ).  
 1922 C, 260 ("uintatherien").  
 Ameghino, F. 1905 C, 368, 375 (Uintatheriidæ).  
 1906 A, 323 (Uintatheriidæ).  
 Arldt, T. 1907 D, 650 (Dinoceratidæ).  
 1912 A, 700 (Uintatheriidæ, Bathyopsidæ).  
 Case, E. C. 1899 B, 170 (Dinoceratidæ).  
 Cope, E. D. 1873 FF, 3.  
 Flower, W. H. 1876 B, XIII, 387 (Uintatheriidæ).  
 Gregory, W. K. 1910 A, 358 (Uintatheriidæ).  
 Hoernes, R. 1886 A, 667 (Dinoceratidæ).  
 Lydekker, R. 1914 A, 635 (Uintatheriidæ).  
 Matthew, W. D. 1909 C, 94, 97, 99, 102 (Eobasileidæ); 94, 97 (Uintatheriidæ).  
 1909 D, 301 (Eobasileidæ, Uintatheriidæ).

Matthew, W. D. 1914 B, 387.  
 1921 D, 214.  
 Osborn, H. F. 1909 D, 42, 45, 52, 57 (Uintatheriidæ).  
 1910 B, 132, 547 (Uintatheriidæ).  
 Palmer, T. S. 1904 A, 775, 908 (Uintatheriidæ).  
 Reynolds, S. H. 1897 A, 364, 434 (Uintatheriidæ).  
 Scott, W. B. 1913 A, 269, 443, 692 (Uintatheriidæ).  
 Trouessart, E. L. 1905 A, 585 (Uintatheriidæ); 582 (Bathyopsidæ).  
 Van Bemmelen, J. F. 1918 A, 572 (Dinoceratidæ).  
 Weber and Abel 1928 A, 426, 626, 693 (Dinoceratidæ).  
 Wood, H. E. 1923 A, 601, 604 (Uintatheriidæ).  
 Zittel and Schlosser 1911 A, 508 (Dinoceratidæ).  
 1923 A, 599, 667 (Dinoceratidæ).

## BATHYOPSIS Cope. Type *B. fissidens* Cope.

Hay, O. P. 1902 A, 700.  
 Granger, W. 1910 A, 243.  
 1914 A, 204.  
 Haug, E. 1911 A, 1528.  
 Lydekker, R. 1914 A, 635.  
 Matthew, W. D. 1909 C, 102.  
 1928 B, 963, 970.  
 Matthew and Granger 1925 D, 5.  
 Osborn, H. F. 1907 G, 168, fig. 146.  
 1909 D, 44, 45, 47.  
 1910 B, 119, 130, 132, 137.  
 1912 G, 236, fig. 3.  
 1913 D, 417.  
 1919 B, 558.  
 1924 D, 2.

Weber and Abel 1928 A, 692, 695, fig. 483.  
 Wood, H. E. 1923 A, 599.  
 Zittel and Schlosser 1911 A, 508 (Syn. of *Coryphodon*).  
 1923 A, 599, 666 (Syn. of *Coryphodon*).

## *Bathyopsis fissidens* Cope.

Palmer, T. S. 1904 A, 134, 908.  
 Schlosser, M. 1902 E, 473 (Bathyopsis).  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 275, 450, 455, 676.  
 Seeley, H. G. 1886 A, 470.  
 Trouessart, E. L. 1905 A, 582.

Hay, O. P. 1902 A, 700.  
 Abel, O. 1914 A, 191, fig. 147.  
 1922 C, 261, figs. 213, 214.  
 Matthew, W. D. 1909 C, 94.  
 Osborn, H. F. 1913 D, 417, pls. lxiv-lxvi; text-fig. 1 (This species?).  
 Trouessart, E. L. 1905 A, 582.  
 Lower Eocene (Wind River); Wyoming.

## *Bathyopsis* sp. indet.

Sinclair and Granger 1912 A, 60. Paleocene (Fort Union?); Wyoming.  
 Wood, H. E. 1923 A, 601. Lower Eocene or Paleocene (Clark Fork); Wyoming.

## UINTATHERIUM Leidy. Type *U. robustum* Leidy.

Hay, O. P. 1902 A, 701 (Uintatherium); 702 (Dinoceras); 703 (Tinoceras).  
 Abel, O. 1912 F, 573.  
 1922 C, 261, fig. 215.  
 Ameghino, F. 1904 A, 367 (Uintatherium); 387 (Dinoceras).  
 1905 A, 63 (Uintatherium); 389 (Dinoceras).  
 Andrews, C. W. 1906 A, xix.  
 Baird, S. F. 1876 A, 357.  
 Beddard, F. E. 1902 A, 206, 210 (Tinoceras, Dinoceras).  
 Boule, M. 1902 B, 911, fig. 20 (Dinoceras).

Cook, H. J. 1926 A, 8 ("uintatheres").  
 Cope, E. D. 1873 FF, 2 (Tinoceras).  
 Delafontaine, M. 1875 A, 173 (Dinoceras, Tinoceras).  
 Depéret, C. 1902 A, 324 (Dinoceras).  
 Eastman, C. R. 1912 C, 659.  
 Gaudry, A. 1896 A, 87 (Dinoceras).  
 1898 A, 128.  
 1906 A, 7, 17 (Dinoceras).  
 1906 B, 111 (Dinoceras).  
 Gidley, J. W. 1917 A, 433.  
 Granger, W. 1909 A, 22.

- Gregory, W. K. 1912 F, 285.  
1920 A, 181, fig. 141 (Dinoceras).  
Haug, E. 1911 A, 1528 (Untatherium, Dinoceras, Tinoceras).  
Heilprin, A. 1887 A, 367 (Untatherium, Dinoceras, Tinoceras).  
Hoernes, R. 1886 A, 667 (Dinoceras).  
1912 A, 661 (Dinoceras).  
Hutchinson, H. N. 1910 A, 254, pl. xli (Tinoceras).  
Lankester, E. R. 1905 A, 149 (Dinoceras).  
Leche, W. 1887 A (Dinoceras).  
Loomis, F. B. 1921 A, 192.  
Lucas, F. A. 1902 B, 228, fig.  
Lull, R. S. 1917 B, 301, 556, fig. 180 (Dinoceras).  
Matthew, W. D. 1909 C, 102.  
1915 K, 464, fig. 36 (Dinoceras).  
1924 E, 748.  
1928 B, 963, 969, fig. 11.  
Matthew and Granger 1925 D, 5 ("Dinoceras").  
Osborn, H. F. 1898 V, 206  
1905 H, 213 (Tinoceros).  
1905 L, 567.  
1907 G, 166, fig. 142.  
1909 D, 23, 51, 52, 53.  
1910 A, 206.  
1910 B, 166, 547 (Tinoceras); 155, 168-166, 173, 547, fig. 71 (Untatherium).  
1912 G, 237, 241, fig. 6.  
1913 D, 419.  
1917 B, 259 (Dinoceras).  
1924 D, 2, 4 (Dinoceras); 4 (Untatherium).  
Oswald, F. 1909 A, 567.  
Palmer, T. S. 1904 A, 699, 908 (Untatherium); 680, 908 (Tinoceras); 232, 908 (Dinoceras).  
Reynolds, S. H. 1897 A, 433, 473, 510, 514, 519, 558.  
Schlosser, M. 1899 I, 349.  
1901 A, 491.  
1902 E, 473.  
1911 A, 140.  
Schuchert, C. 1910 A, 599.  
Schuchert and Levene 1927 A, 333, fig.  
Scott, W. B. 1913 A, 444, 449, 451.  
Seeley, H. G. 1886 A, 473 (Untatherium, Loxolophodon).  
Steinmann, G. 1908 A, 262, figs. 168, 170, 171 (Dinoceras).  
Thorpe, M. R. 1922 B, 282 (Dinoceras).  
Trouessart, E. L. 1905 A, 536 (Untatherium, Dinoceras, Tinoceras).  
Wallace, A. R. 1876 A, 1, 139 (Untatherium, Dinoceras).  
Wasmuth, P. 1905 A, 61 (Dinoceras).  
Weber, M. 1904 A, 702 (Tinoceras).  
Weber and Abel 1928 A, 693, 694, fig. 486.  
Winge, H. 1906 A, 76 (Dinoceras).  
Wood, H. E. 1923 A, 599.  
Wortman, J. L. 1921 A, 186.  
Zittel and Schlosser 1911 A, 509.  
1923 A, 599 (Untatherium); 600 (Tinoceras).

### **Untatherium affine (Marsh).**

- Hay, O. P. 1902 A, 704 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium agreste (Marsh).**

- Hay, O. P. 1902 A, 702 (Dinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium alticeps Scott.**

- Hay, O. P. 1902 A, 702.  
Scott, W. B. 1913 A, 445, 447, figs. 230, 231.  
Trouessart, E. L. 1905 A, 587.  
Weber and Abel 1928 A, 694, fig. 485.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium anceps (Marsh).**

- Hay, O. P. 1902 A, 704 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium annectens (Marsh).**

- Hay, O. P. 1902 A, 704 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium crassifrons (Marsh).**

- Hay, O. P. 1902 A, 704 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium cuneum (Marsh).**

- Hay, O. P. 1902 A, 703 (Dinoceras).  
Middle Eocene (Bridger); Wyoming.

### **Untatherium distans (Marsh).**

- Hay, O. P. 1902 A, 703 (Dinoceras).  
Cope, E. D. 1873 FF, 7 (Tinoceras).  
Merrill, G. P. 1907 A, 34 (Dinoceras).  
Middle Eocene (Bridger); Wyoming.

### **Untatherium grande (Marsh).**

- Hay, O. P. 1902 A, 704 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium hians (Marsh).**

- Hay, O. P. 1902 A, 705 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

### **Untatherium ingens (Marsh).**

- Hay, O. P. 1902 A, 705 (Tinoceras).  
Ameghino, F. 1905 A, 42, fig. 46 (Tinoceras).  
1905 C, 377, fig. 16 (Tinoceras).  
Boule, M. 1902 B, 911, fig. 18 (Dinoceras).  
Cook, H. J. 1926 A, 8.  
Koken, E. 1893 B, 477 (Tinoceras).  
Lull, R. S. 1917 B, 557, fig. 181 (Tinoceras).  
Matthew, W. D. 1909 C, 97.  
Shufeldt, R. W. 1889 D, 4, fig. (Tinoceras).  
1916 B, 40 (Tinoceras).  
Woodward, A. S. 1898 B, 297, fig. 170 (Tinoceras).

- 1923 C, 50, fig. 37 (Tinoceras).  
Middle Eocene (Bridger); Wyoming.

### **Untatherium jugum (Marsh).**

- Hay, O. P. 1902 A, 705 (Tinoceras).  
Middle Eocene (Bridger); Wyoming.

**Uintatherium lacustre** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).  
Middle Eocene (Bridger); Wyoming.

**Uintatherium laticeps** (Marsh).

Hay, O. P. 1902 A, 703 (Dinoceras).  
Abel, O. 1922 C, 181, fig. 146.  
1925 A, 21, fig. 18.

Ameghino, F. 1905 C, 378, fig. 17.

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

**Uintatherium latifrons** Marsh.

Hay, O. P. 1902 A, 702.

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

**Uintatherium latum** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).

Middle Eocene (Bridger); Wyoming.

**Uintatherium leidianum** Osborn, Scott and Speir.

Hay, O. P. 1902 A, 702.

Matthew, W. D. 1909 C, 97 (U. leidyanum).

Middle Eocene (Bridger); Wyoming.

**Uintatherium longiceps** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

**Uintatherium lucare** (Marsh).

Hay, O. P. 1902 A, 703 (Dinoceras).

Matthew, W. D. 1909 C, 97.

Wood, H. E. 1923 A, 602, fig. 3.

Middle Eocene (Bridger); Wyoming.

**Uintatherium mirabile** (Marsh).

Hay, O. P. 1902 A, 703 (Dinoceras).

Abel, O. 1912 F, 581, fig. 451.

1913 B, 747, fig. 71.

1914 A, 191, fig. 148.

Ameghino, F. 1904 A, 68, 371, 389, fig. 65.

1905 A, 40, figs. 44, 45.

1905 C, 378, figs. 18, 19.

Boule, M. 1891 A, 33, fig. 10 (Dinoceras).

Cope, E. D. 1873 FF, 2, 8.

Gaudry, A. 1906 A, 13, 15, figs. 16, 28 (Dinoceras).

Lankoster, E. R. 1905 A, 148, figs. 104, 105 (Dinoceras).

Lull, R. S. 1917 B, 557, fig. 181.

Matthew, W. D. 1909 C, 97.

Osborn, H. F. 1910 B, 155, fig. 56.

Reynolds, S. H. 1897 A, 516, fig. 108.

Schmidt, O. 1886 A, 241, fig. 44 (Dinoceras).

Shufeldt, R. W. 1889 D, 8, fig. (Dinoceras).

Thorpe, M. R. 1922 B, 282 (Dinoceras).

Trouessart, E. L. 1905 A, 585 (Dinoceras).

Weber and Abel 1928 A, 693, fig. 484.

Zittel and Schlosser 1911 A, 509, figs. 705, 706.  
1923 A, 599, figs. 746, 747.

Middle Eocene (Bridger); Wyoming.

**Uintatherium princeps** Osborn, Scott and Speir.

Hay, O. P. 1902 A, 702.

Trouessart, E. L. 1905 A, 587.

Middle Eocene (Bridger); Wyoming.

**Uintatherium pugnax** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).

Matthew, W. D. 1909 C, 97.

Wood, H. E. 1923 A, 602, fig. 3.

Middle Eocene (Bridger); Wyoming.

**Uintatherium reflexum** (Marsh).

Hay, O. P. 1902 A, 703 (Dinoceras).

Middle Eocene (Bridger); Wyoming.

**Uintatherium robustum** Leidy.

Hay, O. P. 1902 A, 702.

Cope, E. D. 1873 FF, 1, 8.

Matthew, W. D. 1909 C, 97.

Ruschenberger and Tryon 1879 A, 14.

Middle Eocene (Bridger); Wyoming.

**Uintatherium segne** Marsh.

Hay, O. P. 1902 A, 702.

Middle Eocene (Bridger); Wyoming.

**Uintatherium speirianum** (Osborn).

Hay, O. P. 1902 A, 705 (Tinoceras).

Cook, H. J. 1926 A, 8.

Matthew, W. D. 1909 C, 97 (This genus?).

Middle Eocene (Bridger); Wyoming.

**Uintatherium stenops** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).

Matthew, W. D. 1909 C, 97.

Wood, H. E. 1923 A, 600, figs. 1, 4.

Middle Eocene (Bridger); Wyoming.

**Uintatherium vagans** (Marsh).

Hay, O. P. 1902 A, 705 (Tinoceras).

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

**Uintatherium sp. indet.**

Hay, O. P. 1902 A, 702.

Figgins, J. D. 1925 A, 17. Eocene; Colorado.

Matthew, W. D. 1909 C, 97. Eocene (Huerfano); Colorado.

**UINTACOLOTHERIUM** Cook. Type *U. blayneyi* Cook.

Cook, H. J. 1926 A, 7.

**Uintacolotherium blayneyi** Cook.

Cook, H. J. 1926 A, 7, 5 pls.

1926 B, 12.

Middle Eocene (Bridger); Colorado.

ELACHOCERAS Scott. Type *E. parvum* Scott.

- Hay, O. P. 1902 A, 705.  
 Heilprin, A. 1887 A, 367.  
 Osborn, H. F. 1913 D, 420.  
 Palmer, T. S. 1904 A, 253, 908.  
 Scott, W. B. 1913 A, 451, 455.  
 Zittel and Schlosser 1923 A, 599.

**Elachoceras parvum** Scott.

- Hay, O. P. 1902 A, 705.  
 Osborn, H. F. 1913 D, 419, figs. 2-4.  
 Scott, W. B. 1913 A, 449, fig. 232.  
 Middle Eocene (Bridger); Wyoming.

EOBASILEUS Cope. Type *E. pressicornis* Cope.

- Cope, E. D. 1872 RR, 2.  
 Hay, O. P. 1902 A, 706.  
 Abel, O. 1913 B, 747, fig. 72.  
 1914 A, 192, fig. 149.  
 1920 A, 440, fig. 669.  
 1922 C, 263, fig. 216.  
 Cope, E. D. 1872 SS, 1 (Loxolophodon).  
 Gaudry, A. 1893 A, 22 (Loxolophodon).  
 Granger, W. 1909 A, 22.  
 Heilprin, A. 1887 A, 367.  
 Matthew, W. D. 1909 C, 97, 102.  
 1924 E, 748 (Eobasileus).  
 1928 B, 970.  
 Osborn, H. F. 1909 D, 23, 53, 54, 56.  
 1910 A, 208.  
 1910 B, 614, figs. 49, 66.  
 Palmer, T. S. 1912 G, 237, 241, fig. 6.  
 1924 D, 5.  
 1904 A, 262, 908.  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 449, 451, 455.  
 Trouessart, E. L. 1905 A, 587.  
 Wallace, A. R. 1876 A, 1, 139.

**Eobasileus cornutus** Cope.

- Cope, E. D. 1872 RR, 2.  
 Hay, O. P. 1902 A, 704 (Tinoceras).  
 Cope, E. D. 1872 SS, 2 (Loxolophodon).  
 1873 FF, 1 (Loxolophodon).  
 1891 N, 82, fig. 54 (Loxolophodon).  
 Granger, W. 1909 A, 14, 19.

- Matthew, W. D. 1909 C, 99.  
 Osborn, H. F. 1904 F, 42 (Uintatherium).  
 Seeley, H. G. 1886 A, 472, fig. (Loxolophodon).  
 Williams, H. S. 1897 A, 678, fig.  
 Upper Eocene (Uinta); Wyoming.

**Eobasileus furcatus** Cope.

- Hay, O. P. 1902 A, 706.  
 Cope, E. D. 1872 SS, 2 (Loxolophodon).  
 1873 FF, 1.  
 Matthew, W. D. 1909 C, 99.  
 Seeley, H. G. 1886 A, 472.  
 Upper Eocene (Washakie?); Wyoming?

**Eobasileus galeatus** Cope.

- Hay, O. P. 1902 A, 704 (Tinoceras).  
 Matthew, W. D. 1909 C, 99.  
 Upper Eocene (Uinta?); Wyoming.

**Eobasileus pressicornis** Cope.

- Hay, O. P. 1902 A, 706.  
 Cope, E. D. 1872 SS, 2 (Loxolophodon).  
 1873 FF, 1.  
 Matthew, W. D. 1909 C, 99.  
 Seeley, H. G. 1886 A, 472.  
 Upper Eocene (Uinta?); Wyoming?

**Eobasileus sp. indet.**

- Matthew, W. D. 1909 C, 99. Upper Eocene (Washakie); Wyoming.

## Order PROBOSCIDEA Illiger.

- Illiger, C. 1811 A, 96.  
 Hay, O. P. 1902 A, 706.  
 Abel, O. 1907 C, (79) ("proboscidiar").  
 1910 B, (186) ("proboscidiar").  
 1912 F, 242, 547 ("proboscidiar").  
 1913 B, 729, 748.  
 1914 A, 122, 191.  
 1919 A, 819.  
 1920 A, 440.  
 1922 B, 2 ("proboscidiar").  
 Adloff, P. 1902 A, 197.  
 1903 A, 359 ("proboscidiar").  
 1910 B, 232 ("proboscidiar").  
 Ameghino, F. 1889 A, 1023.  
 1893 B, 443 ("proboscideans").  
 1901 A, 386.  
 1902 A, 19.  
 1902 B, 7 ("proboscideos").  
 1906 A, 329 ("proboscidiens").  
 1912 B, 170 ("proboscidiens").  
 Anderson, R. J. 1902 A, 1121.  
 1912 D, 252.  
 Andrews, C. W. 1901 A, 409.  
 1902 A, 295.  
 1903 B, 99-118.

- Andrews, C. W. 1903 C, 1.  
 1903 E, 225.  
 1906 A, xv, 99.  
 1908 A, 393.  
 1908 D, 4, 45.  
 1909 C, 305.  
 1912 A, 454.  
 1921 B, 533 ("elephants and mastodons").  
 1922 B, 1, 47.  
 1924 A, 304.  
 Arldt, T. 1907 C, 677.  
 1907 D, 676.  
 Bach, F. 1910 A ("proboscidiar").  
 Barbour, E. H. 1914 B, 177.  
 1915 B, 221.  
 Bardeleben, K. 1885 B, 85.  
 Beddard, F. E. 1902 A, 216.  
 Behlen, H. 1906 A, 197 ("proboscidiar").  
 Berry, E. W. 1922 A, 108.  
 Boas, J. E. V. 1914 B, 587, fig. 38.  
 Bolk, L. 1913 A, 120 ("proboscidiar").  
 1922 A, 124.  
 Boule, M. 1902 B, 913 ("proboscidiens").  
 Boule and Thevenin 1920 A, 1 ("proboscidiens").  
 Braus, H. 1906 A, 304 ("proboscidiar").

- Burmeister, H. 1879 B, 520.  
 Carus, V. 1875 A, 137.  
 Case, E. C. 1899 B, 176.  
 Clark and Sonntag 1926 A, 453, 461, 463.  
 Cooper, C. F. 1922 D, 609.  
 Cope, E. D. 1885 BB, 72 (Proboscidea).  
     1891 N, 67, 84, 90, fig. 55.  
 Deninger, K. 1913 A, 295.  
 Depéret, C. 1908 A, 304.  
 Diener, C. 1909 A, 39.  
 Dietrich, W. O. 1913 A, 49 ("proboscider").  
     1916 A.  
 Dollo, L. 1889 I, 680 ("proboscidiens").  
 Doran, A. H. G. 1878 A, 430.  
 Eales, N. B. 1926 A, 491, 539.  
 Eastman, C. R. 1904 A, 890.  
 Fairchild, H. L. 1887 A, 19.  
 Falconer and Cautley 1847 A.  
 Falconer and Murchison 1867 A.  
 Fischer, E. 1903 A, 713.  
 Frick, C. 1926 B, 123.  
 Gaudry, A. 1906 A, 709 ("proboscidiens").  
     1912 A, 8 ("proboscidiens").  
 Gaupp, E. 1913 A, 125 ("proboscider").  
 Gawrilenko, A. 1924 A, 218 ("proboscider").  
 Gervais, P. 1852 A, 32 ("proboscidiens").  
     1859 A, 53 ("proboscidiens").  
 Giebel, C. G. 1883 A ("proboscider").  
 Goodair, J. 1857 A.  
 Gray, J. E. 1821 A, 305 (Proboscidea).  
 Gregory, W. K. 1903 A, 387, pl. xxiii, figs. 1-4 (Elephas).  
     1910 A, 70, 345, 366, 665.  
     1912 F, 270.  
     1920 A, 180, 244.  
     1927 J, 441 ("proboscideans").  
 Haeckel, E. 1873 A, 544.  
 Hay, O. P. 1912 D, 655.  
     1914 A, 328.  
     1923 B, 100.  
     1924 E, 110.  
 Heilprin, A. 1887 A, 365.  
 Hoernes, R. 1886 A, 683.  
 Holland, H. 1864 C, 362 ("proboscidiens").  
 Huxley, T. H. 1868 C, 318.  
     1870 F, 532.  
 Kampfen, P. N. 1905 A, 619.  
 Kingsley, J. S. 1925 A, 217, 261.  
 Knottnerus-Meyer, T. 1907 A, 3, 96, 101.  
 Koken, E. 1893 B, 485 (Proboscidea).  
 Kükenthal, W. 1913 A, 683.  
 Laloy, L. 1907 A, 584 ("proboscidiens").  
 Larger, R. 1913 A, 727 ("proboscidiens").  
 Lartet, E. 1859 A, 469 ("proboscidiens").  
 Lavocat, A. 1885 A, 46 ("proboscidiens").  
 Leche, W. 1887 A.  
     1900 A, 1030.  
     1921 A, 72.  
 Le Damany, P. 1903 G, 322 ("proboscidiens").  
 Leunis and Ludwig 1883 A, 232.  
 Lull, R. S. 1904 C, 9.  
     1908 A, 169 ("elephants").  
     1909 A, 641, 665 ("proboscidiens").  
     1914 E, 61.  
     1917 B, 577.  
     1918 C, 136 ("proboscideans").  
 Lydekker, R. 1907 B, 68.  
     1907 E, 673.  
 Lydekker, R. 1910 F, 663.  
 Macloskie, G. 1884 A, 215.  
 Major, C. J. F. 1880 A, 38.  
     1899 B, 62.  
 Matsumoto, H. 1923 A, 97-140.  
     1924 A, 55.  
 Matthew, W. D. 1909 C, 116, 119, 120.  
     1910 G, 159.  
     1910 H, 477 ("proboscideans").  
     1912 A, 156.  
     1915 A, 254, 257.  
     1915 B, 21.  
     1915 K, 461.  
     1916 B, 26.  
     1916 C, 521.  
     1916 G, 436.  
     1918 C, 141.  
     1923 F, 520.  
     1924 E, 745.  
     1928 B, 948.  
 Menmuir, W. H. 1902 A, 275.  
 Mitchell, P. C. 1905 A, 466.  
 Moreau, L. 1914 A, 87 ("proboscidiens").  
 Osborn, H. F. 1902 E, 356, fig. 1.  
     1905 H, 226, fig. 2.  
     1905 I, 106.  
     1905 N, 242.  
     1906 B, 56.  
     1907 G, 15, 186.  
     1907 K, 819.  
     1909 D, 134.  
     1909 E, 139.  
     1910 B, 628.  
     1912 I, 782.  
     1915 C, 222.  
     1917 B, 319.  
     1918 C, 134.  
     1919 D, 265 ("proboscideans").  
     1921 A, 1-15 (Superfamilies Mætherioidea, Dinotherioidea, Mastodontoides, Elephantoides).  
     1921 D, 6.  
     1921 E, 231.  
     1922 D, 721, 722.  
     1922 G, 448.  
     1924 J, 114.  
     1925 A, 5.  
     1925 B, 17-35.  
     1925 F, 962 ("proboscideans").  
     1926 C, 341.  
 Owen, R. 1857 E.  
     1858 A, 27.  
     1868 A, 903.  
 Paulli, S. 1900 A, 235.  
 Perrier, E. 1920 A, 357 ("proboscidiens").  
 Peterson, O. A. 1912 B, 164.  
     1928 A, 111.  
 Petronievics, B. 1921 A, 102, 117 ("proboscidiens").  
     1923 B, 55.  
 Pictet, F. J. 1853 A, 279 ("proboscidiens").  
 Pohlig, H. 1886 A.  
 Popowa, N. 1913 A, 280 ("proboscider").  
 Reynolds, S. H. 1897 A, 551.  
 Rutten, L. M. R. 1909 A, 10.  
 Scharff, R. F. 1911 A, 230.  
 Schlesinger, G. 1912 A, 87-182.  
 Schlosser, M. 1898 B, 360.

- Schlosser, M. 1902 J, 257.  
 1903 G, 145.  
 1903 I, 178 (Proboscidea).  
 1911 A, 129, 153.  
 Schmidt, O. 1886 A, 227 (Proboscidea).  
 Schuchert, C. 1915 A, 940.  
 Schuchert and Levene 1927 A, 348.  
 Slater, P. L. 1875 A, 209.  
 Scott, W. B. 1913 A, 238, 422, 688.  
 1916 A, 116.  
 1928 A, 330.  
 1928 B, 255.  
 Seeley, H. G. 1886 A, 464.  
 Shufeldt, R. 1911 A, 73.  
 Steinmann, G. 1907 A, 481.  
 1909 A, 81 ("proboscidian").  
 1912 B, 718 ("proboscidian").  
 Stromer, E. 1902 B, 561 ("proboscidian").  
 1912 A, 217, 245.  
 1916 A, 402, 404.  
 Terra, P. 1911 A, 333.  
 Thacker, A. G. 1914 A, 283 ("proboscidians").  
 1922 A, 600, 603.  
 Tims, H. W. M. 1903 A, 144.  
 Trouessart, E. L. 1905 A, 596.  
 Villada, M. M. 1903 A, 450 ("proboscidees").  
 Wallace, A. R. 1876 A, i, 500; ii, 227, 542.  
 Weber, M. 1904 A, 589, 715.  
 Weber and Abel 1928 A, 425, 426, 445, 459, 894  
 (Subungulata, Proboscidea).  
 Weber and Burlet 1927 A.  
 Williston, S. W. 1912 E, 261.  
 Winge, H. 1906 A, 68, 71, 166, 172 (Proboscidea,  
 Elephantidae).  
 Woodward, A. S. 1923 C, 55.  
 Woodward, H. 1904 B, 157.  
 Wortman, J. L. 1921 A, 186.  
 Zietzschmann, O. 1917 A, 440.  
 Zittel and Schlosser 1911 A, 532.  
 1923 A, 624, 636.

## ELEPHANTIDÆ Gray.

- Gray, J. E. 1821 A, 305.  
 Hay, O. P. 1902 A, 707.  
 Abel, O. 1912 F, 232, 547, 557 ("elephanten").  
 1913 B, 729, 750.  
 1914 A, 192, 197.  
 1919 A, 826.  
 1920 A, 445.  
 Airaghi, C. 1917 A, 197 ("elefantidi").  
 Ameghino, F. 1889 A, 1011.  
 Andrews, C. W. 1908 D ("elephants").  
 1922 B, 1 ("elephants").  
 Arldt, T. 1907 D, 652.  
 1912 A, 746 (Elephantidae).  
 Barbour, E. H. 1927 A, 133 (Amebelodontidae).  
 Beddard, F. E. 1902 A, 217.  
 Berry, E. W. 1922 A, 108 ("elephants").  
 Boas, J. E. V. 1914 B, 577 ("elefanten").  
 Bonaparte, C. L. 1832 A, 9 ("elephantoiden");  
 293 (Elephantina).  
 Branca, W. 1907 A, 9 ("elephanten").  
 Brandes, G. 1900 A, 103 ("elefanten").  
 Carus, J. V. 1875 A, 140 (Elephantina).  
 Chandler, A. C. 1914 B, 139 ("elephants").  
 Cope, E. D. 1880 U, 152.  
 1885 EE, 606 ("elephants").  
 Cuvier, G. 1805 A ("éléphants").  
 1806 D ("éléphants").  
 1825 A, i, 1-204, pls. i-xii ("éléphants").  
 Depéret, C. 1907 B ("éléphants").  
 1912 A, 709 ("éléphants").  
 Depéret and Mayet 1923 A.  
 Dietrich, W. O. 1916 A.  
 Dollo, L. 1889 I, 681.  
 Eichwald, E. 1835 A, 694 ("elephanten").  
 Falconer, H. 1863 A ("elephants").  
 Gadow, H. 1913 A, 128 ("elephants").  
 Giebel, C. G. 1883 A ("elephanten").  
 Grant, E. 1842 A, 770 ("mastodontoid animals").  
 Gray, J. E. 1825 B, 343.  
 Gregory, W. K. 1927 J, 440 ("elephants").  
 Hay, O. P. 1912 D, 655.  
 1914 A, 328.  
 1923 A, 5, 312.  
 Hilzheimer, M. 1913 A, 567 ("elephanten").  
 Hogben, L. T. 1919 A, 75 ("elephants").  
 Hutchinson, H. N. 1910 A, 264 ("elephants").  
 Jacobi, A. 1921 A, 200, 218.  
 Knottnerus-Meyer, T. 1907 A, 3, 96, 101.  
 Koch, A. C. 1845 A, 7 ("mastodontoiden").  
 Köstlin, O. 1844 A ("elephanten").  
 Kunz, G. F. 1916 A, 323, 330.  
 Lankester, E. R. 1905 A, 103 ("elephants").  
 Leunis and Ludwig 1883 A, 233 (Elephantina).  
 Loble, J. L. 1908 A, 205.  
 Lönnerberg, E. 1907 B, 53 ("elefanterna").  
 Lucas, F. A. 1906 A, 157.  
 Lull, R. S. 1908 A, 160 ("elephants").  
 1914 E, 61 ("elephants").  
 1921 B, 160 (Mammotina).  
 Lydekker, R. 1902 B, 374 ("elephants").  
 1903 D, 124 ("elephants").  
 1903 E, 169 ("elephants").  
 Matthew, W. D. 1909 C, 116, 119, 120.  
 1913 B, 201.  
 1915 K, fig. 17 ("elephants").  
 Mayet and Roman 1923 A.  
 Meckel, J. F. 1825 A ("elephanten").  
 Natural Science 1898 A, 371 ("elephants").  
 Osborn, H. F. 1918 C, 135.  
 1921 E, 234 (Elephantoides).  
 1922 G, 455 (Elephantoides, Mammotinae,  
 Elephantinae).  
 1924 G, 1.  
 1925 B, 20, 28 (Elephantidae, "archidiskodons").  
 Palacký, J. 1903 B, 313 ("elephanten").  
 Pander and Alton 1821 B, 3 ("elephanten").  
 Pompeckj, J. F. 1925 A, 13 ("elephanten").  
 Pontier, G. 1911 A, 463 ("éléphants").  
 Raspé, R. E. 1789 A, 126 ("elephanti").  
 Reynolds, S. H. 1897 A, 364, 434.  
 Salensky, W. 1903 A, 793.  
 Schoenichen, W. 1900 A, 501 ("elephanten").  
 Schwarz, E. 1924 A, 420 ("elephants").  
 Scott, W. B. 1913 A, 432, 680.  
 1917 A, 175 ("elephants").  
 Sellards, E. H. 1915 C, 8 ("elephants").  
 Soergel, W. 1913 A, 1, 89 ("elephanten").  
 1914 A, 21 ("elephanten").

# CATALOGUE

Soergel, W. 1915 A, 179, 278 ("elepanten").  
1915 B, 1-65.  
Stefanescu, S. 1915 A, 100 ("éléphants").  
Steinmann, G. 1907 A, 482.  
Terra, P. 1911 A, 335.  
Thacker, A. G. 1914 A, 233 ("elephants").  
Tornier, G. 1909 C, 540 ("elefanten").  
Tornquist, A. 1897 A, 683 ("elephanten").  
Trouessart, E. L. 1905 A, 599.  
Van Bemmelen, J. F. 1918 A, 575.  
Vicq-d'Azyr, F. 1792 A, cvii (Elephantini).

Wagner, R. 1843 A ("elephanten").  
Wallace, A. R. 1876 A, ii, 227.  
Weber, M. 1904 A, 724.  
Weber and Abel 1928 A, 471.  
Winge, H. 1906 A, 71, 166 (Elephantini).  
Woodward, A. S. 1898 E, 331 ("elephants").  
1923 A, 32 ("elephants").  
Wright, G. F. 1911 B, 436, 437, 624 ("elephants").  
Zittel and Schlosser 1911 A, 537.  
1923 A, 628, 636.

## MAMMUTINÆ, new name.

Abel, O. 1914 A, 192 ("tetrabelodontiden").  
1922 C, 178 ("mastodonten").  
Bach, F. 1910 A, 63 ("mastodontiden").  
Capellini, G. 1907 A, 127 (Mastodonti).  
Depéret, C. 1923 A, 520 ("mastodontes").  
Dietrich, W. O. 1919 A, 55 ("mastodonten").  
1921 A, 595 (Mastodon).  
Frech, F. 1906 A, 407 ("mastodonten").  
Freudenberg, W. 1922 A, 5 (Mastodontidæ).  
Gaudry, A. 1891 B ("mastodontes").  
Gawrilenko, A. 1924 A, 233 ("mastodonten").  
Gill, T. 1872 B, 13, 90 (Mastodontinæ).  
Gray, J. E. 1821 A, 306 (Mastodonadæ).  
Hay, O. P. 1924 D, 330 ("mastodons").  
1925 E, 381 ("mastodons").  
1927 E, 77 ("mastodons").  
Ihering, H. 1909 A, 285 ("mastodonten").  
Joleaud, L. 1919 D, 414 (Mastodontinæ).  
Lartet, E. 1859 A, 470 ("mastodontes").  
Matthew, W. D. 1923 A, 12 (Mastodontidæ, Trilophodontidæ).  
Osborn, H. F. 1906 C, 776 (Mastodontinæ).  
1909 D, 81 (Mastodontidæ).  
1910 B, 500, 558, 622 (Mastodontinæ).  
1918 C, 134 (Mastodontidæ, with subfams. Bunomastodontinæ and Mastodontinæ).  
1921 A, 2 (Bunomastodontidæ, Mastodontidæ); 2, 3 (Mastodontoidea); 5 (Rhynchorostrinæ); 6 (Longirostrinæ); 11 (Brevirostrinæ); 12 (Mastodontinæ).  
1921 E, 232 (Bunomastodontidæ, Notorostrinæ, Longirostrinæ, Rhynchorostrinæ, Brevirostrinæ).  
1922 F, 4 (Mastodontinæ).

Osborn, H. F. 1922 G, 454 (Mastodontoidea, Mastodontidæ, Mastodontinæ, Serridentinæ, Bunomastodontidæ, Longirostrinæ, Notorostrinæ, Rhynchorostrinæ, Brevirostrinæ).  
1924 H, 1 (Longirostrinæ).  
1925 A, 5, 14, 16 (Mastodontinæ, Longirostrinæ, "tetralophodonts," "serridentines," "rhynchorostrines," "notorostrines," "brevirostrines," "southern mammoths").  
1925 B, 20, 22-27, figs. 2, 3 (Mastodontidæ, Bunomastodontidæ, "longirostrines," "tetralophodonts," "serridentines," "rhynchorostrines," "notorostrines," "brevirostrines," "zygolophodonts").  
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Scharf, R. F. 1911 A, 408 ("mastodons").  
Schlesinger, G. 1921 A, 3 (Mastodon).  
Scott, W. B. 1923 A, 330 ("mastodons").  
Stefanescu, S. 1913 A, 739 ("mastodontes").  
1919 A, 97 ("mastodontes").  
1919 E, 1329 ("mastodontes").  
1919 F, 148 ("mastodontes").  
1921 A, 929 ("mastodontes").  
1921 B, 1054 ("mastodontes").  
1921 C, 1516 ("mastodontes").  
1921 D, 1669 ("mastodontes").  
Stromer, E. 1908 B, 170 (Mastodontidæ).  
1912 A, 220, 226 (Mastodontinæ).  
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## MAMMUT Blumenbach. Type *M. ohoticum* Blumenbach = *Elephas americanus* Kerr.

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 Heilprin, A. 1887 A, 366 ("mastodon").  
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 Koch, A. C. 1845 A, 12 (Mastodon, Tetracaulodon, Missurium); 21 (Tetracaulodon).  
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 1917 B, 592.  
 Madsen, A. G. 1901 A.  
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 Matthew, W. D. 1909 C, 120 (Trilophodon).  
 1910 G, 154.  
 1915 A, 187 (Mastodon); 255 (Dibelodon).  
 1915 B, 12 (Mammut).  
 1916 C, 522 ("mastodon").  
 1918 A, 201.  
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 1910 B, 622.  
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 Scott, W. B. 1913 A, 207, 429, 437, 685.  
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 1903 C, 22679 ("mastodon").  
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 1877 B, 52.  
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 Abel, O. 1914 A, 197, fig. 155.  
 1922 C, 86, fig. 77 (Mastodon); 179, fig. 143 (Zygolophodon).  
 1925 A, 317, figs. 243-255.  
 1926 B, 81, 238, fig. 59.  
 Alden, W. C. 1924 A, 105.  
 Ameghino, F. 1889 A, 635, 637, 647.  
 Ami, H. M. 1898 A, 80 ("mastodon").  
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 1906 A, 107, fig. 42.  
 1908 A, 406 ("mastodon").  
 1922 B, 33, fig. 19.  
 Anonymous 1879 A, 263 (Mastodon giganteus).  
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- Archer, W. J. 1918 B, 13 ("mastodon").
- Arnell, D. R. 1809 A, 313 ("mammoth").
- Aughey, S. 1876 A, 254 ("mastodons").
- Bagg, R. M. 1809 A, 49, pl. iv ("mastodon").
- Baker, F. C. 1920 A, 463 (Mammut).  
 1920 B, 63.
- Balch, E. S. 1917 A, 481 ("mastodon").
- Ballard, F. A. 1880 A, 643, fig. ("mastodon").
- Bancroft, H. H. 1875 A, 697, 699 ("mastodons").
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 1915 B, 218, fig. 4 ("mastodon").  
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 1924 A, 11 (Mastodon).  
 1925 C, 94 ("American mastodon").  
 1925 D, 111 (Mastodon).
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 1810 A, 342, 343 (Elephas mastodontus).  
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- Becker, G. F. 1891 A, 189.
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- Billings, E. 1886 B, 379, pl. (Mastodon giganteus).  
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- Blumenbach, J. F. 1803 A, 1 (Mammut ohiocticum).
- Bolton, H. C. 1888 A, 123 ("mastodon").
- Borden, W. W. 1874 A, 176 ("mastodon").
- Boule, M. 1923 A, 399, fig. 230.
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- Bradley, F. H. 1870 A, 193, 229, 242, 266.
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- Broadhead, G. C. 1874 A, 187 ("mastodon").  
 1881 A, 519.  
 1898 A, 376 ("mastodon").
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- Call, R. E. 1889 A, 39 ("mastodon." This species?).
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 1901 A, 413 ("mammoth or mastodon").  
 1909 A, 137 (Mammut).
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- Camper, P. 1780 A, 226 ("animal incognitum").
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- Capellini, G. 1907 A, 145 (Mastodon ohiocticus).
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 1888 A, 388, pl. ("mastodon").  
 1903 A, 297 ("mastodon").  
 1903 B, 863 ("mastodon").  
 1903 C, 921-933 ("Mastodon americanus").  
 1908 A, 59 ("mastodon").  
 1908 B, 44-49.  
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 1923 B, 127 ("mastodon").  
 1923 C, 127 ("mastodon").
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- Coleman, A. P. 1895 A, 641 ("mastodon").  
 1907 A, 1248 ("mastodon?").  
 1914 A, 448 ("mastodon").
- Collett, J. 1872 A, 214 ("mastodon").  
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 1881 A, 16 (Mastodon giganteus).  
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 1768 B, 468, pls. xxi, xxii ("elephants?").
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 1910 A, 131, pl. xxviii, fig. 2 ("mastodon").
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- Cook, H. J. 1928 B, 41 (Mastodon).
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 1895 G, 599.
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- De Brahm, — 1788 A, 103, pl. ("fossil bones").
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- Deeley, R. M. 1913 A, 14, tab. ("mastodon").
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- Desor, E. 1855 A, 218 (Mastodon giganteum).
- Diener, C. 1912 A, 216.
- Dietrich, W. O. 1912 A, 64, 90.  
1916 A, 40, 44, 56, 59, 64, 65, 69, 70, 76, fig. 5.  
1919 A, 58 (Mastodon).  
1921 A, 598 (Mastodon).
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- Dreverman, F. 1911 B, 13, pl.
- Dryer, C. R. 1889 A, 129 ("mastodon").
- Dudley, J. 1847 A, 77 ("man").
- Eager, S. W. 1847 A, 71, 77 (Mastodon giganteum).
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- Eichwald, E. 1835 A, 734 (Mastodon ohioiticus).
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- Emerson, B. K. 1917 A, 149 (Mastodon giganteus).
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pl. xl, fig. 16; pl. xlii, fig. 4; pl. xlv, fig. 4 (Mastodon ohioiticus).  
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- Fischer, J. B. 1829 A, 407 (Mastodon giganteum).
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1873 A, 59, 71 ("mastodon"); 63, 84, fig. 4 (Mastodon giganteus).
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- Frech, F. 1906 A, 474, 497 ("mastodon").  
1907 A, 310 ("mastodon").
- Freudenberg, W. 1922 A, 6, 33 (Mastodon ohioiticus, M. americanum).
- Frick, C. 1926 B, 127, 138, 139, 141, 142, fig. C (Mastodon americanus); 130 (M. ohioiticus, M. giganteus).  
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- Fulton, A. R. 1883 A, 102 (Elephas americanus).
- Gaudry, A. 1875 D, 1282 ("mastodon").  
1891 B, 4, 6, pl. ii, fig. 7.  
1891 C, 107, fig. 30 (Mastodon).  
1893 A, 23.
- Gervais, P. 1852 A, 39 (Mastodon giganteus).
- Gervais, P. 1859 A, 68 (Mastodon giganteus); 365 (Mastodon ohioiticum).
- Gibbes, R. W. 1850 C, 67 ("mastodon").
- Gidley, J. W. 1912 C, 19 ("mastodon").  
1916 A, 28 ("mastodon").  
1920 B, 282 ("mastodon").  
1925 A, x ("mastodon").  
1926 A, 87-89.  
1926 D, 240 ("mastodons").  
1926 H, 24 ("Florida mastodon").  
1927 E, 274.
- Gidley and Loomis 1926 A, 262 ("mastodon").
- Giebel, C. G. 1855 C, 140 (Mastodon giganteus).  
1883 A, 112, pls. xxxv, xli (Mastodon giganteus).
- Gilbert, G. K. 1871 B, 129.  
1873 A, 556 (Mastodon giganteus).  
1890 A, 303 ("Elephas or mastodon").
- Gilbert, J. Z. 1910 B, 25, 45, figs. 13, 14 ("mastodon").
- Gilmore, C. W. 1906 A, 610, pl. xxxv ("mastodon").  
1908 A, 30, pl. viii.
- Goddard, P. E. 1926 A, 258 ("mastodon").  
1927 A, 68 ("mastodon").
- Godman, J. D. 1860 A, ii, 52-81, 5 pls. (Mastodon giganteum).
- Gordon, C. H. 1913 A, 31, 64 ("mastodon").
- Gordon, R. 1902 A, 595 ("mastodon").  
1902 B, 1033 ("mastodon").
- Graham, J. G. 1801 A, 213 ("fossil bones").
- Grant, E. 1842 A (Tetracaulodon bucklandi).
- Green, C. 1854 A, 16 ("mastodon").
- Greene, G. K. 1881 A, 428 (Mastodon giganteus).
- Gregory, W. K. 1903 A, 388 ("mastodon").  
1907 C, 91, pl. ("mastodon").  
1920 A, 183, fig. 145.
- Groghan, G. 1831 A, 261 ("elephants").
- Guernsey, J. A. 1831 A, 353, fig. ("mastodon").
- Guettard, — 1752 A, 349, pls. xi, xii ("quel animal?").
- Hall, J. 1861 A, 15 ("mastodon").  
1871 B, 7 ("mastodon").  
1888 A, 32 ("mastodon").
- Harlan, R. 1828 A, 187 ("mastodon").  
1831 C, 62 ("mastodon").  
1842 B, 69, 143 ("mastodon").
- Harris, G. D. 1899 A, 18, 20, 38, 115.
- Hart, M. C. 1884 A, 47 ("elephant or mastodon." This species?).
- Hartnagel and Bishop 1921 A, 1-86, pls. i-xii (mastodons).
- Haug, E. 1911 A, 1873, 1887.
- Hay, O. P. 1910 D ("mastodon").  
1912 B, 5, fig. 1.  
1912 D, 657, pls. xii-xvii; text-figs. 52-62.  
1914 A, 26, 34, 38, 330, pl. xliii; pl. xlv, fig. 3; pls. xlv, xlvii, xlviii; pl. xlix, figs. 1, 3; pl. li; pl. lii, fig. 1; text-figs. 104-119, 121, 123a, 124-127, 129, 131, 132.  
1917 F, 45.  
1918 B, 10.  
1918 C, 346.  
1919 B, 378.  
1920 B, 109, 128, 135, pl. x, fig. 8.  
1923 A, 439.  
1924 B, 263 ("mastodon").

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 1925 C, 22, 24.  
 1925 E, 332 (Mastodon).  
 1926 A, 39.  
 1926 C, 1.  
 1926 D, 360.  
 1926 E, 390 ("mastodon").  
 1927 C, 281 ("mastodon").  
 1927 D, 302, 308.  
 1928 C, 425, 428, 429.
- Hayden, F. V. 1871 A, 99 (Mastodon).  
 1872 A, 34 (Mastodon giganteus).  
 Hayes, S. 1895 B, 37 ("mastodon").  
 Hayes and Kennedy 1903 A, 20 ("Mammut").  
 Haymond, R. 1869 A, 199 (Mastodon maximus).  
 Haynes, H. W. 1889 A, 348, 388 ("mastodons").  
 Heilprin, A. 1888 A, 414 ("mastodon").  
 Henshaw, H. W. 1883 A, 153 ("mastodon").  
 Hermann, R. 1907 B, 285, fig. 2.  
 1908 A, 307, pl. iv; text-figs. 3, 4.  
 1910 A, 99, fig. 5.
- Higley, W. K. 1891 A, xv ("mastodon").  
 Hildreth, S. P. 1834 A, 356 ("mastodon").  
 1837 A, 50 ("mastodons").  
 Hilgard, E. W. 1880 A, 196 (Mastodon giganteus).  
 1869 A, 82 ("mastodon").  
 1872 A, 14 ("mastodon").
- Hill, R. T. 1901 A, 360.  
 Hodge, E. T. 1925 A, x ("mastodon").  
 Hodge, J. T. 1878 A, 593.  
 Hodgson, W. B. 1846 A, 12 (Mastodon giganteus).  
 Holland, W. J. 1899 A, 233, figs. 1, 3.  
 1905 C, 464, figs. 1-5 ("mastodon").  
 1908 A, 23 ("mastodon").  
 1912 B, 750 ("mastodon").
- Hollick, A. 1901 A, 67 ("mastodon").  
 Holmes, F. S. 1859 A, 184 ("mastodon").  
 1860 A, iii, vi ("mastodon").  
 Holmes, W. H. 1901 A, 423 ("mastodon." This species?).  
 1903 A, 242, pls. 6, 7 ("mastodon").  
 Honeyman, D. 1890 A, 344 (Mastodon ohiocticus).  
 Hopkins, F. V. 1871 A, 6 ("mastodon." This genus?).  
 1872 A, 188 ("mastodon." This genus?).  
 Hovey, E. O. 1908 A, 147, pl. v ("mastodon").  
 Howorth, H. H. 1905 A, 94, 99 ("mastodon").  
 Hoy, P. R. 1871 A, 147 (Missourium tetracaulodon).  
 Hrdlička, A. 1907 A, 17, 18 (Mastodon ohiocticus).  
 1918 A, 27.  
 1926 A, 7, 9 ("mastodon").
- Hubbard, B. 1841 A, 559 ("mastodon").  
 Hunter, W. 1769 A, pl. xv, figs. 1, 3, 5 ("pseud-elephant," "animal incognitum").  
 Hussey, J. 1878 A, 477 ("mastodon").  
 Ingalls, A. G. 1926 A, 289, fig. ("mastodon").  
 Jaques, H. E. 1922 A, 65, fig. 5a.  
 Jefferson, T. 1787 A, 68 ("mammoth").  
 Joor, J. F. 1895 A, 397 ("mastodon." This species?).  
 Kaup, J. J. 1843 A, 173 (Tetracaulodon mastodontoides).  
 Kernode, F. 1916 A, 21, pl. xi, fig. 2.  
 Kindle, E. M. 1924 A, 184 ("Mammut").
- Knight, C. R. 1923 A, 1, fig. (Warren mastodons).  
 Knowlton, F. H. 1911 D, 63 ("mastodon").  
 Koch, A. C. 1845 A, 13 (Mastodon cuvieri); 20 (M. rugatum); 13, 25, pl. iv, figs. 1-3 (M. giganteum); 25, 29, 32, pl. iv, figs. 4-6 (Tetracaulodon kochii); 25, 27, 43, pl. vi (Missurium theristocaulodon); 34 (Tetracaulodon haysii); 35 (T. tapiroides); 36 (T. bucklandi).  
 1845 D, 23 ("Missurium").  
 Kunz, G. F. 1916 A, 521 (Mastodon).  
 Lacépède and Cuvier 1808 A, 330 ("mastodonte").  
 Lambe, L. M. 1904 C, 39, 50 (Mastodon).  
 1912 A, 14.  
 1914 F, 299.  
 1914 H, 403 (Mastodon).  
 1916 C, 21.
- Lane, A. C. 1902 A, 252 ("mastodon").  
 1903 A, 297 ("mastodon").  
 Lankester, E. R. 1905 A, 100, 105, figs. 68, 72, 78, 86.  
 Lansing, G. Y. 1861 A, 7, 15 ("mastodon").  
 Lartet, E. 1859 A, 484 (Mastodon ohiocticus).  
 Lawson, A. 1914 A, 15.  
 Lay, J. H. 1876 A, 14 ("mastodon").  
 Lee, C. A. 1871 A, 108 ("mastodon").  
 Lee, Stone, Gale 1915 A, 9.  
 Leidy, J. 1859 J, 181 ("mastodon").  
 1866 D, 459 ("elephas").  
 Leighton, M. M. 1921 A, 513.  
 Leverett, F. 1899 A, 166 ("mastodon").  
 Lewis, H. C. 1881 A, 549 ("mastodon").  
 1883 A, 305 ("mastodon").  
 1883 B, 366, 374 ("mastodon").
- Lichtenstein, R. 1840 A, 105 (Mastodon giganteum).  
 Lindgren, W. 1901 A, 583, 769.  
 1911 A, 51, 212.  
 Lindgren and Drake 1904 A.  
 1904 B, 2 (This species?).  
 Lindmuth, A. C. 1878 A, 43 ("mastodon").  
 Lloyd, J. W. 1904 A, 43 ("mastodon").  
 Lockwood, S. 1832 A, 294 ("mastodon").  
 1883 B, 341.
- Lönnberg, E. 1907 B, 63.  
 Loewe, S. 1914 A, 791, pl. xii ("mastodon").  
 Loomis, F. B. 1924 C, 506 (Mastodon).  
 1925 D, 436 ("mastodon").  
 Lucas, F. A. 1900 H, 99.  
 1901 F, 492, pl. viii.  
 1901 J, 198, figs. 38-40 ("mastodon").  
 1902 A, 555.  
 1902 B, 264, fig.  
 1902 G, 669 ("mastodons").  
 1904 F, 2.  
 1906 B, 157, 159, 160, pls. xxxiv-xxxvi.  
 1906 C, 955 ("mastodon").  
 1908 A, 443 ("mastodon").
- Lull, R. S. 1903 A, 192, 194, figs. 19-21.  
 1909 A, 652, figs. 3, 7, 17-19.  
 1914 B, 321.  
 1914 C, 143.  
 1914 E, 63, pl. i, fig. 2; pl. ii, fig. 6.  
 1917 B, 300, 598, 674, figs. 54, 205, 206.  
 1918 B, 200 ("mastodon").
- Lydekker, R. 1896 B, 57.  
 Lyell, C. 1843 D, 22 ("mastodon").

- Lyell, C. 1845 B, i, 23, 25, 67, 163, 175, 201; ii, 65, 69 ("mastodon").  
 1847 C, lxxxi ("mastodon").  
 1855 A, i, 343; ii, 195, 197, 261, 362, 365 ("mastodon").  
 M'Caslin, D. S. 1883 A, 169 ("mastodon").  
 McCormack, E. C. 1914 A, 14 ("mastodon").  
 1920 A, 23.  
 McCourt, W. E. 1917 A, 69 (Mastodon giganteus).  
 MacCurdy, G. G. 1916 A, 1.  
 1917 A, 261.  
 MacCurdy, H. M. 1920 A, 119.  
 McGee, W. J. 1891 B, 399 ("mastodon").  
 Mackensen, B. 1905 A, 3, pls. i-iv ("mastodon." This species?).  
 Macloskie, G. 1884 A, 225, fig. 116 (Mastodon).  
 Madison, J. 1805 A, 58 ("mammoth." This species?).  
 1812 A, 388 ("elephant").  
 Manigault, G. E. 1887 A, 130 ("mastodon").  
 Mantell, G. A. 1839 A, 146, 149, fig. 25 ("mastodon").  
 1844 A, 332 (Mastodon giganteus).  
 1850 A, 167, pl. lxxiv.  
 Mason, S. C. 1883 A, 13 ("mastodon").  
 Mather, C. 1714 A, 62 ("giants").  
 Mather, W. W. 1843 A, 441 ("mastodon").  
 1843 B, 232, 636 ("mastodon").  
 Matson and Clapp 1909 A, 136 (Mastodon sp.).  
 Matthew, W. D. 1915 B, 13, pl. i; text-figs. 5, 6.  
 1915 K, 410 ("mastodon").  
 1916 G, 48, fig. ("Mastodon").  
 1925 A, 97 (This species?).  
 Meek, F. B. 1855 A, 215 (Mastodon gigantis).  
 Mercer, H. C. 1894 C ("mastodon").  
 1897 A, 444 ("mastodon").  
 Merriam, J. C. 1914 D, 15.  
 Merriam and Stock 1925 A, 10, 11.  
 Meyer, H. 1867 C, 786, 789 (Mastodon ohioiticus).  
 Meyers, — 1868 A, 56 ("mastodon").  
 Miller, H. 1857 A, 123 ("mastodon").  
 Miller, L. H. 1912 A, 71 (Mastodon); 78 (Mastodon sp.).  
 Miller, S. 1801 A, 211 ("large bones").  
 Miller and Stephenson 1912 A, 46, 50, 53, 57 ("mastodon").  
 Mitchell, E. 1828 A, 347 ("mastodon." This species?).  
 Mitchill, S. L. 1817 A, 392.  
 1818 A, pl. vi, figs. 1-4; pl. viii, figs. 1-3 ("Mastodon").  
 1821 A, 291, figs. 14-17.  
 1826 A, 10, 11 ("mastodon").  
 Mitchell and Townsend 1909 A, v ("mastodon").  
 Moodie, R. L. 1923 B, 127, 266, pl. xxv (Mastodon).  
 Moore, J. 1893 A, 73 ("mastodon").  
 Mudge, B. F. 1866 B, 14 ("mastodon").  
 Murchison, C. 1868 A, i, 55 (Mastodon ohioiticus, M. giganteus, M. maximum, Mammut ohioiticum); 56 (Elephas americanus); 63 (Missourium theriocoaulodon).  
 Murchison, R. I. 1843 A, 130 (Mastodon giganteus).  
 1843 B, 132, 146 (Mastodon giganteus).  
 Murdock, J. 1885 A, 99 (Elephas? sp.).  
 Newberry, J. S. 1870 D, 32 ("mastodon").  
 1873 E, 183 ("mastodon").  
 1873 F, 87 ("mastodon").  
 Newcombe, C. F. 1915 A, 32.  
 New York World 1879 A, 263 ("mastodon").  
 Nordenskiöld, E. 1903 A, 9, 13 (Mastodon giganteus).  
 Obalski, T. 1904 A, 216 ("mastodonte").  
 Orton, E. 1870 A, 56 ("mastodon").  
 Osborn, H. F. 1904 F, 33, 44.  
 1905 H, 226.  
 1905 I, 110.  
 1909 D, 86.  
 1910 B, 439, 622, figs. 189, 204, 209, 210.  
 1912 I, 782, figs. 1-3 ("mastodon").  
 1914 D, 408, fig. 1.  
 1915 C, 223.  
 1918 C, table (Mastodon).  
 1921 A, 12.  
 1923 A, 3, figs.  
 1925 A, 4, 23, fig. p. 13 (Mastodon).  
 1925 B, 24 (Mastodon).  
 1925 D, 531, 535, fig. (Mastodon).  
 Osgood, W. H. 1905 B, 254.  
 Owen, R. (of America) 1862 A, 197 ("mastodon").  
 Palacký, J. 1903 B, 318 (M. ohioiticus).  
 Pallas, P. S. 1780 A, 213, pl. viii, fig. 3 ("ignotum animal." Species of Gomphotherium?).  
 Palmer, T. S. 1904 A, 397 (Mammut); 401 (Mastodon).  
 Pander and Alton 1821 B, 8, pls. iii, iv ("Ohioelephant").  
 Pavlov, M. 1901 A, 11, 12, pl. i, fig. 3 (Mastodon ohioiticus).  
 Peale, R. 1831 A, 211 ("mastodon").  
 Peterson, O. A. 1917 A, 474.  
 1926 A, 274, pls. xxii, xxiii (Mastodon).  
 1927 A, 255, figs. 1, 2 (Mastodon).  
 1928 A, 111 (Mastodon).  
 Phinney, A. J. 1883 A, 131 ("mastodon").  
 1883 A, 181 ("mastodon").  
 1884 A, 143 ("mastodon").  
 Piers, H. 1912 A, 163.  
 Pleas, E. 1891 A, 131.  
 Plummer, J. T. 1843 A, 302 ("mastodon").  
 Pohlig, H. 1889 A, 43, fig. 2 (Mastodon giganteus).  
 Pompeckj, J. F. 1905 A, 48 (Mastodon giganteus).  
 Pownall, J. 1803 A, 332 ("mammoth").  
 Putnam, C. E. 1886 A ("mastodon").  
 1890 A, 468.  
 Putnam, F. W. 1886 A, 408 ("mastodon or mammoth").  
 Ranking, J. 1828 A, 355 ("mastodon").  
 Raspé, R. E. 1769 A, 126 ("elephant").  
 Rath, G. 1886 A, 105 (Mastodon).  
 Rhoads, S. N. 1903 A, 234.  
 Richardson, J. 1854 B, 82 (Mastodon giganteus).  
 Ridgway, J. L. 1926 A, 16, 2 figs. ("mastodon").  
 Rio, A. 1918 A, 367 ("mamut americano").  
 Rogers, H. D. 1844 A, 253, 262 (Mastodon giganteum).  
 1858 A, 480 ("mastodon").  
 Ruschenberger and Tryon 1879 A, 14 (Mastodon giganteum).

- Russell, J. W. 1924 A, 235 ("mastodon").  
 Russell and Leverett 1908 A, 9.  
 Scharff, R. F. 1911 A, 80 ("mastodon").  
 Schlesinger, G. 1912 A (Mastodon, Mammut).  
 1921 A, 32, 41, 61, 163, 175, 230.  
 Schmidt, E. 1872 A, 234, 245, 254 (Mastodon giganteum).  
 Schmidt, O. 1886 A, 233 (Mastodon giganteum).  
 Schuchert, C. 1914 A, 321, fig. 3 (Mammut).  
 1915 A, 956 (Mammut).  
 1926 A, 14 ("mastodon").  
 Scott, W. B. 1913 A, 685, figs. 113, 226.  
 Sellards, E. H. 1915 B, 143 (Mammut).  
 1915 C, 8 (Mammut).  
 1915 D, 76, 112, fig. 45 (Mammut).  
 1916 B, 96, 104 (Mammut).  
 1916 C, 132, 158, pl. xxxi (Mammut).  
 1916 D, 617 (Mammut).  
 1916 E, 15, 16 (Mammut).  
 1916 F, 7, 9.  
 1917 A, 250 ("mastodon").  
 1917 C, 76 ("mastodon").  
 Serres, M. 1852 A, 120 (Mastodon giganteus).  
 Shaler, N. S. 1877 A, 197 (Mastodon ohioiticus).  
 Shaw, J. 1873 A, 110 ("mastodon").  
 Sheldon, P. 1915 A, 98.  
 Shepard, E. M.\* 1895 A, 143 ("mastodon").  
 Shinek, B. 1902 A, 285 (Mastodon giganteus).  
 1904 A, 305 (Mastodon giganteus).  
 1910 A, 129, 132, 134, 135.  
 1910 B, 324, pl. xxvi.  
 Shunard, B. F. 1855 A, 175 (Mastodon giganteus).  
 1873 A, 291, 304 ("mastodon").  
 Silliman, B. Sr. 1831 A, 371 ("Mastodon").  
 Simpson, G. G. 1925 H, 3 (Mastodon).  
 Sinclair, W. J. 1903 A, 711 ("mastodon").  
 1904 A, 18, 21 ("mastodon").  
 1908 A, 112 ("mastodon").  
 Southall, J. C. 1875 A, 596 ("mastodon").  
 1878 A, 422 ("mastodon").  
 Sperry, L. B. 1834 A, 670 ("mastodon").  
 Stalker, M. 1899 A, 216 ("mammoth." This species?).  
 Stauffer, C. 1924 A, 41 (Mastodon. This genus?).  
 1926 A, 1 (Mastodon).  
 Stefano, G. 1915 A, 209 (Mastodon).  
 Stephenson, L. W. 1912 B, 268 (Mastodon giganteum).  
 Sterling, E. 1886 A, 309 ("mastodon").  
 Stevenson, J. I. 1876 A, 22 ("mastodon").  
 Stock, C. 1925 A, 30, 113 (This species?).  
 1928 D, 46, pl. ii, figs. b, c; pl. iii, fig. a; pl. iv, figs. d, f.  
 Swallow, G. C. 1858 A, 35 (Mastodon giganteus).  
 Swarth, H. S. 1915 A, 25, figs. 13, 14 (Mastodon).  
 Tarr, R. S. 1905 A, 27 (Full ed. p. 201).  
 Taylor, J. L. B. 1921 A, 591, figs. ("mastodon." This genus?).  
 Terra, P. 1911 A, 336, fig. 162 (Mastodon giganteum).  
 Tilesius, W. G. 1815 A, 474 (Elephas mastodon-teus vel americanus).  
 Tilton, J. L. 1911 A, 26 ("mastodon").  
 Todd, J. E. 1896 A, 129 ("mastodon").  
 Townsend, P. S. 1908 A, 147, pl. v (Elephas mastodonts).  
 Troxell, E. L. 1923 A, 89.  
 Tuomey, M. 1848 A, 177, 178 ("Mastodon").  
 Turner, H. W. 1895 A, 375 ("mastodon").  
 Tyrell, J. B. 1892 A, 129 (Mastodon giganteus).  
 Udden, J. A. 1899 A, 352 ("mastodon or elephant?"); 356 ("mastodon").  
 1905 A, 47-57.  
 Vacek, M. 1877 A, 6, 34 (Mastodon ohioiticus).  
 Van Rensselaer, J. 1827 B, 80.  
 Veatch, A. C. 1899 A, 245.  
 1902 A, 68, 74, 87 ("mastodon." This genus?); 79 ("extinct animal." This genus?).  
 1906 A, 51 ("mastodon").  
 Walker, B. 1898 A, 121 ("mastodon").  
 Ward, H. A. 1866 A, 38, figs. (Mastodon giganteus).  
 Warder, R. B. 1872 A, 402 ("mastodon").  
 Warren, J. C. 1848 A, 144 ("mastodon").  
 1849 A, 111 ("mastodon").  
 1853 A, 377 (Mastodon giganteus).  
 Weber and Abel 1923 A, 453, fig. 284 (Mastodon).  
 Weidman, S. 1907 A, 430 ("mastodon").  
 West, H. H. 1877 B, 336 ("mastodon").  
 White, I. C. 1883 A, 20, 123 ("mastodon").  
 1911 A, 378 (mastodon).  
 Whitney, J. D. 1862 A, 129-133 ("mastodon").  
 1864 A, 264 ("mastodon").  
 1865 A, 102, 135, 242, 252, 276 ("mastodon").  
 1866 A, 162 ("mastodon").  
 1879 B, 263, 275, 281 ("mastodon").  
 Whittlesey, C. 1866 A, 15, 16 ("mastodon").  
 Wilber, C. D. 1861 A, 59, figs. 1-3 (Mastodon giganteus).  
 Wilder, F. A. 1900 A, 117 ("elephant").  
 Williams, G. H. 1894 A, 26.  
 Williams, H. S. 1897 A, 676, fig. ("mastodon").  
 Williamson, C. W. 1905 A, 334-338 ("mastodon").  
 Wilson, T. 1892 A, 629.  
 1901 A, 299 (Mastodon mexicanus); 322 (M. americanus); 333, fig. 29 (M. ohioiticus).  
 Winchell, A. 1861 A, 132 (Mastodon giganteus).  
 1870 A, 304 ("mastodon").  
 Winchell, N. H. 1874 A, 247 ("mastodon").  
 1874 B, 392 ("mastodon").  
 1878 A, 61 ("mastodon").  
 1888 A, 397 ("mastodon").  
 1905 A, 259.  
 1907 A, 163 ("mastodon").  
 1910 A, 418 ("mastodon").  
 1917 A, 134 ("mastodon").  
 Woodward, A. S. 1923 C, 63, fig. 54.  
 Worthen, A. H. 1866 A, 38, 39, 315 ("mastodon").  
 1873 A, 308 ("mastodon").  
 1890 A, 8 ("mastodon").  
 Wright, F. B. 1903 A, 246 ("mastodon").  
 Wright, G. F. 1903 A, 297 ("mastodon").  
 1905 A, 18 ("mastodon").  
 1908 B, 187 ("mastodon").  
 1911 A, 232 ("mastodon").  
 1911 C, 42 ("mastodon").  
 Wyman, J. 1875 A, 31, 81 ("mastodon").  
 Wyman, L. E. 1922 A, 17, figs. 3, 10.  
 1927 A, 86 ("mastodon").  
 Yates, L. G. 1915 A, 67 (This species?).

- Zittel and Schlosser 1923 A, 631 (Mastodon).  
Pleistocene (Early to Late). The whole of North America.
- Mammut americanum plicatum** (Osborn).  
Osborn, H. F. 1926 B, 1, fig. 1 (Mastodon).  
Pleistocene (Wisconsin); Illinois.
- Mammut francisi** Hay.  
Hay, O. P. 1926 A, 35, pl. i, fig. 3; pl. ii.  
Pleistocene (Aftonian); Texas.
- Mammut matthewi** (Osborn).  
Osborn, H. F. 1921 B, 2, 4, fig. 1a, a<sup>2</sup>, a<sup>3</sup> (Mastodon); not fig. 1a<sup>1</sup>.  
Matthew, W. D. 1923 A, 12 (Miomastodon).  
Osborn, H. F. 1921 C, 108 (Mastodon).  
1922 F, 4 (Miomastodon).  
1926 B, 1 (Pliomastodon).  
Lower Pliocene (Snake Creek); Nebraska.
- Mammut merriami** (Osborn).  
Osborn, H. F. 1921 B, 4, 6, fig. 2 (Mastodon).  
1921 C, 108 (Mastodon).  
1922 F, 4 (Miomastodon).  
Pliocene (Thousand Creek); Nevada.
- Mammut oregonense** Hay.  
Hay, O. P. 1926 A, 39, pl. i, figs. 1, 2.  
1927 D, 13, 19, 245.  
Pleistocene (Early); Oregon.
- Mammut progenium** Hay.  
Hay, O. P. 1914 A, 26, 368, pl. xlv, figs. 1, 2; pl. xlviii, fig. 1; pl. lii, figs. 2, 3.  
Baker, F. C. 1920 A, 226, 243.  
Blatchley, W. S. 1898 A, 90 (Mastodon americanus).  
Clarke, J. M. 1903 C, 936 (Mastodon americanus).
- Collett, J. 1881 A, 386 ("mastodon").  
Hartnagel and Bishop 1921 A, 49, pl. vii ("mastodon").  
Hay, O. P. 1923 A, 489.  
1924 D, 378.  
1928 C, 425.  
Hayes, S. 1895 B, 40, pl. ("mastodon").  
Leidy, J. 1871 F, 113 (Mastodon americanus).  
Loomis, F. B. 1917 A, 210.  
1918 A, 438, figs. 1-4 (Mastodon americanus).  
Merriam, J. C. 1917 A, 439, 441.  
Osborn, H. F. 1921 A, 12 (Mastodon).  
Pohlig, H. 1912 A, 187, fig. 12 (Tetraacaulodon ohioicum).  
Sellards, E. H. 1916 B, 95, pl. x.  
Pleistocene (Aftonian); Iowa, North Carolina, South Carolina, Kansas, Texas; Sangamon; Ohio; (Late Wisconsin); Illinois; Pliocene? (Bone Valley); Florida.
- Mammut sp. indet.**  
Buckley, S. B. 1866 A, 44 ("Mastodon").  
Cooke, C. W. 1926 A, 445 ("Mastodon").  
Pleistocene; Florida.  
Hay, O. P. 1927 D, 223, 235 (Mammut); 308 (Mastodon. This genus?). Pleistocene; Arizona, California, Idaho, Oregon, Washington.  
Merriam, J. C. 1909 A, 293. Pleistocene (Los Angeles); California.  
Merriam and Sinclair 1907 A, 196 (Mastodon).  
Pliocene (Mascall?); Oregon.  
Merriam and Stock 1921 A, 567 (Mastodon).  
Pleistocene (Early); California.  
Sinclair, W. J. 1904 B, 11 (This genus?).  
Pleistocene; Nevada.  
1908 A, 112 ("mastodon").  
1915 A, 77, 78, 84, fig. 9 (Mastodon). Pliocene; Nebraska.  
Stock, C. 1925 A, 113. Pleistocene (Cave); California.
- ANANCUS** Lartet. Type *A. macrophus* Lartet = *Mastodon arvernensis* Croizet and Jobert.  
Lartet, E. 1859 A, 493 (As syn. of Mastodon).  
Hay, O. P. 1902 A, 711 (Mammut, part).  
Aymard, A. 1854, Ann. Soc. Agric. Sci. le Puy, 507.  
Gidley, J. W. 1926 A, 84.  
Hay, O. P. 1923 A, 479.  
1923 B, 112 (Anancus); 112 (Dibelodon).  
1925 B, 4.  
1925 D, 245 ("mastodon").  
1925 E, 382.  
Matthew, W. D. 1913 A, 200 (Tetralophodon).  
1921 B, 189 (Mastodon arvernensis).  
Newton, E. T. 1891 A, 43 (Mastodon arvernensis).  
Osborn, H. F. 1918 C, table.  
1922 F, 4 (Miomastodon; type *Mastodon merriami* Osborn).  
1923 A, 17 (Cuvieronius; type *Mastodon humboldtii*).  
1926 B, 1 (Pliomastodon; type *Mastodon matthewi* Osborn); 15 (Cordillerion; type *Mastodon andium*).
- Schlesinger, G. 1921 A, 2, 125 (Dibunodon, as subgenus).  
Stefanescu, S. 1919 E, 1332 (Mastodon).  
1920 A, 811 (Mastodon arvernensis).
- Anancus bensonensis** Gidley.  
Gidley, J. W. 1926 A, 85, pl. xxxii.  
1922 B, 120 (Gomphotherium n. sp.?).  
Hay, O. P. 1927 D, 10, 136.  
Lower Pleistocene; Arizona.
- Anancus brazosius** Hay.  
Hay, O. P. 1923 B, 112, pl. viii, figs. 1, 2.  
Frick, C. 1925 B, 167 (Anancus brazosius).  
Hay, O. P. 1917 B, 22, pl. iii, fig. 2 (Gomphotherium elegans, part).  
1917 G, 221, pl. xxvi, fig. 3 (Gomphotherium elegans, part).  
1921 B, 403 ("Gomphotherium").  
1924 D, 373.  
1925 B, 1, pla. i, ii; pl. iii, fig. 1.

Hay, O. P. 1926 C, 13.

1927 D, 297.

Pleistocene (Aftonian); Texas.

**Anancus deflocatus Hay.**

Hay, O. P. 1926 C, 14, pl. vii; pl. viii, fig. 1.

Pleistocene (Early); Texas.

**Anancus edensis (Frick).**

Frick, C. 1921 A, 405, pl. 1; text-figs. 180-185

[Tetrabelodon (Trilophodon) shepardii edensis].

1926 B, 127, 141, 152, 169, 171, 174, figs. 1c, 2-4b, 8, 9, 18, 21a-22d, 25 [Rhynchotherium (Dibelodon)].

Gidley, J. W. 1926 A, 85, 86 (Tetrabelodon shepardii andium).

Hay, O. P. 1923 B, 110 (Gomphotherium).

Osborn, H. F. 1922 F, 2, fig. 2 (Dibelodon edensis).

1926 B, 15 (Cordillerion).

Stock, C. 1925 A, 21 (Trilophodon shepardii edensis).

Pliocene (Eden); California.

**Anancus felicitis (Freudenberg).**

Freudenberg, W. 1922 A, 4, 20, pl. ii; pl. iii, fig. 2; pl. v, fig. 2 [Mastodon (Dibelodon) oligobunus felicitis].

1921 A, 139 [Mastodon (Dibelodon) oligobunus felicitis].

Pleistocene; Mexico.

**Anancus gratus (Hay).**

Hay, O. P. 1917 B, 18, pl. iii, figs. 3, 4; pl. iv (Gomphotherium).

Cahn, A. R. 1922 A, 23 (Gomphotherium).

Hay, O. P. 1924 D, 373.

1926 C, 12 (Part to A. orarius).

Osborn, H. F. 1926 B, 15 (Cordillerion).

Pleistocene (Early); Texas.

**Anancus? hicksi (Cook).**

Cook, H. J. 1922 A, 5, pls. i-iv; pl. vi, fig. 4 (Trilophodon).

1926 B, 39 (Trilophodon).

Upper Miocene?; Colorado.

**Anancus humboldtii (Fischer de Waldheim).**

Fischer de Waldheim, G. 1814 A, 341 (Mastotherium).

Hay, O. P. 1902 A, 710 (Mammot humboldtii).

Abel, O. 1914 A, 202 (Tetrabelodon humboldtii).

Blainville, H. M. D. 1864 A, xix, 249, 285, pl. xii.

Blake, C. C. 1861 A, 470 (Mastodon).

Boule and Thevenin 1920 A, 43, 63, 68, text-figs. 3, 28, 32 (Mastodon humboldtii).

Burmeister, H. 1879 B, 522 (Mastodon).

Capellini, G. 1907 A, 144 (Mastodon humboldtii).

Cuvier, G. 1824 Ossem. foss., ed. 2, v, pt. 2, 527 (Mastodon humboldtii).

1825 A, i, 266-268, pl. ii, fig. 1 (Mastodon de Humboldt); v, pt. 2, 527 (M. humboldtii).

Desmarest, A. G. 1822 A, 386 (Mastodon).

Diener, C. 1912 A, 224 (Mastodon humboldtii).

Dumble, E. T. 1894 A, 559 (Dibelodon).

Eaton, G. F. 1905 A, 330 (Mastodon).

Falconer, H. 1863 A, 99 (Mastodon).

Fischer, J. B. 1829 A, 408 (Mastodon).

Freudenberg, W. 1922 A, 8, 16 (Mastodon humboldtii).

Gaudry, A. 1891 B, 3 (Mastodon).

Gervais, P. 1855 A, 17, pl. v, figs. 9, 10.

Hay, O. P. 1917 B, 20 (Gomphotherium humboldii).

1917 G, 221 (Gomphotherium humboldii).

1923 B, 112 (Anancus).

1924 D, 17 (Mastodon).

1925 B, 2, 4, 5 (Mastodon, Anancus).

1925 C, 25 (Mastodon).

1925 E, 382.

Hays, I. 1834 A, 333, pl. ii, fig. 5 (Mastodon).

Ingalls, A. G. 1926 A, 290, fig. (Cuvieronius).

Kaup, J. J. 1843 A, 169 (Mastodon).

Koch, A. C. 1845 A, 16 (Mastodon).

Lull, R. S. 1908 A, 191 (Dibelodon).

1909 A, 670 (Dibelodon).

Matthew, W. D. 1909 C, 120 (Dibelodon?).

Merriam, J. C. 1917 A, 435 (Dibelodon).

Meyer, H. 1867 C, 789 (Trilophodon).

Murchison, C. 1868 A, ii, 8 (Mastodon).

Nordenskiöld, E. 1903 A, 6, 14, 21, pls. v, vi (Mastodon humboldtii).

Osborn, H. F. 1903 E, 249 (M.).

1905 E, 931 (M.).

1918 C, table (Tetrabelodon).

1921 A, 10 (M.).

1923 E, 1 (Cuvieronius).

1925 A, 17 (Cuvieronius).

1925 B, 27, fig. 3 (Cuvieronius).

1926 B, 15 (Cuvieronius).

Palacký, J. 1903 B, 316 (Mastodon).

Pompeckj, J. F. 1905 A, 44, pl. iii, fig. 3a; pl. iv, fig. 3b (Mastodon humboldtii).

Pontier, G. 1910 B, 303 (Mastodon humboldtii; syn. of M. andium).

Schlesinger, G. 1921 A, 229 (Mastodon humboldtii).

Stefanescu, S. 1919 A, 98 (Mastodon humboldtii).

Zittel and Schlosser 1923 A, 631 (Mastodon).

Upper Pliocene (Blanco); Texas.

**Anancus hyodon (Fischer, G.).**

Fischer de Waldheim, G. 1814 A, 341 (Mastotherium).

Abel, O. 1914 A, 202 (Tetrabelodon andium).

Ameghino, F. 1905 A, 39, fig. 43 (Mastodon andium).

Andrews, C. W. 1908 D, 33 (Mastodon andium).

1922 B, 34 (Mastodon andium).

Blainville, H. M. D. 1864 A, xix, 249 (Mastodon andium).

Boule and Thevenin 1920 A, 3, pls. i-ix; text-figs. 2, 5-13, 18, 20, 22, 27 (Mastodon andium).

Burmeister, H. 1879 B, 523 (Mastodon andium).

Capellini, G. 1907 A, 144 (Mastodon andium).

Cipriani, L. 1923 A, 93.

Cope, E. D. 1864 G, 5 (Tetrabelodon andium).

Cuvier, G. 1824, Ossem. foss., ed. 2, v, pt. 2, 527 (Mastodon andium).

1825 A, i, 267, pl. ii, fig. 5; v, pt. 2, 527 (M. andium).



- Desmarest, A. G. 1822 A, 385 (Mastodon cordillerarum).
- Diener, C. 1912 A, 225 (Mastodon andium).
- Dietrich, W. O. 1916 A, 44, 49, 57, 65, 74 (Mastodon andium).
- Falconer, H. 1863 A, 74 (Mastodon andium?).
- Felix and Lenk 1891 A, 133 (Mastodon andium. This species?).
- Fischer, J. B. 1829 A, 408 (Mastodon cordillerarum).
- Freudenberg, W. 1922 A, 7, 11, 12, 16, 17 (Mastodon andium, Dibelodon cordillerarum).
- Frick, C. 1926 B, 170, 174 [Mastodon (Dibelodon) andium].
- Gaudry, A. 1891 B, 4, pl. ii, fig. 2 (Mastodon andium).
- Gervais, P. 1855 A, 14, pls. v, vi, figs. 1-8 (Mastodon andium).
- Gidley, J. W. 1926 A, 85 (Mastodon andium).
- Hay, O. P. 1923 B, 112 (Anancus).  
1924 D, 17 (Anancus).  
1925 B, 2, 4, 5 (Mastodon andium, M. cordillerarum, M. cordillerarum, Anancus hyodon).  
1925 C, 25 (Mastodon).
- Hays, I. 1834 A, 332, pl. ii, fig. 1 (Mastodon cordillerarum).
- Ingalls, A. G. 1926 A, 290, fig. (Dibelodon).
- Kaup, J. J. 1843 A, 169 (Mastodon andium).
- Leidy, J. 1860 A, 242, 397, pl. xxvii, fig. 14 (Mastodon andium?).
- Lull, R. S. 1908 A, 191 (Dibelodon andium).
- Lydekker, R. 1886 B, 44 (Mastodon cordillerarum).
- Matthew, W. D. 1921 -B, 186 (Mastodon andium).
- Murchison, C. 1868 A, ii, 8, 15 (Mastodon andium).
- Osborn, H. F. 1918 C, table (Tetralophodon andium).  
1921 A, 10 (Mastodon andium).  
1923 E, 2 (Mastodon andium).  
1925 A, 17 (Dibelodon andium).  
1925 B, 27, fig. 3 (Dibelodon andium).  
1926 B, 15 (Cordillerion andium).
- Owen, R. 1844 B, 269, 270, figs. 1, 2 (Mastodon australis).
- Philippi, R. A. 1893 A, 88, figs. 1, 3.
- Pompeckj, J. F. 1905 A, 21, 25 (Mastodon andium).
- Pontier, G. 1910 B, 303, fig. (Mastodon andium; M. cordillerarum, M. humboldti as syns.).
- Scharff, R. F. 1911 A, 408 (Mastodon andium).
- Schlesinger, G. 1921 A, 229 (Mastodon andium).
- Stefanescu, S. 1918 A, 740 (Mastodon andium).  
1919 A, 97 (Mastodon andium).
- Trouessart, E. L. 1905 A, 600 (Mastodon andium).
- Viret d'Aoust, T. 1865 A, 23 (Mastodon andicus).
- Wyman, J. 1855 C, 275, pl. xii, figs. 1, 2 (Mastodon andium).
- Zittel and Schlosser 1923 A, 631 (Mastodon andium).  
Upper Pliocene? and Pleistocene (Early); South America, Mexico, Texas.
- Anancus oligobunus (Cope).**  
Cope, E. D. 1893 C, 204 (Mastodon).  
1894 G, 5 (Dibelodon shepardii; not Mastodon shepardii Leidy).  
1893 A, 59 (Mastodon).  
1893 P, 473 (Mastodon).  
Felix and Lenk 1891 A, 126, 127, pl. xxx, fig. 1 (Mastodon shepardii).  
Freudenberg, W. 1922 A, 11, 13, 15, 17, text-fig. 4 (Mastodon).  
Hay, O. P. 1925 C, 25, 28 (Mastodon oligobunus, Dibelodon shepardii, Mastodon shepardii).  
Osborn, H. F. 1926 B, 15 (Cordillerion).  
Villada, M. M. 1903 A, 450, pl. vii (Dibelodon shepardii).  
Zittel and Schlosser 1923 A, 681 (Mastodon).  
Pleistocene (Early); Mexico.
- Anancus oligobunus antiquissimus (Freudenberg).**  
Freudenberg, W. 1922 A, 4, 18, pl. i, fig. 3; pl. viii, fig. 3 (Mastodon (Dibelodon)).  
1921 A, 139 (Mastodon; no description).  
Pleistocene (Early); Mexico.
- Anancus oligobunus intermedius (Freudenberg).**  
Freudenberg, W. 1922 A, 4, 23, pl. iv; pl. vi, fig. 1; pl. viii, fig. 4 (Mastodon).  
Hay, O. P. 1925 C, 27, 28 (Mastodon).  
Pleistocene (Early); Mexico.
- Anancus oligobunus progressus (Freudenberg).**  
Freudenberg, W. 1922 A, 4, 20, 26, 27, pl. v, fig. 1; pl. vi (Mastodon).  
1921 A, 139 (Mastodon; no description).  
Hay, O. P. 1925 C, 27, 28 (Mastodon).  
Pleistocene (Early); Mexico.
- Anancus orarius Hay.**  
Hay, O. P. 1926 C, 8, pl. ii, fig. 1; pl. iii, fig. 1; pl. iv; pl. v, figs. 1-3.  
1927 D, 287.  
Pleistocene (Early); Texas.
- Anancus successor (Cope).**  
Cope, E. D. 1892 G, 227 (Mastodon).  
Hay, O. P. 1902 A, 712 (Mammut tropicum, in part).  
Cope, E. D. 1893 A, 58, 59, 62, pl. xvi, fig. 1; pl. xvii, figs. 1-3 (Dibelodon tropicum).  
Dumble, E. T. 1894 A, 559 (Dibelodon tropicum).  
Gidley, J. W. 1903 C, 627 (Dibelodon tropicum).  
Hay, O. P. 1917 B, 20 (Gomphotherium tropicum).  
1917 G, 220 (Gomphotherium tropicum).  
Lucas, F. A. 1902 A, 555 (Mastodon tropicum).  
Osborn, H. F. 1924 H, 3 (Stegomastodon).  
Matthew, W. D. 1909 C, 120 (Dibelodon tropicus).  
Pliocene (Blanco); Texas.
- Anancus tropicus (Cope).**  
Hay, O. P. 1902 A, 712 (Mammut).  
Böse, E. 1905 A, 24 (Mastodon).  
Boule and Thevenin 1920 A, 73 (Mastodon).

Eaton, G. F. 1905 A, 330 (Mastodon).  
 Felix and Lenk 1891 A, 133 (Mastodon).  
 Freudenberg, W. 1921 A, 139 (Mastodon).  
 1922 A, 4, 8, 11, 28, pl. iii, fig. 1; pl. vi,  
 fig. 3; text-fig. 9 [Mastodon (Dibelodon)].  
 Hay, O. P. 1925 C, 31 (Mastodon).  
 1926 C, 12.  
 Osborn, H. F. 1903 E, 249 (M.).  
 1921 A, 10 (Mastodon).  
 1926 B, 15 (Cordillerion).  
 Villada, M. M. 1903 A, 450 (Dibelodon).  
 Zittel and Schlosser 1923 A, 631, 680 (Mastodon).  
 Upper Pliocene (Blanco); Mexico.

**Anancus sp. indet.**

Bárcena, M. 1882 A, 20 ("mastodonte"). Pleis-  
 tocene?; Mexico.  
 Cope, E. D. 1885 M, 494 (Mastodon). Mio-  
 cene; Mexico.  
 Gidley, J. W. 1922 B, 120 (Dibelodon). Plio-  
 cene? (San Pedro Valley); Arizona.  
 Hay, O. P. 1927 D, 16, 266, 267, 268. Pleisto-  
 cene; California, Idaho.  
 Lucas, F. A. 1900 H, 99 ("Mastodon; not  
 Mastodon americanus").

**STEGOMASTODON Pohlig. Type *Mastodon mirificus* Leidy.**

Pohlig, H. 1912 A, 193.  
 Hay, O. P. 1902 A, 711 (Mammut, in part).  
 Gidley, J. W. 1926 A, 86.  
 Hay, O. P. 1914 A, 373 (Rhabdobunus).  
 Matthew, W. D. 1915 B, 15 (Syn. of Dibelodon).  
 1918 A, 201.  
 Merriam, J. C. 1917 A, 443 (Stegodon).  
 Osborn, H. F. 1925 A, 15.

**Stegomastodon arizonæ Gidley.**

Gidley, J. W. 1924, in Osborn, H. F. 1924 H, 4  
 (Stegomastodon).  
 1922 B, 120 (Dibelodon? n. sp.?).  
 1926 A, 86, pls. xxxiii-xxxix (Stegomasto-  
 don).  
 Hay, O. P. 1927 D, 136 (Dibelodon sp. indet.);  
 301 (Anancus); 313 (Stegomastodon).  
 Ingalls, A. G. 1926 A, 290, fig. (Stegomastodon).  
 Osborn, H. F. 1925 A, 15, fig. (Stegomastodon).  
 Lower Pleistocene; Arizona.

**Stegomastodon elegans (Hay).**

Hay, O. P. 1917 B, 21, pl. iii, figs. 1, 2; not  
 fig. 3 (Gomphotherium).  
 1917 G, 219, pl. xxvi (Gomphotherium).  
 1923 B, 112, 113, figs. 1, 2.  
 1924 D, 378 (Gomphotherium).  
 Pleistocene (Aftonian); Kansas.

**Stegomastodon mirificus (Leidy).**

Hay, O. P. 1902 A, 711 (Mammut).  
 Baker, F. C. 1920 A, 470 (Rhabdobundus).  
 Barbour, E. H. 1914 B, 181 (Mastodon merci-  
 ficus).  
 1914 C, 222 (Mammut).  
 Boule and Thevenin 1920 A, 72 (Mastodon).  
 Calvin, S. 1909 B, 355, pl. xxvii (Mammut).  
 1910 A, xii ("mastodon").  
 Dall and Harris 1892 A, 236 (Mastodon).  
 Frick, C. 1921 A, 409 (Tetralophodon).  
 Gidley, J. W. 1903 C, 619, 627 (Dibelodon).  
 1926 A, 86, 87 (Stegomastodon).  
 Haug, E. 1911 A, 1886 (Mastodon).  
 Hay, O. P. 1914 A, 26, 374, pl. xviii, figs. 2, 3;  
 pl. xlix, fig. 2; pl. l (Rhabdobunus).  
 1919 D, 374 (Stegomastodon).  
 1921 B, 403 (Stegomastodon).  
 1923 A, 377 (Stegomastodon).  
 1924 D, 16, 35 (Anancus).

Hay, O. P. 1926 E, 388, 390 (Anancus).  
 1927 D, 301 (Anancus); 74, 312 (Stegomas-  
 todon).  
 1928 B, 238 (Mastodon).  
 1928 C, 423, 425, 426 (Stegomastodon).  
 Lartet, E. 1859 A, 499, 505 (Mastodon).  
 Lindgren, W. 1893 A, 623 (Mastodon).  
 Lindgren and Drake 1904 A, 3 (Mastodon).  
 Louderback, G. D. 1924 A, 7 (Mastodon).  
 Lucas, F. A. 1902 A, 555 (Mastodon).  
 1904 F, 3 (Mastodon).  
 Lull, R. S. 1903 A, 191 (Dibelodon).  
 Matthew, W. D. 1909 C, 120 (Dibelodon).  
 1918 A, 201 (Stegomastodon).  
 Merriam, J. C. 1917 A, 432, 433 (Mastodon);  
 435 [Dibelodon (Stegodon)].  
 Merrill, G. P. 1907 A, 45 (Mastodon).  
 Newberry, J. S. 1870 D, 28 (Mastodon).  
 Osborn, H. F. 1901 G, 160 (Elephas).  
 1905 H, 223 (Mastodon).  
 1909 D, 82 (Dibelodon); 83, 84 (Mastodon).  
 1910 B, 363, 366, 368 (Stegodon, Mastodon).  
 1913 A, 30, 32 (Dibelodon).  
 1913 C, 135 (M.); table (Tetralophodon,  
 Stegomastodon).  
 1921 A, 10, 11 (Mastodon).  
 1922 A, 5 (M.).  
 1922 E, 282 (M.).  
 1924 H, 3 (Stegomastodon mirificus; S.  
 aftonianæ).  
 1925 A, 16 (Stegomastodon, Mastodon).  
 1925 B, 27 (Mastodon).  
 Pohlig, H. 1912 A, 193 (Stegomastodon).  
 Pontier, G. 1910 B, 306 (Mastodon).  
 Ruschenberger and Tryon 1879 A, 14 (Mas-  
 todon).  
 Shimek, B. 1910 A, 126, 127 (Mammut).  
 1910 B, 316 (Mammut).  
 1912 A, 128 (Mammut).  
 Zittel and Schlosser 1923 A, 631, 680 (Mastodon).  
 Pleistocene; Nebraska: (Aftonian); Iowa  
 Kansas: (Idaho); Idaho.

**Stegomastodon nebrascensis Osborn.**

Osborn, H. F. 1924 H, 5, fig. 2.  
 Middle Pliocene (Snake Creek); Nebraska.

**Stegomastodon texanus Osborn.**

Osborn, H. F. 1924 H, 3, fig. 2 (Stegomastodon).  
 Upper Pliocene (Blanco); Texas.

## GOMPHOTHERIUM Burmeister.

Type *Mastodon angustidens*.

- Burmeister, H. 1837, Handb. Naturges., 795.  
 Hay, O. P. 1902 A, 707 (Mammut, in part).  
 Abel, O. 1907 C (80) (Tetralodon).  
 1912 F, 242, 703, figs. 431-433 (Tetralodon).  
 1913 B, 750 (Tetralodon, Bunolophodon).  
 1914 A, 193, 200 (Tetralodon).  
 1914 B, 73, 74, figs. 23, 24 (Tetralodon, in part).  
 1914 C, 384 (Tetralodon).  
 1919 A, 790, fig. 594 (Mastodon).  
 1922 C, 173, figs. 139-141 (Mastodon).  
 Ameghino, F. 1889 A, 1017 (Mastodon).  
 1902 A, 39 (Mastodon).  
 1906 A, 340 (Mastodon).  
 1912 A, 47 (Mastodon).  
 Andrews, C. W. 1903 B, 99 (Tetralodon).  
 1903 D (Mastodon).  
 1903 E, 226 (Tetralodon).  
 1906 A, xviii (Tetralodon).  
 1907 C, 302 (Tetralodon).  
 1908 A, 398 (Tetralodon).  
 1912 A, 454 (Tetralodon).  
 1922 B, 23, figs. 12-17 (Tetralodon); 33 (Rhynchotherium).  
 Bach, F. 1910 A (Mastodon).  
 Baird, S. F. 1876 A, cxx (Mastodon).  
 Barbour, E. H. 1914 B, 177 (Tetralodon); 180 (Dibelodon); 181 (Gomphotherium); 186 (Eubelodon, type *E. morrilli* Barbour).  
 1915 B, 217 (Megabelodon, type *Tetralodon kullii* Barbour).  
 1917 A, 192 (Tetralodon, Genomastodon, Mastelphas).  
 1927 A, 132 (Amebelodon, type *A. fricki*).  
 Boule and Thevenin 1920 A, 3 (Mastodon).  
 Branca, W. 1907 A, 9 ("mastodonten").  
 Bronn, H. G. 1849 A, 703 (Mastodon).  
 Burmeister, H. 1879 B, 521 (Mastodon).  
 Capellini, G. 1907 A (Mastodon).  
 Cooper, C. F. 1922 D, 609 (Bunolophodon).  
 1923 B, 263 (Tetralodon).  
 Cope and Matthew 1915 A, pl. cxx.  
 Depéret, C. 1907 B (Mastodon).  
 Diener, C. 1912 A, 206 (Mastodon).  
 Dollo, L. 1889 I, 682 (Tetralodon).  
 Eales, N. B. 1926 A, 541, 543.  
 Eaton, G. F. 1914 A, 145 (Dibelodon).  
 Falconer, H. 1868 A, II, 74 (Rhynchotherium).  
 Freudenberg, W. 1922 A, 12 (Tetralodon).  
 Frick, C. 1926 B, 124 [Trilophodon (Serridentinus), Rhynchotherium].  
 1926 C, 440 (Trilophodon).  
 Gaudry, A. 1896 A, 99 (Mastodon).  
 1906 A, 8 ("mastodontes").  
 Gawrilenko, A. 1924 A, 234 (Tetralodon).  
 Gervais, P. 1852 A, 38 (Mastodon).  
 1859 A, 67, text-fig. 12 (Mastodon).  
 Giebel, C. G. 1855 A, 78 (Mastodon).  
 1883 A, pl. lxxxviii (Mastodon).  
 Gloger, C. W. L. 1842, Hand-Hilfsbuch, 119 (Gomphotherium; type *Mastodon angustidens*).  
 Haug, E. 1911 A, 1706 (Tetralophodon).  
 Hay, O. P. 1918 B, 12.  
 1919 A, 311.  
 Hay, O. P. 1919 D, 372.  
 1923 A, 486.  
 1923 B, 109, 112.  
 1925 E, 382.  
 Hoernes, R. 1886 A, 684 (Mastodon).  
 Hutchinson, H. N. 1910 A, 269, pl. xlii (Tetralodon).  
 Joleaud, L. 1919 A, 708, fig. 3 ("mastodontes").  
 Knpe, H. R. 1912 A, 160, fig. (Tetralodon).  
 Kunz, G. F. 1916 A, 487 (Eubelodon).  
 Lankester, E. R. 1905 A, 117 (Tetralodon).  
 Lartet, E. 1859 A, 482 (Mastodon).  
 Leche, W. 1921 A, 69 (Mastodon).  
 Lee, Stone and Gale 1915 A, 27 ("mastodonts"); 34, pl. vi ("trilophodon").  
 Leidy, J. 1871 J, 142 (Rhynchotherium).  
 1873 B, 237 (Rhynchotherium).  
 Lönnerberg, E. 1907 B, 62, fig. 4 (Tetralodon).  
 Lull, R. S. 1908 A, 189 (Tetralodon); 191 (Dibelodon).  
 1909 A, 657, figs. 7, 14, 15 (Tetralodon); 658 (Dibelodon).  
 1914 E, 63, 67, pl. i, fig. 3; pl. ii, fig. 5 (Tetralodon).  
 1917 B, 592, 595, 596, 597 (Dibelodon, Tetralophodon, Trilophodon).  
 Lydekker, R. 1903 D, 124 ("mastodonts").  
 1903 E, 170, fig. 2 ("mastodon").  
 1907 C, 676 (Tetralodon).  
 Matsumoto, H. 1923 A, 103, 117, 119, 120 (Trilophodon, Megabelodon, Tetralodon).  
 1924 A, 58 (Tetralophodon).  
 Matthew, W. D. 1909 C, 120 (Dibelodon).  
 1915 B, 15 (Dibelodon); 16 (Tetralophodon, Rhynchotherium); 17 (Gomphotherium).  
 1915 K, fig. 35 (Trilophodon).  
 1916 G, 487, fig. (Mastodon, Dibelodon).  
 1918 A, 186 (Trilophodon); 200 (Zygolophodon); 201 (Megabelodon, Eubelodon).  
 1921 B, 189 (Rhynchotherium).  
 1924 A, 5 (Serridentinus, Trilophodon).  
 Matthew and Cook 1909 A, 367 (Gomphotherium, Dibelodon, Tetralodon).  
 Meyer, H. 1887 C, 788 (Trilophodon).  
 Moreau, L. 1914 A, 87 (Mastodon).  
 Osborn, H. F. 1909 D, 78 (Trilophodon).  
 1910 B, 558 (Dibelodon); 683 (Tetralophodon).  
 1918 A, 24 (Tetralodon).  
 1918 C, table (Gomphotherium, Trilophodon, Tetralophodon, Eubelodon, Mastotherium, Bunolophodon, Rhynchotherium).  
 1919 D, 226 (Megabelodon).  
 1921 A, 3, 5, figs. 1, 2 (Rhynchotherium).  
 1923 E, 2 (Serridentinus; type *Mastodon productus* Cope).  
 1924 F, 1 (Serridentinus).  
 1924 H, 1 (Tetralophodon).  
 1925 A, 8, 9 (Trilophodon); 12 (Tetralophodon); 14 (Rhynchotherium).  
 1925 B, 23 (Trilophodon, Tetralophodon).  
 1926 B, 4 (Serridentinus, Trilophodon).  
 Owen, R. 1880 E, 353 (Mastodon).  
 Palacký, J. 1903 B, 313, 317 (Mastodon).  
 Palmer, T. S. 1904 A, 298, 943.  
 Pavlov, M. 1903 C, 130 (Mastodon).

- Petronievics, B. 1921 A, 102 (Tetrabelodon).  
 Pilgrim, G. E. 1912 A, 16 (Tetrabelodon).  
     1913 A, 292 (Tetrabelodon).  
 Roth, S. 1908 A, 141 (Mastodon).  
 Scharff, R. F. 1911 A, 231 (Tetrabelodon).  
 Schlesinger, G. 1912 A (Tetrabelodon).  
     1921 A, 2 (Tetrabelodon, Bunolophodon).  
 Schlosser, M. 1911 A, 137 (Mastodon); 163 (Tetrabelodon).  
 Schmidt, O. 1886 A, 231, fig. 40 (Mastodon).  
 Schuchert, C. 1915 A, 942.  
 Schuchert and Levene 1927 A, 336, 352, fig. (Trilophodon).  
 Scott, W. B. 1913 A, 430, 437 (Tetrabelodon); 681 (Gomphotherium).  
 Spencer, J. W. 1898 A, 26 ("mastodon").  
 Stefanescu, S. 1913 B, 735 (Mastodon).  
     1913 C, 883 (Mastodon).  
     1918 A, 740 (Mastodon).  
     1919 A, 98 (Mastodon).  
     1919 B, 467 ("bunolophodontes").  
     1919 C, 907 (Mastodon).  
     1919 D, 1211 (Mastodon).  
 Steinmann, G. 1907 A, 483 (Mastodon).  
 Stromer, E. 1906 A, 210, 216 (Mastodon).  
     1908 B, 174 (Mastodon).  
 Terra, P. 1911 A, 334 (Tetralophodon).  
 Thomas, O. 1895 A, 191, 192 (Gomphotherium).  
 Trouessart, E. L. 1905 A, 599 (Tetrabelodon).  
 Vacek, M. 1877 A, 45 (Bunolophodon).  
     1877 B, 52 (Mastodon).  
 Warren, J. C. 1852 C, 139 (Tetralophodon).  
 Weber and Abel 1928 A, xix, 465, figs. 294, 295. (Bunolophodon).  
 Wilckens, O. 1911 A, 708 ("mastodonten").  
 Wiman, C. 1923 A, 225 (Mastodon).  
 Woodward, A. S. 1904 C, 194, fig. 6 (Tetrabelodon).  
     1923 C, 63, figs. 55, 60 (Tetrabelodon).  
 Zittel and Schlosser 1911 A, 538, figs. 731-733 (Mastodon, Tetralophodon).  
     1923 A, 629, figs. 773-775 (Mastodon, Tetralophodon).
- Gomphotherium abeli** (Barbour).  
*Barbour, E. H.* 1925 C, 91, figs. 52-56 (Tetrabelodon).  
*Cook, H. J.* 1928 B, 37 (Trilophodon).  
*Frick, C.* 1926 B, 168 (Trilophodon).  
     Pliocene (Devil's Gulch); Nebraska.
- Gomphotherium anguirivale** (Osborn).  
*Osborn, H. F.* 1926 B, 10, 11, fig. 8 (Serridentinus).  
     Pliocene (Snake Creek); Nebraska.
- Gomphotherium barbouri** Osborn.  
*Osborn, H. F.* 1921 A, 9, 10 (Tetralophodon).  
     1924 II, 1, fig. 1 [Tetralophodon (Morrillia, Type *T. barbouri*)].  
     1925 A, 12 [Tetralophodon (Morrillia)].  
     1925 B, 26 [Tetralophodon (Morrillia)].  
     Upper Pliocene; Nebraska.
- Gomphotherium brevidens** (Cope).  
*Hay, O. P.* 1902 A, 710 (Mammut).  
*Abel, O.* 1919 A, 324, fig. 24 (Mastodon).  
*Boule and Thevenin* 1920 A, 71 (Mastodon).
- Depéret, C.* 1912 A, 709 (Mastodon).  
*Dollo, L.* 1889 I, 685 (Tetrabelodon).  
*Matthew, W. D.* 1901 B, 359, 374 (Tetrabelodon).  
     1909 C, 114 [Trilophodon (=Gomphotherium breviceps)].  
     1918 A, 199 (Mastodon).  
*Osborn, H. F.* 1903 E, 249 (M.).  
     1910 B, 292 (Trilophodon).  
     1918 C, 135 (Rhynchotherium).  
     1921 A, 5, 6 (Rhynchotherium).  
     1922 F, 4 (Rhynchotherium).  
     1926 B, 13 (Rhynchotherium).  
*Palacký, J.* 1903 B, 311 ("brevicens").  
*Pavlov, M.* 1901 A, 13, pl. i, fig. 4 (This species?).  
     1907 A, 142.  
*Schlesinger, G.* 1921 A, 159, 161, 226 (Mastodon tapiroides).  
*Weber and Abel* 1928 A, 469 (Rhynchotherium).  
     Middle Miocene (Deep River); Montana, Oregon.
- Gomphotherium brewsterensis** (Osborn).  
*Osborn, H. F.* 1926 B, 11, fig. 9 (Serridentinus).  
     Pliocene; Florida.
- Gomphotherium campester** (Cope).  
*Hay, O. P.* 1902 A, 710 (Mammut campestre).  
*Andrews, C. W.* 1908 D, 32 (Tetrabelodon campestris).  
     1909 A, 347, 349 (Tetrabelodon).  
*Barbour, E. H.* 1915 A, 90 (Tetrabelodon).  
     1915 B, 216 (Tetrabelodon).  
*Boule and Thevenin* 1920 A, 72 (Mastodon).  
*Cope and Matthew* 1915 A, pls. cxx, cxxi; pl. cxxii, figs. 1, 2; pl. cxxiii, fig. 1 (Mastodon, Tetralophodon).  
*Freudenberg, W.* 1922 A, 6, 24 (Mastodon).  
*Frick, C.* 1921 A, 409 (Tetralophodon).  
*Ingalls, A. G.* 1926 A, 290, fig. (Tetralophodon).  
*Lull, R. S.* 1908 A, 190 (Tetrabelodon).  
*Matthew, W. D.* 1909 C, 116 (Trilophodon).  
     1915 B, 24 (Tetralophodon).  
     1918 A, 201 (Mastodon).  
*Merriam, J. C.* 1917 A, 438 (Tetralophodon).  
*Osborn, H. F.* 1903 E, 249 (M.).  
     1909 D, 81 (Trilophodon).  
     1910 B, 353 (Tetralophodon).  
     1918 A, 27 (Tetrabelodon).  
     1918 C, table (Trilophodon).  
     1921 A, 7, 10, fig. 4 (Tetralophodon).  
     1923 E, 3 (Tetralophodon).  
     1925 B, 25, fig. 3 (Tetralophodon).  
*Pavlov, M.* 1903 C, 137 (Mastodon).  
*Pompeck, J. F.* 1905 A, 47 (Mastodon).  
*Schlesinger, G.* 1921 A, 228, 229 (Mastodon).  
*Sternberg, C. H.* 1909 C, 123 (Trilophodon).  
*Trouessart, E. L.* 1905 A, 600 (Tetrabelodon).  
*Weber and Abel* 1928 A, 469 (Bunolophodon).  
*Zittel and Schlosser* 1923 A, 631 (Mastodon).  
     Pliocene (Republican River); Kansas, Nebraska.
- Gomphotherium? chapmani** (Leidy).  
*Leidy, J.* 1869 A, 248, 396 (Mastodon).  
*Hay, O. P.* 1902 A, 710 (Mammut).

- Blainville, H. M. D. 1864 A, iii, 257 (*Mastodon chapmani*; syn. "de l'animal de l'Ohio").  
 Osborn, H. F. 1921 A, 11 (*Mastodon*).  
 Locality and formation unknown.

### **Gomphotherium cimarronis (Cope).**

- Cope, E. D. 1893 A, 18 (*Tetrabelodon serridens*?); 20, pl. iii, figs. 2, 3 (*T. s. cimarronis*).  
 Freudenberg, W. 1922 A, 7 (*Tetrabelodon*).  
 Frick, C. 1926 B, 141, 142, 156, 157, 163, 165, 167 [*Trilophodon (Serridentinus)*].  
 Hay, O. P. 1925 B, 5, pl. iii, figs. 2-6; pl. iv; text-figs. 1-9.  
 1925 C, 22.  
 Matthew, W. D. 1915 L, 470 (*Trilophodon* sp.).  
 Montgomery, T. H. 1904 A, 57 (*Tetrabelodon serridens cimarronis*).  
 Osborn, H. F. 1921 A, 8 (*Trilophodon serridens cimarronis*).  
 1926 B, 12 (*Serridentinus*).  
 Trouessart, E. L. 1905 A, 600 (Syn. of *Tetrabelodon serridens*).  
 Miocene (Clarendon, Fleming); Texas.

### **Gomphotherium? conodon Cook.**

- Cook, H. J. 1909 A, 183, fig. 1.  
 1912 D, 42 (*This genus?*).  
 Joleaud, L. 1919 D, 414 (*Mastodon*).  
 O'Hara, C. C. 1920 A, 157.  
 Miocene (Upper Harrison); Nebraska.

### **Gomphotherium dinotherioides (Andrews).**

- Andrews, C. W. 1909 A, 347, figs. A-C (*Tetrabelodon*).  
 Abel, O. 1913 B, 750, fig. 78.  
 1914 A, 202, fig. 161 (*Tetrabelodon*).  
 Andrews, C. W. 1908 D, 28 (*Tetrabelodon*).  
 1916 C, 128 (*Tetrabelodon*).  
 1921 B, 334 (*Tetrabelodon*).  
 1922 B, 29, fig. 17 (*Tetrabelodon*).  
 Freudenberg, W. 1921 A, 139 (*This species?*).  
 1922 A, 4, 11, 14, 18, text-fig. 6 (*Mastodon*, *Tetrabelodon*. *This species?*).  
 Hay, O. P. 1925 C, 24 (*Mastodon*, *Tetrabelodon*).  
 Matthew, W. D. 1918 A, 201 (*Mastodon*).  
 Osborn, H. F. 1921 A, 6 (*Rhynchotherium*).  
 Schlesinger, G. 1921 A, 230 (*Mastodon*).  
 Sternberg, C. H. 1907 B, 971 (*"inferior-tusked mastodon"*).  
 1909 C, 123 (*"gigantic pachyderm"*).  
 Weber and Abel 1923 A, 463, fig. 297 (*Rhynchotherium*).  
 Lower Pliocene or Upper Miocene (River Republican); Kansas, Mexico.

### **Gomphotherium? emmonsii sp. nov.**

- Emmons, E. 1858 B, 199, fig. 23 (*Mastodon giganteus*).  
 1860 A, 218, fig. 136 (*"mastodon"*).  
 Leidy, J. 1869 A, 396 (*Mastodon obscurus?*).  
 Pleistocene?; North Carolina.

### **Gomphotherium euhypodon (Cope).**

- Hay, O. P. 1902 A, 710 (*Mammut*).  
 Andrews, C. W. 1908 D, 32 (*Tetrabelodon euhypodon*).

- Andrews, C. W. 1909 A, 349 (*Tetrabelodon*).  
 Barbour, E. H. 1914 B, 181, 190 (*Mastodon*).  
 1915 B, 222 (*Tetrabelodon*).  
 1917 A, 172 (*Tetrabelodon*. *This species?*).  
 Dumble, E. T. 1920 A, 231 (*Trilophodon euhypodon*).  
 Freudenberg, W. 1922 A, 12 (*Mastodon*).  
 Matthew, W. D. 1909 C, 116 (*Trilophodon*).  
 1920 E, 231 (*Trilophodon euhypodon*).  
 Merriam, J. C. 1917 A, 438 (*Tetrabelodon*).  
 Osborn, H. F. 1903 E, 249 (M.).  
 1909 D, 81 (*"Trilophodon"*).  
 1910 B, 353 (*Tetrabelodon*).  
 1918 C, 135 (*Rhynchotherium*).  
 1921 A, 5, fig. 2 (*Rhynchotherium*).  
 1923 E, 3 (*Rhynchotherium*).  
 Paylow, M. 1903 C, 137 (*Mastodon*).  
 Pompeckj, J. F. 1905 A, 47 (*Mastodon*).  
 Schlesinger, G. 1921 A, 50, 53, 63, 229 (*Mastodon*; syn. of *M. angustidens*).  
 Trouessart, E. L. 1905 A, 599 (*Tetrabelodon*).  
 Upper Miocene (Republican River); Kansas; or Lower Pliocene (Devil's Gulch); Nebraska.

### **Gomphotherium falconeri (Osborn).**

- Osborn, H. F. 1923 E, 3 (*Rhynchotherium*).  
 Upper Pliocene (Blanco); Texas.

### **Gomphotherium floridanum (Leidy).**

- Hay, O. P. 1902 A, 710 (*Mammut*).  
 Allen, G. M. 1926 A, 454.  
 Freudenberg, W. 1922 A, 6, 9, 33 (*Mastodon*).  
 Frick, C. 1921 A, 408 (*Mastodon*); 409 (*Trilophodon*).  
 1926 B, 141 (*Mastodon*); 169 [*Trilophodon (Serridentinus)*].  
 Gidley, J. W. 1911 A, 436 (*Mammut*).  
 Hay, O. P. 1917 G, 220.  
 1923 A, 486.  
 1925 C, 22.  
 Leidy and Lucas 1896 A, viii, 15, pls. i-vii (*Mastodon*).  
 Lucas, F. A. 1902 A, 555 (*Mastodon*).  
 Matson and Clapp 1909 A, 136, 137 (*Mastodon*).  
 Matthew, W. D. 1909 C, 118 (*Trilophodon*).  
 Merriam, J. C. 1917 A, 439 [*Mastodon (Trilophodon)*].  
 Merrill, G. P. 1907 A, 45 (*Mastodon*).  
 Moodie, R. L. 1923 B, 224.  
 Osborn, H. F. 1903 E, 249 (M.).  
 1905 E, 931 (*Mastodon floridanum*).  
 1910 B, 348 (*Mastodon*).  
 1918 C, table (*Trilophodon*).  
 1921 A, 7 (*Trilophodon*).  
 1923 E, 2 (*Serridentinus*).  
 1926 B, 12 (*Serridentinus*).  
 Sellards, E. H. 1914 A, 162 (*Mastodon*).  
 1915 A, 135 (*Mastodon*. *This species?*).  
 1915 D, 72, 104, figs. 24, 36 [*Mastodon (Trilophodon)*]; 106, fig. 35 (*"mastodon"*. *This species?*).  
 1915 in Matson, G. C. 1915 A, 67 (*Mastodon*).  
 1916 B, 94 (*Mastodon*).  
 Spencer, J. W. 1895 A, 136 (*Mastodon*).  
 Trouessart, E. L. 1905 A, 599 (*Tetrabelodon*).  
 Upper Pliocene or Lower Pleistocene (Alachua); Florida.

**Gomphotherium fricki** (Barbour).

Barbour, E. H. 1927 A, 131, figs. 89-91 (Amebelodon).

Cook, H. J. 1928 B, 38 (Amebelodon).

Weber and Abel 1928 A, 478, fig. 307a (Amebelodon).

Pleistocene? (Early); Nebraska.

**Gomphotherium giganteum** (Osborn).

Osborn, H. F. 1921 A, 7, 10, fig. 4 (Trilophodon).

Andrews, C. W. 1922 B, 34.

Barbour, E. H. 1925 D, 111 (Tetralophodon).

Cook, H. J. 1928 B, 38 (Trilophodon).

Frick, C. 1926 B, 157 (Tetralabelodon).

Ingalls, A. G. 1926 A, 290, fig. (Trilophodon).

Osborn, H. F. 1923 E, 3 (Trilophodon).

1925 A, 10, 23, fig. (Trilophodon).

1925 B, 25, fig. 3 (Trilophodon).

Peterson, O. A. 1928 A, 111 ("Trilophodon").

Miocene or Pliocene; South Dakota.

**Gomphotherium guatemalense** (Osborn).

Osborn, H. F. 1926 B, 12, fig. 12 (Serridentinus).

Pleistocene?; Guatemala.

**Gomphotherium leidii** (Frick).

Frick, C. 1926 B, 125, 155, 169, figs. 16a-16d, 24a-24c [Trilophodon (Serridentinus)].

Upper Pliocene or Lower Pleistocene (Alachua); Florida.

**Gomphotherium ligoniferum** Cope.

Cope, E. D. 1915, in Cope and Matthew, 1915 A, pl. cxxii, figs. 3, 5; pl. cxxiv (Mastodon).

Matthew, W. D. 1915, in Cope and Matthew, 1915 A, pls. cxxii, cxxiv (Tetralophodon? sp.).

Osborn, H. F. 1923 E, 3 (Trilophodon).

Miocene (Republican River); Nebraska.

**Gomphotherium lulli** (Barbour).

Barbour, E. H. 1914 C, 213, 222, pls. iii-vi (Tetralabelodon); 217 (Megabelodon).

Barbour, E. H. 1915 A, 87, figs. 1, 2 (Tetralabelodon).

1915 B, 134, fig. 5 (Tetralabelodon).

1916 B, 253, fig. 2 (Tetralabelodon).

1917 A, 512 (Tetralabelodon, Megabelodon).

Boule and Thevenin 1920 A, 73 (Mastodon).

Frick, C. 1926 B, 147, 168 [Trilophodon (Serridentinus)].

Kunz, G. F. 1916 A, pl. opp. p. 324, fig. 6; pl. opp. p. 376 (Tetralabelodon).

Lull, R. S. 1917 B, 597, fig. 203.

Matthew, W. D. 1918 A, 201 (Megabelodon).

Osborn, H. F. 1918 C, 137 (Megabelodon); table (Trilophodon tulli).

1921 A, 7 (Trilophodon).

1925 A, 10 (Trilophodon).

Schuchert and Levene 1927 A, 352 (Trilophodon).

Pliocene (Snake Creek); Nebraska.

**Gomphotherium morrilli** (Barbour).

Barbour, E. H. 1914 B, 181, 186, pls. ix-xiii (Eubelodon).

Barbour, E. H. 1914 C, 217, 220, 222, fig. 3 (Eubelodon).

1915 A, 91 (Eubelodon).

1915 B, 134, fig. 5 (Eubelodon).

1916 B, 253, fig. 3 (Eubelodon).

1925 C, 91.

Barbour and Cook 1917 A, 172 (Eubelodon).

Cook, H. J. 1928 B, 37 (Trilophodon).

Frick, C. 1926 B, 168 (Eubelodon).

Kunz, G. F. 1916 A, 372, pl. opp. p. 324, fig. 7 (Eubelodon).

Osborn, H. F. 1918 A, 29 (Eubelodon).

1918 C, 137 (Eubelodon); table (Trilophodon).

1921 A, 10 (Eubelodon).

Peterson, O. A. 1928 A, 114 ("Eubelodon").

Pliocene (Devil's Gulch); Nebraska.

**Gomphotherium obliquidens** (Osborn).

Osborn, H. F. 1926 B, 9 (Serridentinus).

Pleistocene (Early); South Carolina.

**Gomphotherium obscurum** (Leidy).

Leidy, J. 1869 A, 244, 396, pl. xxvii, figs. 13, 15?, 16? (Mastodon).

Hay, O. P. 1902 A, 711 (Mammut).

1925 E, 383, 387 (Mastodon).

Cooper, J. G. 1875 A, 390 (Mastodon).

Cope, E. D. 1880 V, 61 (Mastodon).

Dall and Harris 1892 A, 73, 222 (Mastodon).

Frick, C. 1926 B, 142, 143 (Mastodon).

Harlan, R. 1842 B, 143 (Mastodon longirostris).

Hay, O. P. 1925 C, 24.

Lindgren, W. 1911 A, 51 (Mastodon).

Lucas, F. A. 1902 A, 555 (=Mastodon shepardii?).

1902 B, 246 (Mastodon).

Lull, R. S. 1908 A, 191 (Dibelodon).

Matthew, W. D. 1918 A, 201 (Mastodon).

Merrill, G. P. 1907 A, 45 (Mastodon).

Meyer, H. 1867 B, 69 ("Baltimore tooth").

Osborn, H. F. 1903 E, 249 (M.).

1921 A, 7 (Trilophodon).

1923 E, 2 (Serridentinus).

Schlesinger, G. 1921 A, 50, 159, 228 (Mastodon angustidens subtapiroidea).

Trouessart, E. L. 1905 A, 599 (Tetralabelodon).

Turner, H. W. 1895 A, 375 (Mastodon).

Miocene?; Maryland?

**Gomphotherium osborni** (Barbour).

Barbour, E. H. 1916 C, 522, figs. 1-4 (Tetralabelodon).

1917 A, 499, figs. 1-12 (Tetralabelodon); 512 (Mastelphas, an alternative name).

1925 C, 91, 94 (Tetralabelodon).

Osborn, H. F. 1921 A, 7 (Trilophodon).

Peterson, O. A. 1928 A, 111, 112 ("Trilophodon").

Pliocene (Snake Creek); Nebraska.

**Gomphotherium paladentatum** Cook.

Cook, H. J. 1922 A, 6, pl. v.; pl. vi, fig. 4? (Trilophodon).

1928 B, 38 (Trilophodon).

Upper Miocene?; Colorado.

**Gomphotherium petersoni** Hay.

Hay, O. P. 1928 in Peterson, O. A. 1928 A, 121.  
 Peterson, O. A. 1928 A, 111, pls. xi-xv; text-  
 figs. 21, 22 (*Serridentinus fricki*).  
 Miocene (Brown's Park); Colorado.

**Gomphotherium phippsi** Cook.

Cook, H. J. 1928 B, pls. 1-iii (*Trilophodon*).  
 Miocene (Devil's Gulch); Nebraska.

**Gomphotherium pojoaquense** (Frick).

Frick, C. 1926 B, 125, 142, 156, 157, 161, figs.  
 1a, 1b, 7b, 13, 19b, 19c, 22a, 22b, 26, 27 [*Trilophodon* (*Serridentinus*)].  
 Cook, H. J. 1928 B, 40 (*Trilophodon*).  
 Peterson, O. A. 1928 A, 112 ("Trilophodon").  
 Stock, C. 1928 D, 44.  
 Miocene (Santa Fé); New Mexico.

**Gomphotherium? præcursor** (Cope).

Cope, E. D. 1893 A, 64, pls. xviii, xix (*Dibelodon*); 57, pl. xv (*Tetrabelodon shepardii*. This species?).  
 Hay, O. P. 1902 A, 711 (*Mammut præcursor*); 712 (*M. shepardii*, in part).  
 Andrews, C. W. 1908 D, 32 (*Tetrabelodon?*).  
 Dumble, E. T. 1894 A, 559 (*Dibelodon*).  
 Freudenberg, W. 1922 A, 17 (*Mastodon*).  
 Gidley, J. W. 1903 C, 627 (*Dibelodon præcursor*, *Tetrabelodon shepardii*).  
 Hay, O. P. 1917 B, 21.  
 1925 C, 24 (*Mastodon*, *Gomphotherium*, *Dibelodon*; *Tetrabelodon dinotherioides*).  
 Lull, R. S. 1908 A, 191 (*Dibelodon*).  
 Matthew, W. D. 1909 E, 114 [*Trilophodon* (= *Gomphotherium*) *proavus*]; 116 (*Trilophodon*); 120 (*Dibelodon*).  
 Merriam, J. C. 1917 A, 435 [*Trilophodon* (*Gomphotherium*) *shepardii*]; (*Dibelodon præcursor*).  
 Montgomery, T. H. 1904 A, 57 (*Dibelodon*).  
 Osborn, H. F. 1903 E, 249 (*M.*).  
 1918 C, table (*Trilophodon*).  
 1921 A, 8 (*Trilophodon*).  
 1926 B, 11, 12 (*Serridentinus*).  
 Sellards, E. H. 1913 A, 3, pl. iv, fig. 1; pl. v, fig. 1 ("mastodon").  
 Miocene (Arikaree); Texas: Pliocene (Blanco); Texas.

**Gomphotherium precampestre** (Osborn).

Osborn, H. F. 1923 E, 3 (*Tetrabelodon*).  
 Late Tertiary?; Nebraska.

**Gomphotherium? proavus** (Cope).

Hay, O. P. 1902 A, 711 (*Mammut*).  
 Andrews, C. W. 1909 A, 349 (*Tetrabelodon*).  
 Boule and Thevenin 1920 A, 71 (*Mastodon*).  
 Dall and Harris 1892 A, 283 (*Mastodon*).  
 Dumble, E. T. 1920 A, 233 (*Trilophodon*).  
 Freudenberg, W. 1922 A, 11 (*Mastodon*).  
 Frick, C. 1926 B, 153, 168 (*Trilophodon angustidens proavus*).  
 Lucas, F. A. 1902 A, 555 (*Mastodon*).  
 Lull, R. S. 1908 A, 190 (*Tetrabelodon*).  
 Matthew, W. D. 1920 E, 233 (*Trilophodon*).  
 Osborn, H. F. 1910 B, 292 (*Trilophodon*).

Osborn, H. F. 1921 A, 6 (*Rhynchotherium*).  
 1922 F, 4 (*Miomastodon?*).

Pompeckj, J. F. 1905 A, 47 (*Mastodon*).  
 Schlesinger, G. 1921 A, 50, 63, 228 (*Mastodon angustidens proavus*).  
 Weber and Abel 1928 A, 469 (*Rhynchotherium*).  
 Zittel and Schlosser 1923 A, 631 (*Mastodon*).  
 Upper Miocene (Pawnee Creek); Colorado.

**Gomphotherium productum** (Cope).

Hay, O. P. 1902 A, 711 (*Mammut*).  
 Abel, O. 1913 B, 750 (*Tetrabelodon*).  
 1914 A, 202, fig. 160 (*Tetrabelodon*).  
 1922 C, 175, fig. 142 (*Mastodon*).  
 1925 A, 307, figs. 237 (*Serridentinus*).  
 Andrews, C. W. 1908 D, 32 (*Tetrabelodon*).  
 1922 B, 33 (*Tetrabelodon*).  
 Anonymous, 1921 A, 323 (*Trilophodon*).  
 Barbour, E. H. 1925 D, 111 (*Serridentinus*).  
 Boule and Thevenin 1920 A, 71 (*Mastodon*).  
 Freudenberg, W. 1922 A, 7 (*Tetrabelodon*).  
 Frick, C. 1926 B, 125, 126, 142, 158, figs. 1c, 5-7a, 10-15c, 19a, 22c-24. [*Trilophodon* (*Serridentinus*)].  
 Gidley, J. W. 1903 C, 634 ("Mastodon").  
 Gilbert, G. K. 1875 A, 543 ("Mastodon").  
 Hay, O. P. 1925 B, 12.  
 1925 C, 25 (*Mastodon dinotherioides*, *M. obscurus*, *M. productus*).  
 Ingalls, A. G. 1926 A, 290, fig. 6 (*Serridentinus*).  
 Lee, Stone, Gale 1915 A, pl. vi (*Trilophodon*).  
 Lucas, F. A. 1902 A, 555 (*Mastodon*).  
 Lull, R. S. 1908 A, 190 (*Tetrabelodon*).  
 Matthew, W. D. 1909 C, 116 (*Trilophodon* = *Gomphotherium*).  
 1915 B, 17, 23, fig. 7 (*Trilophodon*).  
 1918 A, 199 (*Mastodon*).  
 Merrill, G. P. 1907 A, 45 (*Mastodon*).  
 Osborn, H. F. 1903 E, 249 (*Mastodon*).  
 1903 I, 978 (*Trilophodon*).  
 1905 H, 200 (*Mastodon*).  
 1910 B, 299, 300, fig. 149 (*Trilophodon*).  
 1918 A, 26 (*Trilophodon*).  
 1918 C, table.  
 1919 D, 266 (*Trilophodon*).  
 1921 A, 6, 7, figs. 3, 4 (*Trilophodon*).  
 1923 E, 2 (*Serridentinus*).  
 1924 F, 2, 3 (*Serridentinus*).  
 1925 A, 13, 23, fig. 6 (*Serridentinus*).  
 1925 B, 26, fig. 3 (*Serridentinus*).  
 1926 B, 12 (*Serridentinus*).  
 Schlesinger, G. 1921 A, 50, 51, 63, 228 (*Mastodon*; syn. of *M. angustidens*).  
 Scott, W. B. 1913 A, 431, fig. 228.  
 Sternberg, C. H. 1907 C, 123 (*Mastodon*).  
 Stock, C. 1928 D, 43 (*Trilophodon*).  
 Weber and Abel 1928 A, 469 (*Bumolophodon*).  
 Zittel and Schlosser 1923 A, 631 (*Mastodon*).  
 Miocene (Arikaree); New Mexico, Texas, Montana.

**Gomphotherium rectidens** (Osborn).

Osborn, H. F. 1923 E, 3 (*Rhynchotherium*).  
 Middle Miocene (Pawnee Buttes); Colorado.

**Gomphotherium republicanum** (Osborn).

Osborn, H. F. 1926 B, 6, figs. 5, 6 (Serridentinus).

Lower Pliocene (Republican); Kansas.

**Gomphotherium? rugosidens** (Leidy).

Hay, O. P. 1902 A, 712 (Mammut).

Allen, G. M. 1926 A, 454.

Hay, O. P. 1923 A, 486.

Lucas, F. A. 1902 A, 555 (Mastodon).

Matson, G. C. 1915 A, 37, pls. ix, x ("mastodon").

Osborn, H. F. 1903 E, 249 (M.).

Pliocene (Bone Valley); Florida, South Carolina.

**Gomphotherium serpentirivale**, new name.

Osborn, H. F. 1921 B, 2, 4, fig. 1, a (Mastodon matthewi, in part).

1926 B, 13, fig. 11 (Rhynchotherium anguirivals).

Pliocene (Snake Creek); Nebraska.

**Gomphotherium serridens** (Cope).

Hay, O. P. 1902 A, 712 (Mammut).

Boule and Thevenin 1920 A, 71 (Mastodon).

Freudenberg, W. 1921 A, 131, 132 (Mastodon).

1922 A, 4, 5, 33, pl. i, figs. 1, 2; text-fig. 1 (Mastodon, Tetrabelodon).

Frick, C. 1926 B, 142, 156, 157, 168 [Trilophodon (Serridentinus)].

Gidley, J. W. 1903 C, 634 (Tetrabelodon. This species?).

Hay, O. P. 1925 B, 14.

1925 C, 22, 23 (Gomphotherium, Mastodon).

1927 D, 298 (Mastodon).

Lucas, F. A. 1902 A, 555 (Mastodon).

Lull, R. S. 1908 A, 190 (Tetrabelodon).

Matson and Clapp 1909 A, 137 (Mastodon).

Matthew, W. D. 1918 A, 199 (Mastodon); 200 (Zygolophodon).

Montgomery, T. H. 1904 A, 57 (Tetrabelodon serridens cimarronis).

Osborn, H. F. 1903 E, 249 (M.).

1918 C, 135 (Rhynchotherium?); table (Trilophodon).

1921 A, 8, fig. 3 (Trilophodon).

1926 B, 11, 12 (Serridentinus).

Zittel and Schlosser 1923 A, 631 (Mastodon).

Lower Pliocene (Clarendon); Texas, Mexico.

**Gomphotherium? shepardi** (Leidy).

Hay, O. P. 1902 A, 712 (Mammut shepardi, in part).

Boule and Thevenin 1920 A, 73 (Mastodon).

Dumble, E. T. 1894 A, 559 (Tetrabelodon shepardii).

Felix and Lenk 1891 A, 132.

Frech and Geinitz 1903 A, 35 (Mastodon).

Freudenberg, W. 1922 A, 6, fig. 2 (Mastodon sp.); 7, 9 (Dibelodon); 11, 12 (Mastodon); 14, fig. 3 (Mastodon obscurus).

Frick, C. 1921 A, 409.

1926 B, 142, 143, 173 (Mastodon); 139, 175 (Rhynchotherium).

Hay, O. P. 1917 B, 21.

Hay, O. P. 1923 B, 110 (Mastodon, Dibelodon).  
1925 C, 24, 25 (Mastodon, Tetrabelodon, Dibelodon).

1925 E, 383 (Mastodon).

1927 D, 301 (Anancus); 302, 308 (Mastodon); 15, 64 (Mastodon obscurus).

Kellogg, R. 1922 A, 61 (Mastodon).

Lindgren, W. 1911 A, 51 (Mastodon obscurus).

Lucas, F. A. 1902 A, 555 (Mastodon).

Lull, R. S. 1908 A, 191 (Mammut?).

Matthew, W. D. 1909 C, 120 (Trilophodon (=G.) shepardii. To Dibelodon?).

1918 A, 200 (Mastodon).

Osborn, H. F. 1903 E, 249 (M.).

1918 C, 135 (Rhynchotherium?); table (Dibelodon).

1919 C, 135 (Rhynchotherium?).

1921 A, 5, 6, fig. 2 (Rhynchotherium).

1923 E, 3 (Rhynchotherium).

Pohlig, H. 1892 B, 313 (Dibelodon rejected).

Rath, G. 1886 A, 105 (Dibelodon).

Rio, A. 1918 A, 367 (Dibelodon shepardy).

Schlesinger, G. 1921 A, 228 (Mastodon).

Trouessart, E. L. 1905 A, 599 (Tetrabelodon).

Whitney, J. D. 1879 B, 233 (Mastodon).

Yates, L. G. 1874 B, 20 (Mastodon obscurus, M. shepardii).

1903 A, 97, 99, pl. ix (Mastodon obscurus).

Zittel and Schlosser 1923 A, 631, 680 (Mastodon).

Late Pliocene or Early Pleistocene; California. The generic position of this species is doubtful.

**Gomphotherium? simplicidens** (Osborn).

Osborn, H. F. 1923 E, 3 (Trilophodon).

Middle Miocene (Pawnee Creek); Colorado.

**Gomphotherium tlaxcalae** (Osborn).

The authors cited use the name *Rhynchotherium*.

Osborn, H. F. 1917 E, 135 (R. tlaxcalae); table (tlascale).

Frick, C. 1926 B, 171 (R. tlascale).

Ingalls, A. G. 1926 A, 290, fig. (R. tlascale).

Osborn, H. F. 1918 C, 135.

1921 A, 6, fig. 2 (R. tlascale).

1925 B, 30, fig. 3 (R. tlascale).

Weber and Abel 1928 A, 469 (Rhynchotherium trascale).

Pleistocene?; Mexico: Pliocene; Texas.

**Gomphotherium willistoni** Barbour.

Barbour, E. H. 1914 B, 181, 184, pls. i, v, vi, viii, xii (Tetrabelodon).

1914 C, 216, 220, 222, figs.

1915 A, 91 (Tetrabelodon).

1915 B, 134, fig. 5 (Tetrabelodon).

1916 B, 253, fig. 1 (Tetrabelodon).

1917 A, 512 (Tetrabelodon, "Genomastodon").

Barbour and Cook 1917 A, 172 (Tetrabelodon).

Cook, H. J. 1923 B, 37 (Trilophodon).

Frick, C. 1926 B, 141, 142, 168 [Trilophodon (Serridentinus)].

Kunz, G. F. 1916 A, 372, pl. opp. p. 324, fig. 5 (Tetrabelodon).



Osborn, H. F. 1918 A, 29 (Tetrabelodon).

1921 A, 7 (Trilophodon).

Pliocene (Devil's Gulch); Nebraska.

### **Gomphotherium** sp. indet.

Buwalda, J. P. 1914 B, 307, fig. 1 (Tetrabelodon?). Miocene (Truckee beds); Nevada.

1914 C, 352 ("mastodon"). Miocene (Truckee); Nevada.

1924 A, 572 (Tetrabelodon. This genus?). Middle Neocene (Payette); Idaho.

Diller, J. S. 1896 A, 478 ("mastodon"). Pliocene, Oregon.

1902 A, 59 ("mastodon"). Pliocene, Oregon.

Frick, C. 1926 B, 166, 168. Miocene (Santa Fé); New Mexico, California, Nebraska.

Gidley, J. W. 1903 C, 634 ("Mastodon"). Upper Miocene, Texas.

Gilbert, G. K. 1875 A, 543 (Mastodon). Pliocene?; New Mexico.

Hay, O. P. 1923 A, 380. Pleistocene; Florida. 1927 D, 16, 136 (This genus?). Pleistocene; Arizona, California.

Lindren and Drake 1904 A, 3 (Mastodon). Pleistocene (Idaho); Idaho.

Matthew, W. D. 1923 A, 12 (Trilophodon?). Lower Pliocene (Upper Snake Creek); Nebraska.

Merriam, J. C. 1911 A, 189, fig. 29 (Tetrabelodon). Pliocene (Cedar Mountain); California. 1911 B, 205, 206, 209, 214, 215, 271, pl. xxxiii, figs. 46, 47 (Tetrabelodon?).

1913 E, 381 (Tetrabelodon?). Pliocene (Orindan); California.

1914 C, 646 (Tetrabelodon?).

Merriam, J. C. 1915 E, 194, 197, 203, figs. 19, 20, 38, 39 (Tetrabelodon. This genus?). Miocene (Merychippus); 226, figs. 38-39b ("mastodon"): Pleistocene? (Etchigoin); California.

1916 D, 134, fig. 3 (Tetrabelodon?). Late Tertiary; Oregon.

1917 A, 426 (Tetrabelodon?). Orinda, California; 428 (Tetrabelodon?). Rattlesnake, Oregon; 429 (Mastodon, Tetrabelodon?). Pliocene (Thousand Creek); Nevada; 431 (Tetrabelodon?). Pliocene (Ricardo); California; 437. Pliocene (Snake Creek); Kansas.

1919 A, 450, 525, 527, 548, figs. 160-162 (Tetrabelodon?). Miocene (Barstow) and Pliocene (Ricardo); California.

Osborn, H. F. 1919 D, 266, fig. 1 (Megabelodon). Pliocene; Texas.

Pan, I. 1925 A, 345, figs. 1-5 (This genus?). Pliocene?; "Lusana."

Sellards, E. H. 1913 A, pl. iv, figs. 1, 2; pl. v, fig. 1 ("mastodons").

1915 D, 106, fig. 35 (Miocene or Pliocene); Florida.

Sinclair, W. J. 1915 A, 77, 83, fig. 8. Pliocene (Snake Creek); Nebraska.

Stock, C. 1924 B, 54 (Tetrabelodon). Upper Miocene (Mint Canyon); California.

1925 A, 18 (Tetrabelodon?). Lower Pliocene (Rattlesnake); Oregon.

1928 D, 43, pl. i, figs. b-d (Trilophodon); pl. ii, figs. a, d; pl. iii, fig. b; pl. iv, figs. a-c (Trilophodon?).

Young and Cooper 1927 A, 1 (Trilophodon. This genus?). Pliocene.

### **ELEPHANTINÆ** Gill.

Gill, T. 1872 B, 13, 90.

Dietrich, W. O. 1919 A, 55 ("elephantiden").

Eaton, J. E. 1928 A, 133 ("mammoths").

Freudenberg, W. 1922 A, 38 (Elephantidæ).

Gavrilenko, A. 1924 A, 233 ("elephanten").

Hay, O. P. 1924 D, 376 ("elephants").

1927 E, 77 ("elephants").

Lull, R. S. 1921 B, 160 (Mammotinæ).

Osborn, H. F. 1906 C, 776.

1909 D, 86, 87.

1910 B, 558.

1918 C, 135.

1921 A, 1 (Loxodontinæ, Mammotinæ, Elephantinæ).

Osborn, H. F. 1921 E, 234 (Euelephantinæ, Mammotinæ, Elephantinæ).

1922 B, 1 (Mammotinæ).

1924 G, 1, 2 (Elephantinæ, Mammotinæ, Loxodontinæ).

1925 A, 3 ("elephants").

Scott, W. B. 1928 A, 380 ("elephants").

Stefanescu, S. 1918 A, 739 ("elephants").

1919 F, 148 ("elephants").

1921 A, 929 ("elephants").

1921 B, 1054 ("elephants").

1921 C, 1516 ("elephants").

1921 D, 1669 ("elephants").

Weber and Abel 1928 A, 471.

### **ELEPHAS** Linnaeus. Type *E. maximus* Linnaeus.

Hay, O. P. 1902 A, 712.

Abel, O. 1909 D, (226).

1910 B, (186) ("mammoth").

1912 F, 242 ("elephant").

1913 B, 750.

1914 C, 305, fig. 1.

1919 A, 828.

1920 A, 439, fig. 667.

1921 A, 259 ("elefanten").

1925 A, 288.

Adams, C. C. 1905 A, 54 ("mammoth").

Adloff, P. 1910 B, 232 ("elefant").

1920 B, 534.

Aichel, O. 1918 A, 502.

Aichel, O. 1918 B, 1-109, pls. i-v; text-figs. 5-20. 1926 A, 43.

Airaghi, C. 1917 A, 195.

Altmann, F. 1925 A, 108.

Ameghino, F. 1889 A, 1011.

1902 A, 41.

1902 B, 9.

1902 D, 427.

Anderson, R. J. 1902 A, 1121, fig. 16.

1905 A, 333, fig. 28.

1909 A, 745.

1912 A, 918.

1912 B, 428 ("elephant").

1914 A, 534 ("elephant").

- Andrews, C. W. 1903 E, 226.  
 1904 A, 111.  
 1907 C, 302.  
 1908 A, 399.  
 1908 D, figs. 4, 6, 23-31.  
 1922 B, 35.  
 1924 A, 307.  
 Anthony, R. 1912 A ("éléphant").  
 Arldt, T. 1907 D, 652.  
 1911 A, 215 ("elefanten").  
 Baird, S. F. 1876 A, cviii ("elephants").  
 Baker, F. C. 1920 A, 458.  
 Barbour, C. A. 1898 A, 264, fig. 1 ("mammoth").  
 Beddard, F. E. 1902 A, 218.  
 Beyer, H. 1908 A ("elefant").  
 1909 A, 29 ("elefant").  
 Blanford, W. T. 1876 A, 286.  
 Boas, J. E. V. 1908 A, 197 ("elefant").  
 Bükér, H. 1927 A, 38.  
 Bolck, L. 1913 A, 120.  
 1922 A, 124.  
 Botti, U. 1901 A, 438.  
 Boule, M. 1902 B, 913.  
 Bronn, H. G. 1838 A, 1239, 1307.  
 1849 A, 703.  
 Cabrera, A. 1927 A, 441, figs. 1, 2 ("elefante").  
 Camper, P. 1780 A, 220 ("elephas").  
 Carnot, A. 1892 A, 1190 ("elephant").  
 Carus, V. 1875 A, 140.  
 Carus and Engelmann 1861 A, 1732.  
 Clark and Sonntag 1926 A, 454, 466.  
 Cleland, J. 1863 B, 300 ("elephant").  
 Codrington, T. 1908 A ("elephant").  
 Cook, H. J. 1927 C, 241 ("Elephas").  
 Cooper, C. F. 1923 B, 263, figs. 1, 2 ("elephant").  
 1924 A, 108.  
 Cope, E. D. 1891 N, 62, 63, 84, figs. 32b, 56.  
 Cummins, W. F. 1893 A, 184 ("elephant").  
 Cuvier, F. 1825 A, 221, pl. xci ("éléphant").  
 Cuvier, G. 1803 A, 166 ("éléphant").  
 1805 A.  
 1806 D ("éléphant").  
 Dall and Harris 1892 A, 284.  
 Dana, J. D. 1863 C, 336 ("elephant").  
 Deninger, K. 1913 A, 295 ("elefant").  
 Depéret, C. 1907 B.  
 1923 A, 520 ("éléphants").  
 Depéret and Mayet 1923 A.  
 Desor, E. 1855 A, 218 ("elephants").  
 Diener, C. 1912 A, 216 ("elefanten").  
 Dietrich, W. O. 1913 A, 49.  
 1916 A.  
 1919 A, 47, figs. 3, 5.  
 1921 A, 595.  
 Dollo, L. 1889 I, 682.  
 Doran, A. H. G. 1878 A, 430, pl. ix.  
 Eales, N. B. 1926 A, 491, pls. i-xii.  
 1926 B, 361 ("elefant").  
 Eichwald, E. 1835 A, 695.  
 Eimer, G. H. T. 1901 A, 257 ("elefant").  
 Ewart, J. C. 1904 B, 143 ("elephant").  
 Fairchild, H. L. 1887 A, 20.  
 Falconer, H. 1857 C, 81.  
 1863 A, 56 (Euulephas).  
 Fischer, E. 1903 A, 695, 718.  
 Fischer, J. B. 1829 A, 404.  
 Foote, J. S. 1916 A, 109, 130, pls. xii, xiii.  
 Foster, J. W. 1857 A, 361.  
 Fraas, E. 1900 A, 38.  
 Frech, F. 1907 A, 306 ("elephante").  
 Freudenberg, W. 1926 A, 68.  
 Gaudry, A. 1906 A, 8 ("éléphants").  
 Gawrilenko, A. 1924 A, 223, fig. 3.  
 Geikie, J. 1914 A, 321.  
 Geinitz, E. 1903 A.  
 1904 A.  
 Gervais, P. 1852 A, 35.  
 1859 A, 61.  
 Giebel, C. G. 1855 A, 78, pl. xxxiv.  
 1883 A, pls. xxxv, xl, xli.  
 Goethe and Alton 1824 A, 325, pls. xxxiii-xxxv.  
 Gottlieb, H. 1914 A, 190.  
 Grant, E. 1842 A, 771.  
 Gregory, W. K. 1903 A, 387.  
 1912 F, 275, fig. 1 ("elephant").  
 1920 A, 183, 244, fig. 146.  
 Haworth, E. 1897 A, 280 ("elephants").  
 Hay, O. P. 1910 D, 372 ("elephant").  
 1912 D, 716.  
 1914 A, 392.  
 1919 A, 311 ("elephants").  
 1923 A, 484.  
 1925 D, 245.  
 1928 B, 238 ("elephants").  
 Hay, R. 1896 A, 34.  
 Heilprin, A. 1887 A, 417 ("elephant").  
 Herz, O. 1902 A, 137, pls. i-vii.  
 Hoernes, R. 1886 A, 686.  
 1912 A, 663.  
 Holmes, F. S. 1870 A, 17, 31 ("elephant").  
 Hoyer and Babik 1924 A, 455.  
 Hue, E. 1907 A, pls. 1, lxxxv, xcix, cxiii, cxxxvii, cxxxviii, cl, clxv, clxxviii.  
 Huxley, T. H. 1863 E, 555.  
 1863 F, 608, fig. 56.  
 1870 F, 542.  
 1881 A, 453 ("elephants").  
 Kampfen, P. N. 1905 A, 619, fig. 80.  
 Kingsley, J. S. 1925 A, 193, 217, 300, figs. 229, 323 ("elephant").  
 Knight, W. C. 1903 A, 828.  
 Knottnerus-Meyer, T. 1907 A, 101.  
 Kollmann, J. 1884 A, 184 ("elephanten").  
 Köstlin, O. 1844 A.  
 Kunz, G. F. 1916 A, 516.  
 Laloy, L. 1907 A, 535 ("elephant").  
 Larger, R. 1913 A, 708 ("elephants").  
 Lartet, E. 1859 A, 469, 498.  
 Lataste, F. 1887 A, 270 ("éléphant").  
 Leche, W. 1887 A, pl. xcvi.  
 1900 A, 1031.  
 Le Damany, P. 1903 B, 275 ("éléphant").  
 1903 G, 141, fig. 6 ("éléphant").  
 1906 A, 54, figs. 11, 12 ("éléphant").  
 1906 B, 164 ("éléphant").  
 Leunis and Ludwig 1883 A, 233.  
 Leuthardt, F. 1891 A, 95.  
 Lindgren, W. 1911 A, 52.  
 Lönnberg, E. 1907 B, 56, figs. 1-3 ("elefant").  
 Lull, R. S. 1908 A, 195.  
 1909 A, 641 ("elephant").  
 1917 B, 301, 588, 592, fig. 191.  
 Lydekker, R. 1903 E, 169, fig. 1 ("elephants").  
 1907 B, 68.  
 1907 E, 676.

- Macloskie, G. 1884 A, 215, fig. 115.  
 Maddren, A. G. 1905 A.  
 Martins, C. 1887 A, 68, 91 ("éléphant").  
 Matsumoto, H. 1923 A, 121.  
 1926 F, 43 (Elephas, Parelephas); 45 (Archidiskodon).  
 Matthew, W. D. 1915 A, 187, 255.  
 1915 B, 6, 24.  
 1915 K, 403.  
 1916 G, 485, fig. ("Elephas").  
 1923 F, 520.  
 1924 E, 748.  
 Mayer, C. 1847 A, 1-88.  
 Mayet and Roman 1923 A.  
 Meckel, J. F. 1825 A.  
 Merriam, J. C. 1906 D, 249.  
 1917 A.  
 Meunier, S. 1903 A, 776 ("éléphants").  
 Meyer, H. 1867 C, 785.  
 Miller and Dieck 1900 A, 385, figs. 1-4.  
 Mitchell, W. 1904 A, 284, figs. 1-34.  
 Neuville, H. 1919 A, 193 ("elephant").  
 Newton, E. T. 1891 A, 45.  
 Osborn, H. F. 1905 D, 315 ("elephants").  
 1907 G, 188.  
 1907 K, 815 ("elephants").  
 1909 D, 82, 83, 87.  
 1909 E, 140 ("elephant").  
 1910 A, 213.  
 1910 B, 613.  
 1912 G, 250.  
 1916 B, 538.  
 1917 B, 269, 270, fig.  
 1924 G, 1, 4, 5 (Elephas, Mammonteus; Parelephas, type E. jeffersonii=E. boreus).  
 1925 A, 6 (Elephas, Parelephas); 10 (Mammut).  
 1925 B, 28, 32 (Elephas, Mammonteus, Archidiskodon, Parelephas).  
 1925 D, 532 (Archidiskodon).  
 1926 A, 188 ("elephant").  
 1928 A, 672 (Elephas, Archidiskodon).  
 Owen, R. 1845 E, 125 ("elephant").  
 1868 A, 878, 879, figs. 289-292.  
 Palmer, T. S. 1904 A, 255, 943.  
 Pander and Alton 1821 B, 3, pls. i, ii ("elephant").  
 Paulli, S. 1900 A, 235, fig. 44.  
 Pavlow, M. 1909 A, 171.  
 1910 A.  
 Petronievics, B. 1921 A, 102.  
 Pilgrim, G. E. 1913 A, 295.  
 Pohle, H. 1921 A, 116.  
 Pohlig, H. 1892 B, 233 (List of nominal species).  
 Pompeckj, J. F. 1905 A, 48.  
 Pontier, G. 1911 A, 463.  
 Retterer, E. 1919 D, 740 ("éléphants").  
 Retzius, A. 1837 A, 488.  
 1849 A, 654.  
 Reynolds, S. H. 1897 A, 434, 474, figs. 96, 97.  
 Röse, C. 1892 F, 403 ("elephanten").  
 Rogers, A. F. 1924 A, 544 ("elephant").  
 Rogers, H. D. 1844 A, 258 ("elephant").  
 Ruge, G. 1906 A, 496, figs. 1-3.  
 Rutland, J. 1901 A, 21032 ("mammoth").  
 Schlesinger, G. 1912 A.  
 Schlesinger, G. 1916 A, 215.  
 Schlosser, M. 1911 A, 136.  
 Schmidt, E. 1872 A, 233, 237 ("elephanten").  
 Schmidtgen, O. 1926 A, 62, figs. 1-3.  
 Scott, W. B. 1913 A, 437, 680.  
 1916 A, 118, 120 ("elephants").  
 Seeley, H. G. 1872 A, 278 ("elephant").  
 Shumek, B. 1908 A, 923.  
 Shumard, B. F. 1863 A, 141.  
 Smith, G. E. 1915 A, 340, fig. 1; 425, 501 ("elephant").  
 1916 A, 593, fig. 2 ("elephant").  
 1916 B, xx ("elephant").  
 Smith and Packard 1919 A, 102, 104 ("mammoth").  
 Soergel, W. 1913 A, 1.  
 1914 A, 20.  
 1915 A, 179.  
 1915 B, 1-65.  
 1921 A.  
 Spencer, J. W. 1898 A, 27 ("elephant").  
 Spinden, H. J. 1916 A, 592 ("elephant"), fig. 1.  
 Stofanescu, S. 1913 A, 611 ("éléphant").  
 1913 B, 735.  
 1913 C, 883.  
 1914 A, 1043 ("éléphants").  
 1915 A, 100 ("éléphants").  
 1918 A, 739.  
 1919 A, 97.  
 1919 B, 464.  
 1919 C, 906.  
 1919 D, 1208.  
 1919 E, 1329.  
 1920 A, 811.  
 1921 B, 1056.  
 1921 D, 1689.  
 Steinman, G. 1907 A, 484.  
 Strecker, C. 1887 A, 310 ("elephant").  
 Taschenberg, O. 1899 A, 4542.  
 Thomson, A. 1902 A, 104 ("elephant").  
 Tims, H. W. M. 1903 A, 144, fig. 4b.  
 1905 B, 1787, fig. 6.  
 Tozzer, A. M. 1916 A, 502 ("elephant").  
 Trouessart, E. L. 1892 A, 189.  
 1905 A, 602.  
 Troxell, E. L. 1915 B, 479.  
 Upham, W. 1902 A, 149 ("mammoth").  
 Virchow, H. 1910 B, 77 ("elefant").  
 1910 C, 131 ("elefant").  
 1910 D, 251 ("elefant").  
 Wallace, A. R. 1876 A, i, 138; ii, 227.  
 Weber, M. 1904 A, 723, 724 (Elephas); 723 (Euelephas); 723, 725 (Loxodon); 717, figs. 509, 513 (E. indicus).  
 Weber and Abel 1928 A, xviii, 446, 458, 471, figs. 277-286.  
 Weber and Burlet 1927 A, figs. 35, 115.  
 Wiele, C. van de 1903 A, 593 ("mammoth").  
 Wilder, B. 1872 B, 315, 320.  
 Williston, S. W. 1902 J, 196.  
 Woodward, A. S. 1903 A, 257 ("mammoth").  
 1923 C, 55.  
 Woodward, H. 1904 B, 158.  
 Wright, G. F. 1908 A, 34 ("elephants").  
 Wüst, E. 1901 A, 246.  
 Ziegler, H. F. 1924 A, lx ("elephanten").  
 Zietzschmann, O. 1917 A, 442, pl. xxv.

Zittel and Schlosser 1911 A, 539.  
1923 A, 625, 632, figs. 768.

### **Elephas boreus Hay.**

Unless otherwise indicated the authors, as cited, call this species *Elephas primigenius*. Some of the identifications may be erroneous.

Hay, O. P. 1922 D, 5, pl. ii, figs. 2, 3; text-figs. 5, 6 (*E. boreus*).

Abel, O. 1908 D, (212) (*E. columbi*).

1912 F, 574, fig. 445 (*E. columbi*).

1914 A, 198, 204, figs. 156, 157, 166, 171 (*E. columbi*).

1919 A, 797, fig. 601 (*E. columbi*).

1922 C, 22, fig. 22 (*E. columbi*).

1925 A, 282, 290, figs. 209-211, 218 (*E. primigenius*?; 288, fig. 216 (*E. columbi*)).

Anderson, N. C. 1905 A ("mammoth").

Andrews, C. W. 1922 B, 34; 43 (*E. jeffersoni*).

Anonymous 1907 A, 5 (*E. columbi*).

Arsene and Marty 1923 A, 5 (*E. primigenius*. This species?).

Baker, F. C. 1920 A, 458 (in part).

Barbour, E. H. 1903 A, 172, fig. 107 ("mammoth").

1914 B, 181.

1914 C, 222.

1915 B, 129.

1924 A, 11 (*E. jeffersoni columbi*).

1925 A, 21 (*E. jeffersoni columbi*; *E. primigenius*).

1925 D, 111 (*Parelephas jeffersoni*).

Calvin, S. 1897 A, 21 (*E. primigenius*, *E. americanus*).

1909 B, 351, pl. xxiii, fig. 2.

1911 A, 211, pl. xx.

Carman, J. E. 1917 A, 410.

Cook, H. J. 1928 C, 44, figs. (*E. jeffersoni*?).

Cope, E. D. 1895 G, 599.

Crook, A. R. 1926 A, 13 (*E. primigenius boreus*).

1927 A, 24, fig. (*E. primigenius*).

1927 B, 288-299, figs. (*E. primigenius boreus*).

DeKay, J. E. 1842 C, 101, pl. xxxii, fig. 2 (*E. americanus*).

Dietrich, W. O. 1912 A, 74 (*E. columbi*).

1916 A, 50, 76, 77 (*E. columbi*).

Diller, J. S. 1906 A, 6, 11 ("elephants." This species?).

Dumble, E. T. 1894 A, 564. (This species?).

Felix and Lenk 1891 A, 126, 127, 131. (This species?).

Fenneman, N. M. 1916 A, 158.

Fischer, J. B. 1829 A.

Freudenberg, W. 1922 A, 39.

Frick, C. 1926 B, 165 (*E. columbi*).

Gass and Pratt 1883 A, 177.

Gervais, P. 1859 A, 365.

Gidley, J. W. 1926 C, 484 (*E. primigenius*?).

1927 A, 43.

Gregory, W. K. 1907 A, 5 (*E. columbi*).

Hartnagel and Bishop 1921 A, 70, 71 (*E. columbi*, *E. jeffersonii*?; 79, pl. xvii (*E. boreus*=*E. jeffersonii*)).

Haug, E. 1911 A, 1873, 1887 (*E. primigenius*).

Hay, O. P. 1887 A, 53, 54 ("elephant").

1909 G, 893 (*E. primigenius*, *E. columbi*).

Hay, O. P. 1912 D, 718, figs. 63, 64.

1914 A, 26, 34, 74, 395, 404, 406, pl. liv, fig. 6; pl. lv, fig. 2; pl. lvi, fig. 2; pl. lviii, figs. 2, 3; text-figs. 122, 133.

1918 B, 10.

1918 C, 346.

1920 A, 361 ("elephants").

1920 B, 92, 136, pl. iii, fig. 16; pl. ix, figs. 1-7; pl. x, figs. 3-7; pl. xi, figs. 1-6.

1922 A, 446.

1922 D, 5, pl. ii, figs. 2, 3; text-figs. 5, 6 (*E. boreus*).

1922 F, 98.

1923 A, 484.

1924 D, 376 (*E. boreus*, *E. primigenius*).

1925 A, 5 (*E. boreus*).

1926 B, 159 (*E. boreus*).

1926 E, 388, 390 (*E. boreus*).

1927 D, 302, 305.

1928 B, 237 (*E. boreus*).

1928 C, 425, 427 (*E. boreus*).

Hollister, N. 1922 A, 271 (*E. borealis*).

Ingalls, A. G. 1926 A, 290 (*Parelephas jeffersonii*).

Kermode, F. 1916 A, 21.

Lacépède and Cuvier 1808 A, 332 ("mammoth").

Lane, A. C. 1906 A, 553 ("mammoth").

Le Conte, J. 1832 B, 2.

Louderback, G. D. 1907 A, 209, figs. ("mammoth").

Lucas, F. A. 1902 A, 554 ("mammoth").

1906 B, 157, 158.

1908 B, 443.

Lull, R. S. 1908 A, 197 (in part).

1917 B, 601 (in part).

Maddren, A. G. 1905 B, 746 (*E. jacksoni*. This species?).

Martin, H. T. 1924 A, 274 (*E. primigenius*. This species?).

Mather, W. W. 1838 A, 362, fig. B. (*E. primigenus*).

Matsumoto, H. 1926 F, 43 (*E. jeffersoni*).

Matthew, W. D. 1907 C, 5 (*E. columbi*).

1915 B, 6, 10, fig. 3?

1918 A, 201.

1921 G, 661 (*E. jacksoni*).

1925 A, 97 (*E. jeffersonii*. This species?).

Merriam and Stock 1925 A, 10 (*E. primigenius*. This species?).

Newcombe, C. F. 1915 A, 32, 33.

Osborn, H. F. 1905 H, 226 (in part).

1905 I, 111, pl. xii, fig. 1 ? (in part).

1907 K, 834, fig. (*E. columbi*).

1909 D, 125 (in part).

1910 A, 204.

1910 B, 455, fig. 196 (*E. columbi*).

1912 G, 251.

1915 C, 263 (*E. columbi*).

1918 C, 135 (*E. jeffersonii primigenius*).

1921 A, 14, 15 (in part).

1922 B, 11, figs. 10, 11 (*E. jeffersonii*).

1923 A, 21 (*E. jeffersonii*).

1924 G, 2, fig. 1 [*E. (Parelephas) jeffersonii*].

1925 A, 19, 22, 23, frontispiece (*Parelephas jeffersonii*).

1925 B, 29, 32, fig. 3 (*Parelephas jeffersonii*).

- Osborn, H. F. 1925 D, 539 (*Parelephas jeffer-sonii*).
- Pratt, W. H. 1876 A, 98.
- Scharff, R. F. 1911 A, 78 (in part).
- Schlesinger, G. 1912 A, 174 (*E. columbi*).
- Sellards, E. H. 1919 A, 74 ("elephant").
- Shimek, B. 1910 A, 138, 139.
- 1910 B, 316.
- Smith, B. 1914 B, 68.
- Stauffer, C. 1926 A, 1 (*E. boreus*).
- Sternberg, C. H. 1898 B, 169.
- Stock, C. 1925 A, 113 (*E. primigenius*. This species?).
- Warren, J. C. 1853 A, 377.
- Woodward, A. S. 1910 C, 12 (*E. columbi*).
- Zittel and Schlosser 1923 A, 632 (*E. jeffer-soni*).
- Pleistocene; Ohio, Indiana, Illinois, Michigan, Arizona, Nevada, New Mexico, Idaho, Oregon, South Dakota.
- Elephas boreus progressus* (Osborn).**
- Osborn, H. F. 1924 G, 7 (*Parelephas jeffer-sonii progressus*).
- 1925 B, 32 (*Parelephas jeffer-sonii progres-sus*).
- Pleistocene (Upper?); Ohio.
- Elephas columbi* Falconer.**
- Hay, O. P. 1902 A, 713.
- Abbott, C. C. 1881 A, 485 (*E. americanus*. This species?).
- Abel, O. 1914 A, 204, fig. 172.
- 1922 C, 23, fig. 23.
- 1926 B, 81.
- Airaghi, C. 1917 A, 197-199.
- Allen, G. M. 1926 A, 454.
- Ameghino, F. 1897 B, 264.
- Andrews, C. W. 1908 D, 33.
- 1922 B, 34.
- Anonymous 1907 A, 5.
- 1910 A, 198 (This species?).
- Antevs, E. 1925 A, 75 (This species?).
- Arsène and Marty 1923 A, 5, 6, 14.
- Aughey, S. 1876 A, 254 (*E. americanus*. This species?).
- Baker, F. C. 1920 A, 458.
- Balch, E. S. 1917 A, 481.
- Barbour, E. H. 1913 A, 58, pls. i-ii; text-fig. 1.
- 1914 A, 181.
- 1914 C, 222.
- 1915 B, 129.
- 1925 D, 95, 96, 107, figs. 58, 61.
- 1927 A, 133.
- Beddard, F. E. 1902 A, 226 (*E. columbianus*).
- Billings, E. 1863 A, 135, figs. 1-5 (*Euelephas jacksoni*. Species doubtful).
- 1863 B, 475 (*Euelephas jacksoni*. Species doubtful).
- Blake, C. C. 1862 A, 58.
- 1862 B, 56, figure.
- Blake, W. P. 1866 A, 290 (This species?).
- Boule, M. 1923 A, 410.
- Bringier, L. 1921 A, 22 ("mammoth." This species?).
- Brown, B. 1912 C, 167.
- Bryan, K. 1927 A, 35, pl. iv.
- Buckley, S. B. 1874 A, 64 ("mammoth." This species?).
- Cahn, A. R. 1922 A, 23.
- Calvin, S. 1909 A, 137.
- 1909 B, 351, 355, pl. xiv, fig. 3.
- 1910 A, xii ("elephant").
- 1911 A, 211, 212 (*E. indianapolis*, *E. mis-sissippiensis*).
- Carman, J. E. 1917 A, 409.
- Chamberlin, R. T. 1918 A, 35 ("columbian ele-phant").
- Clayton, J. E. 1864 A, 171 ("elephant." This species?).
- Coleman, A. P. 1904 A, 351-353, 364, 366, 367 ("mammoth").
- 1905 A, 482 ("mammoth").
- Condon, T. 1871 A, 470 ("mammoth").
- 1902 A, 154, pl. xxx ("mammoth").
- 1910 A, 132, pl. xxx ("mammoth").
- Conrad, T. A. 1838 A, x ("elephant." This species?).
- Cook, H. J. 1912 D, 45 (This species?).
- 1914 A, 47, pl. i.
- 1925 A, 460.
- 1927 A, 117 ("mammoth").
- 1927 C, 247.
- Cooper, J. G. 1875 A, 390 (*E. americanus*).
- Cope, E. D. 1869 E, 178.
- 1877 K, 25, pl. lxx, fig. 4 (*E. primigenius columbi*).
- 1894 A, 68 (*E. primigenius*).
- Couper, J. H. 1843 A, 33 ("mammoth").
- Dall, W. H. 1896 A, 854.
- Dall and Harris 1892 A, 264, 266.
- Darton, N. H. 1915 A, 20 ("mammoth").
- Dawson, J. W. 1863 F, 914 (*Euelephas jack-soni*. This species?).
- 1872 B, 403 (*Euelephas jacksonii*).
- 1872 C, 99 (*Euelephas jacksonii*).
- 1894 D, 3 (*E. jacksoni*. This species?); 4 (*E. columbi*?).
- Deeley, R. M. 1913 A, 14, tab. ("elephant").
- De Gregorio, A. 1916 A, 104.
- Deussen, A. 1924 A, 108.
- Diener, C. 1912 A, 205.
- Digby, B. 1926 A, 30.
- Dopp, K. E. 1904 A, 22 ("mammoth." This species?).
- Drayton, J. 1802 A, 39, pl., fig. 5 ("ele-phants?").
- Edwards, A. M. 1866 A, 1, pl. i, figs. 1-5; pl. ii.
- Emmons, E. 1852 A, 96 ("elephant").
- 1860 A, 242, fig. 207 ("elephant").
- Fairchild, H. L. 1916 A, 247 ("mammoth").
- Falconer, H. 1857 C, 84 (*Euelephas*).
- 1863 A, 43, 49, pl. i; pl. ii, fig. 1.
- Felix and Lenk 1891 A, 126.
- Figgins, J. D. 1928 A, 82 ("columbi").
- Finlay, G. I. 1916 A, 11.
- Foster, J. W. 1873 A, 57 ("elephant").
- Fruch and Geinitz 1903 A, 34, 36.
- Freeman, O. W. 1926 A, 477 (*E. primigenius*).
- Freudenberg, W. 1921 A, 17, 138.
- 1922 A, 4, 11, 28, 43, 69, pl. viii, fig. 1; text-fig. 25 (*E. columbi*); 43 (*E. primi-genius*).
- Furlong, E. L. 1904 A, 54 (*Elephas*, sp.?).
- 1906 A, 243 (*Elephas*, sp.?).
- 1925 A, 139 (This species?).

- Gawwilenko, A. 1924 A, 226, 234, 239.  
 Gervais and Ameghino 1880 A, 111 (E. colombi).  
 Gidley, J. W. 1912 C, 19.  
 1913, in Matson and Sanford 1913 A, 142.  
 1915 D, 19 (E. primigenius?); 20 (E. columbi).  
 1925 A, x ("mammoth").  
 1926 B, 310 ("mammoth").  
 1926 D, 240 ("mammoth").  
 1927 A, 48.  
 1927 E, 274.  
 Gidley and Loomis 1926 A, 262 ("mammoth").  
 Gilbert, J. Z. 1910 B, 46, lower right fig., 48.  
 Gilmore, C. W. 1908 A, 30.  
 Gregory, H. E. 1917 A, 82 ("Elephas." This species?).  
 Gregory, W. K. 1907 A, 5.  
 Hager, A. D. 1861 A, 934, fig. 339 ("elephant").  
 Harlan, R. 1842 B, 143 ("elephant").  
 Hartnagel and Bishop 1921 A, 72, pls. xiv, xv.  
 Haug, E. 1911 A, 1886, 1887.  
 Hay, O. P. 1909 G, 893.  
 1910 D, 374.  
 1912 B, 7, fig. 3.  
 1912 D, 734, pls. xxii-xxvi; text-fig. 70.  
 1914 A, 26, 410, pls. lxi-lxv.  
 1917 E, 45.  
 1918 B, 10.  
 1919 B, 378.  
 1919 C, 106.  
 1919 D, 366, 372.  
 1920 A, 361 ("elephants").  
 1920 B, 104, 128.  
 1921 A, 604.  
 1921 B, 403.  
 1922 D, 5, text-figs. 9, 10.  
 1922 F, 97.  
 1923 A, 484.  
 1923 B, 116.  
 1924 D, 376.  
 1925 C, 32, pl. iv, fig. 5.  
 1925 D, 242.  
 1926 B, 154.  
 1926 C, 2.  
 1926 E, 390.  
 1927 C, 280 ("mammoth").  
 1927 D, 301, 302, 305.  
 1928 B, 237.  
 1928 C, 425, 428.  
 Hay, R. 1890 A, 42 ("Elephas").  
 Hayden, F. V. 1871 A, 99 (E. americanus. This species?).  
 Henry, J. 1869 A ("elephant." Mastodon?).  
 Hitchcock, E. 1861 B, 176 (Elephas primigenius).  
 Hodge, E. T. 1925 A, x ("mammoth").  
 Holland, W. J. 1899 A, 233 ("mammoth").  
 1909 A, 455.  
 Holmes, F. S. 1860 A, vii ("elephas").  
 Holmes, W. H. 1903 A, 244, pl. ix (E. primigenius).  
 1925 A, 237.  
 Holsinger, J. M. 1885 A, 147 (E. primigenius).  
 Howorth, H. H. 1893 B, 94.  
 1905 A, xi, 94 ("elephant").  
 Hrdlička, A. 1918 A, 26.  
 Jaques, H. E. 1922 A, 66-68, figs. 5b-5c.  
 Kermodé, F. 1916 A, 21.  
 Kunz, G. F. 1916 A, pl. opp. p. 324, fig. 10.  
 Lartet, E. 1859 A, 505.  
 Le Conte, J. 1882 B, 2 (E. americanus).  
 Lee, W. T. 1907 B, 215.  
 Lee, Stone, Gale 1915 A, 10.  
 Leidy, J. 1869 A, 252, 397.  
 1873 G, 416.  
 1889 D, 17, pl. iii, figs. 6-9 (E. americanus, or E. columbi).  
 Lindgren, W. 1901 A, 583, 769.  
 1911 A, 51 (E. americanus, E. columbi).  
 Loomis, F. B. 1924 C, 503, 506.  
 1925 D, 436 ("mammoth").  
 Louderback, J. D. 1907 A, 205 ("mammoth." This species?).  
 Lucas, F. A. 1901 A, 307.  
 1901 I, 354, 356.  
 1901 J, 181.  
 1902 A, 554.  
 1902 B, 247, 267.  
 1906 B, 158, 159, 165, pls. xxxviii, xxxix, xl.  
 1908 B, 443.  
 Lull, R. S. 1908 A, 196, fig. 27.  
 1909 A, 651, 673, 674, figs. 7, 22.  
 1914 E, 63, 68, pl. i, fig. 1; pl. ii, fig. 9.  
 1917 B, 601.  
 1921 B, 175.  
 Lydekker, R. 1910 F, 663.  
 M'Clure, F. 1904 A, 60, fig. (E. primigenius).  
 McCormack, E. C. 1914 A, 10, 13 ("mammoth").  
 1920 A, 15, 16 (Elephas); 17 ("mammoth").  
 MacCurdy, G. G. 1916 A, 61.  
 1917 A, 261.  
 McGee, W. J. 1889 A, 303 ("elephant").  
 1891 B, 400 ("american elephant," species doubtful).  
 Mackie, S. J. 1863 G, 475 (Euelephas jacksoni).  
 Maddren, A. G. 1905 A, 7.  
 1905 B, 746.  
 Manigault, G. E. 1887 A, 130 ("elephant").  
 Mantell, G. A. 1839 A, 150, fig. 26 ("elephant").  
 Mather, W. W. 1838 A, 362, fig. A (E. jacksoni. Species not determinable).  
 Matson and Clapp 1909 A, 136, 137.  
 Matthew, W. D. 1902 F, 318 (E. primigenius columbi).  
 1915 B, 9, 10, figs. 3, 4.  
 1915 K, 410 ("columbian mammoth").  
 1918 A, 201, 227.  
 Mercer, H. C. 1895 B, 393 ("elephant").  
 Merriam, J. C. 1901 A, 313 (E. primigenius).  
 1918 D, 520 (This species?).  
 Meyer, H. 1872 B, pl. vii, figs. 7, 8.  
 Miller, B. L. 1912 A, 5 (This species?).  
 Miller, L. H. 1912 A, 73, 78, 81 (Elephas sp.).  
 Miller and Stephenson 1912 A, 46, 50, 55 ("elephant").  
 Mitchell, E. 1823 A, 347 ("elephant." This species?).  
 Mitchell, S. L. 1826 A, 10 ("elephant").  
 Newberry, J. S. 1873 F, 87 ("elephant").  
 Osborn, H. F. 1903 E, 249.  
 1905 D, 316 ("columbian elephant").  
 1905 E, 931.  
 1905 H, 226.  
 1905 I, 110, 111, pl. xii, fig. 2.  
 1907 B, 255, fig. 1.

- Osborn, H. F. 1909 D, 125.  
 1910 B, 613, figs. 189, 190.  
 1918 C, 135 (Euelephas).  
 1921 A, 14.  
 1921 E, 233.  
 1922 B, 2, 11, figs. 1-3 (E. columbi); 13, figs. 11-12 (E. jeffersonii).  
 1924 H, 3, fig. D (Parelephas jeffersonii).  
 1928 A, 673 (Archidiskodon).
- Pavlov, M. 1909 A, 174.  
 1910 A, 28.
- Perkins, H. C. 1842 B, 57 ("elephant." This species?).
- Perkins, G. H. 1910 B, 8 ("elephant").
- Pohlig, H. 1889 A, 247, fig. 107.
- Reagan, A. B. 1903 A, 88 (E. primigenius columbia); 89 (E. primigenius).
- Rhoads, S. N. 1903 A, 236.
- Richardson, G. B. 1907 A, 32.  
 1909 A, 44.  
 1915 A, 9.
- Riggs, E. S. 1915 A, 393, pl. lxviii.
- Rio, A. 1918 A, 367.
- Russell, I. C. 1884 A, 460 ("elephant").  
 1885 A, 238 ("elephant or mastodon").
- Scharff, R. F. 1911 A, 83, 87, 153.
- Schlesinger, G. 1912 A.
- Schmidt, E. 1872 A, 251, 254 ("Elephas").
- Schuchert, C. 1915 A, 958.
- Scott, W. B. 1913 A, 195, 197, 198, 427, figs. 113, 114.
- Sellards, E. H. 1915 C, 8.  
 1915 D, 76, 80.  
 1916 B, 102.  
 1916 C, 130, 139, 140, 150, 158, pl. xxv, fig. 1.  
 1916 D, 616.  
 1916 E, 16.  
 1916 F, 7, 9.  
 1917 A, 250 ("elephant").  
 1919 A, 73 ("Elephas").
- Shimek, B. 1902 A, 285 (E. primigenius).  
 1910 A, 135, 137.  
 1910 B, 310, 323.
- Shuler, E. W. 1923 A, 333 ("mammoth").
- Soergel, W. 1913 A, 89.  
 1915 A, 278, 283.  
 1921 A, 1-100, pls. i-viii; text-figs. 3-5.
- Spencer, J. W. 1883 A, 308 (Euelephas jacksoni).  
 1895 A, 137.
- Stauffer, C. 1924 A, 40, 41.  
 1926 A, 1 (E. columbi, E. jeffersonii).
- Stefano, G. 1915 A, 209, pl. xi, fig. 1.
- Stephenson, L. W. 1912 B, 268 ("elephant").
- Sternberg, C. H. 1898 B, 169 (E. primigenius).  
 1903 A, 511.  
 1903 D, 89 ("elephant").  
 1907 B, 971.  
 1909 C, 280 ("columbian mammoth").
- Stock, C. 1925 A, 195, 201.
- Thornton, T. R. 1900 A, 198 ("mammoth").
- Trouessart, E. L. 1913 A, 727.
- Troxell, E. L. 1915 A, 616, 636 (This species?).
- Udden, J. A. 1902 A, 428 (E. americanus. This species?).  
 1905 A, 47-57 (E. americanus. This species?).
- Veatch, A. C. 1906 A, 51 ("Elephas").
- Villada, M. M. 1903 A, 442.
- Virlet d'Aoust, T. 1865 A, 24.
- Ward, H. A. 1866 A, 37 (E. americanus).
- Whitney, J. D. 1879 B, 261, 263, 275, 281 ("elephants." This species?).
- Williston, S. W. 1902 M, 315 (E. primigenius).  
 1905 A, 335 (E. primigenius, E. columbi).
- Wilson, T. 1901 A, 299.
- Winchell, A. 1861 A, 132 ("elephant").
- Woodward, A. S. 1923 C, 55.
- Wright, F. B. 1903 A, 243.
- Wyman, J. 1875 A, 31, 42 ("elephant").
- Yates, L. G. 1903 A, 92, 101, 106, pl. x (E. americanus. This species?).
- Zittel and Schlosser 1923 A, 632, 680, 681.  
 Pleistocene; greater part of North America.
- Elephas columbi falconeri** Freudenberg.  
*Freudenberg, W.* 1922 A, 40, 51, 53, pl. viii, fig. 1; text-fig. 20.  
 Hay, O. P. 1925 C, 32.  
 Villada, M. M. 1903 A, 451, pl. viii (E. columbi).  
 Pleistocene; Mexico.
- Elephas columbi felcis** Freudenberg.  
*Freudenberg, W.* 1922 A, 38, 47, pl. viii, fig. 3; text-figs. 18, 23.  
 Hay, O. P. 1925 C, 32, 36 (E. columbi, E. primigenius columbi).  
 Pleistocene; Mexico.
- Elephas columbi silvestris** Freudenberg.  
*Freudenberg, W.* 1922 A, 46, 52, fig. 19.  
 Hay, O. P. 1925 C, 32.  
 Pleistocene; Mexico.
- Elephas cellsi** Hay.  
*Hay, O. P.* 1926 B, 155, with plate.  
 1927 D, 38, 261.  
 Pleistocene; Washington.
- Elephas exilis** Stock and Furlong.  
*Stock and Furlong* 1928 B, 140.  
 Pleistocene (Early); California.
- Elephas francisi** Hay.  
*Hay, O. P.* 1922 D, 6, pls. iii, iv; text-figs. 7, 8.  
 1924 D, 376.  
 Pleistocene (Early); Texas.
- Elephas haroldcooki** Hay.  
*Hay, O. P.* 1928, in Hay and Cook 1928 A, 33.  
 Cook, H. J. 1927 A, 117 ("mammoth").  
 Hay, O. P. 1928 C, 425, 426.  
 Spier, L. 1928 A, 161 ("primitive elephant").  
 Pleistocene (Aftonian); Oklahoma.
- Elephas hayi** Barbour.  
*Barbour, E. H.* 1915 B, 120, figs. 1, 3, 5.  
 Hay, O. P. 1924 D, 376.  
 Barbour, E. H. 1925 A, 22, fig. 11.  
 Kunz, G. F. 1916 A, pl. opp. p. 324, fig. 9.  
 Osborn, H. F. 1922 E, 282.  
 Pleistocene (Aftonian); Nebraska.
- Elephas imperator** Leidy.  
*Leidy, J.* 1858 B, 10.  
 Hay, O. P. 1902 A, 713 (E. columbi, in part).

- Abel, O. 1914 A, 207.  
 1926 B, 238 (Elephas, Archidiskodon).  
 Allen, G. M. 1926 A, 455.  
 Andrews, C. W. 1922 B, 43.  
 Archer, W. J. 1918 B, 13 ("imperial elephant").  
 Baker, F. C. 1920 A, 458.  
 Barbour, E. H. 1914 B, 181.  
 1914 C, 219, 222, fig. 5.  
 1915 B, 129, figs. 2, 4, 5.  
 1916 B, 253, fig. 5.  
 1925 A, 21.  
 1925 D, 111 (Archidiskodon).  
 1926 A, 119, fig. 88 (Archidiskodon).  
 Blake, C. C. 1857 A, 186, fig.  
 1861 A, 470 (E. texianus).  
 1862 A, 57, pl. iv (E. texianus).  
 1863 B, 56 (E. texianus); 60 (E. imperator).  
 Blake, W. P. 1856 A, 395 (E. primogenius).  
 Branner, J. C. 1909 A, 7 (E. columbi).  
 Cahn, A. R. 1922 A, 23.  
 Calvin, S. 1909 A, 137.  
 1909 B, 351, pl. xxiv, xxv, figs. 1, 7.  
 1910 A, xii ("elephant").  
 1911 A, 212.  
 Chamberlin, R. T. 1917 A, 672 ("proboscidian").  
 Chamberlin, T. C. 1919 A, 316.  
 De Gregorio, A. 1916 A, 104.  
 Deussen, A. 1924 A, 20, 108.  
 Diener, C. 1912 A, 217.  
 Dietrich, W. O. 1912 A, 64, 74, fig. 10.  
 Digby, B. 1926 A, 31, 34.  
 Falconer, H. 1863 A, 46, 52 (E. texianus).  
 Freudenberg, W. 1921 A, 138.  
 1922 A, 39 (E. texanus, E. imperator); 55, 60, fig. 22 (E. columbi imperator); 44, 65, 70, figs. 26, 28 (E. imperator); 45, 47 (E. americanus).  
 Gawrilenko, A. 1924 A, 234.  
 Gidley, J. W. 1903 C, 618, 624.  
 1912 C, 19.  
 1926 B, 310 ("mammoth").  
 1926 D, 240 ("mammoth").  
 1926 I, 28 ("mammoth").  
 1927 A, 43 ("mammoth").  
 1927 E, 274. (This species?).  
 Gidley and Loomis 1926 A, 262 ("mammoth").  
 Gilbert, J. Z. 1910 B, 25 ("elephant").  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1914 A, 26, 421, pls. lxvi-lxvii (E. imperator); 413, pl. lxi, figs. 7, 8 (E. columbi).  
 1916 E, 54.  
 1917 D, 39 (This species?).  
 1918 B, 9, seq.  
 1919 A, 311.  
 1919 C, 103, pl. xxvi, fig. 1.  
 1919 D, 361, 362, 372.  
 1920 B, 128.  
 1921 B, 403.  
 1922 A, 446.  
 1922 D, 6, text-figs. 3, 4.  
 1922 F, 97.  
 1923 A, 484.  
 1924 B, 250, 260.  
 1924 D, 376 (E. imperator); 92, 93 (E. texianus).  
 Hay, O. P. 1925 C, 22, 32, 35, 37, pl. iii, fig. 3; pl. iv, fig. 4 (E. imperator, E. columbi imperator).  
 1926 B, 159.  
 1926 E, 388, 390.  
 1926 F, 426.  
 1926 G, 128, 131.  
 1927 C, 280, 281 ("mammoth").  
 1927 D, 301, 302, 305.  
 1928 B, 238.  
 1928 C, 423, 425, 426.  
 Hayden, F. V. 1858 B, 157.  
 1872 A, 48.  
 Hill, R. T. 1901 A, 356 (Mastodon americanus).  
 Holmes, W. H. 1903 A, 244, pls. viii, ix.  
 1918 A, 562.  
 Ingalls, A. G. 1926 A, 290, fig. (Archidiskodon).  
 Kunz, G. F. 1916 A, 516, figs.  
 Lartet, E. 1859 A, 500, 505.  
 Lec, Stone, Gale 1915 A, 10.  
 Leidy, J. 1869 A, 252, 254, 398, pl. xxv, fig. 3.  
 Lucas, F. A. 1902 A, 554.  
 1902 B, 247.  
 1906 A, 152.  
 1907 B, 837.  
 1908 B, 443.  
 Lull, R. S. 1908 A, 196, fig. 23.  
 1909 A, 662, 673, fig. 21.  
 1914 E, 65, 68, pl. ii, fig. 8.  
 1917 A, 475.  
 1917 B, 53, 600, fig. 207.  
 1921 B, 159.  
 Lydekker, R. 1910 F, 663.  
 Maddren, A. G. 1905 B, 746.  
 Matthew, W. D. 1915 B, 11.  
 1918 A, 227.  
 Matthew and Cook 1909 A, 361.  
 Merriam, J. C. 1908 D, 473 ("mammoth").  
 1915 G, 101 ("elephant").  
 Merriam and Stock 1925 A, 11 (This species?).  
 Merrill, G. P. 1907 A, 35 (No. 185, E. columbi); (No. 189, E. imperator).  
 Osborn, H. F. 1903 E, 249 ("imperial mammoth").  
 1903 I, 978 (E. imperiales).  
 1905 D, 316.  
 1905 E, 931.  
 1905 H, 226.  
 1905 I, 111, pl. xii, fig. 3; pls. xiii, xiv.  
 1909 D, 125.  
 1910 B, 613, fig. 189.  
 1915 C, 263.  
 1918 A, 32.  
 1918 C, 135 (Elephas).  
 1921 A, 14, 15 (in part).  
 1921 E, 233.  
 1922 B, 3, figs. 4-6.  
 1924 G, 1 (Archidiskodon).  
 1925 A, 8, 19, 23, fig. (Archidiskodon).  
 1925 B, 28, 31, fig. 3 (Archidiskodon, Elephas).  
 1925 D, 528, 531, 532, figs. (Archidiskodon).  
 1928 A, 673 (Archidiskodon).  
 Pavlow, M. 1909 A, 174.  
 1910 A, 28.  
 Peterson, O. A. 1928 A, 119, text-fig. 23 (Parelephas washingtoni).



- Pohlig, H. 1889 A, 247, 248 (E. imperator?).  
 Rio, A. 1918 A, 366, pls. i-v (E. primigenius).  
 This species?).  
 Scharff, R. F. 1911 A, 87, 153.  
 Schlesinger, A. 1912 A.  
 Schuchert, C. 1915 A, 958.  
 Schuchert and Levene 1927 A, 352, fig.  
 Scott, W. B. 1913 A, 199, 427.  
 Sellards, E. H. 1915 C, 8 ("imperial elephant").  
 1915 D, 78 ("imperial elephant"); 112, fig.  
 46 (E. columbi var.).  
 Shmeek, B. 1910 A, 131, 134, 135, 138.  
 1910 B, 316, 323, pl. xxvi, fig. 1.  
 Soergel, W. 1915 A, 278, 283.  
 1921 A, 30, 60.  
 Stefano, G. 1915 A, 209, pl. xi, figs. 2, 3.  
 Sternberg, W. 1909 C, 268, fig. 44 ("columbian elephant").  
 Stock, C. 1925 A, 30 (This species?).  
 Stock and Furlong 1928 B, 140.  
 Stremme, H. 1911 A, 88.  
 Swarth, H. S. 1915 A, 27, figs. 15, 16.  
 Weber and Abel 1928 A, 473.  
 Wyman, L. E. 1922 A, 15, figs. 3, 6-9.  
 1927 A, 86, fig. ("elephant").  
 Yates, L. G. 1903 A, 114, pl. xi (E. americanus?).  
 Zittel and Schlosser 1923 A, 632, 680.  
 Pleistocene (Early); western half and southern border of United States; Mexico.
- Elephas malbeni** Barbour.  
 Barbour, E. H. 1925 D, 95-111, figs. 58-60, 63-70, 72-87.  
 1926 A, 119, fig. 88 (Archidiskodon).  
 Pleistocene (Loess); Nebraska.
- Elephas primigenius** Blumenbach.  
 Blumenbach, J. F. 1799, Handb. Naturges., ed. vi, 697.  
 Cuvier's name *Elephas mammonius* (Cuvier, G., 1799 A, p. 21) is antedated by that of Blumenbach.  
 Hay, O. P. 1902 A, 713 (in part).  
 Abel, O. 1912 F, 683 ("mammut").  
 1913 B, 750.  
 1914 B, 22 ("mammut").  
 1914 C, 306 ("mammut").  
 1919 A, 821, 824, 828, fig. 827.  
 1920 A, 442, figs. 673, 674, 677.  
 1922 C, 3, figs. 1, 2, 6, 8-14, 16-18, 21, 25.  
 Adams, M. F. 1807 A, 141-153 ("mammoth").  
 Adelung, N. 1901 A ("mammut").  
 Airaghi, C. 1917 A, 195, 234, pl. xv.  
 Allen, H. T. 1887 A, 99 ("mammoth").  
 Andrews, C. W. 1907 C, 303.  
 1908 D, 33, fig. 28.  
 1922 B, 42, fig. 29.  
 1923 C, 322, pl. x.  
 Anonymous 1903 A, 390, fig. ("mammoth").  
 Ardit, T. 1907 D, 652.  
 Barbour, E. H. 1925 A, 21.  
 1925 D, 111 (Mammonius).  
 Beaumont, E. 1872 A, 1282.  
 Beddard, F. E. 1902 A, 226.  
 Beechey, F. W. 1831 A, 257, 322, 324 ("mammoth").  
 Billings, E. 1856 B, 379 (in part).  
 Blake, C. C. 1861 A, 470 (in part).  
 1863 B, 56, 58 (in part).  
 Boule, M. 1913 A ("mammoth").  
 1923 A, 496 ("mammoth").  
 Brandes, G. 1900 A, 103 ("mammoth").  
 Brandt, A. 1866 D, 1-41, pl. i (E. mammonius seu primigenius).  
 1866 E, 361 ("mammoth").  
 1907 A, 301, figs. 1-4.  
 Brandt and Woldrich 1887 A, 95.  
 Breyne, C. 1738 A, 128, pls. i-iii ("mammoth").  
 Cantwell, J. C. 1884 A, 552 ("mammoth").  
 1887 A, 47 ("mammoth").  
 Capitan and Breuil 1901 A, 1038.  
 Clinton, D. W. 1815 A, 102 ("elephant").  
 Collier, A. J. 1902 A, 25-28 ("mammoth").  
 1903 A, 43 ("mammoth").  
 1906 A, 33.  
 1908 A, 86-93 ("mammoth").  
 Cope, E. D. 1891 N, 84, fig. 56.  
 Coupin, H. 1904 A, 101.  
 1908 A, 86-93 ("mammoth").  
 Cuvier, G. 1799 A, 21, pl. v, fig. 2; pl. vi, fig. 1 (E. mammonius).  
 1799 B, 90 ("mammoth").  
 1807 B, 381 ("mammoth").  
 1825 A, 1, 75, pls. ("mammoth," E. primigenius).  
 Cuvier and Geoffroy St-Hilaire 1796 A, 90 ("éléphant").  
 Dall, W. H. 1870 A, 238.  
 1881 A, 108 ("mammoth").  
 1896 A, 354 ("mammoth").  
 1901 A, 308 ("mammoth").  
 Dall and Harris 1892 A, 264, 266.  
 Dawson, G. M. 1893 A, 84 ("mammoth").  
 Dawson, J. W. 1894 D, 2, 4.  
 De Kay, J. E. 1842 C, 100.  
 Deniker, J. 1913 A, 117.  
 Depéret and Mayet 1923 A, 176-190.  
 Desmarest, A. G. 1822 A, 383 (E. primigenius).  
 Diener, C. 1912 A, 205.  
 Dietrich, W. O. 1912 A, 42.  
 1913 A, 67.  
 1919 A, 57.  
 Digby, B. 1925 A, 1-217, pls.; text-figs.  
 Dollo, L. 1889 I, 685.  
 Eichwald, E. 1835 A, 707, pl. iii (E. mammonius).  
 Falconer, H. 1837 C, 81.  
 1863 A, 43, 55.  
 Falconer and Cautley 1847 A, pls. i, xiii, xlii.  
 Falconer and Murchison 1867 A, 1, 19.  
 Felix, J. 1912 A, 1, figs. 2, 3.  
 Fischer de Waldheim, G. 1814 A, 319 (E. mammonius).  
 1829 A, 285 (E. mammonius, E. paniscus, E. peribolites, E. pygmaeus, E. campylotes).  
 1829 B, 267 (E. mammonius).  
 Fraas, E. 1900 A, 38 ("mammut").  
 1912 A, 325 ("mammoth").  
 1913 D, lxiii ("mammut").  
 Frech, F. 1906 A, 472 ("mammut").  
 1907 A, 310.  
 Frech and Geinitz 1913 A, 15, 24, figs.  
 Freudenberg, W. 1913 A, 475.  
 1922 A, 63, fig. 24.  
 Gaudry, A. 1875 C, 29, pl. A, figs. 1, la.

- Gaudry, A. 1891 C, 69, 119, fig. 33.  
1893 A, 10.  
1903 A, 553 ("mammoth").
- Gawrilenko, A. 1924 A, 227.
- Geikie, J. 1894 A, 653.  
1914 A, 324 ("mammoth").
- Gervais, P. 1852 A, 35 (E. primigenius).  
1859 A, 59, 61.
- Gidley, J. W. 1912 C, 20.  
1927 A, 48.
- Giebel, C. G. 1883 A, pls. lxviii, lxxiv.
- Gilmore, C. W. 1908 A, 27, pl. vii.
- Goddard, P. E. 1927 A, 68 ("hairy mammoth").
- Harmer, F. W. 1901 A, 422.
- Hay, O. P. 1912 D, 664, 726, pl. xix; text-figs. 54a, 65-67a.  
1914 A, 398, 406, pl. lii, figs. 4-8; pl. liv, figs. 1-5, 7-9; pl. lv, figs. 1, 3, 4; pl. lvi, fig. 1; pl. lvii, figs. 1, 2; pl. lviii, fig. 1; pl. lx; text-figs. 54a, 65-67a; 134-137.  
1922 F, 99 (E. mammoniteus).  
1924 D, 87.  
1926 B, 157, 158.  
1927 D, 302, 305.  
1928 C, 425 (This species?).
- Heilprin, A. 1887 A, 205, 386 ("mammoth").
- Herr, O. F. 1904 A, 711.
- Hess, — 1910 A, 711.
- Hilzheimer, M. 1909 B, 455, figs. 1-7.
- Hoernes, R. 1912 A, 663 ("mammut").
- Hoffman, G. C. 1902 A, 14.
- Howorth, H. H. 1878 A, 433 ("mammoth").  
1893 B, 94 ("mammoth").  
1905 A, 246, 251.
- Hull, E. 1908 A, 156.  
1914 A, 613 ("mammoth").
- Hutchinson, H. N. 1910 A, pl. xlviii; text-fig. 108 ("mammoth").
- Ingalls, A. G. 1926 A, 290, fig.
- Jochelson, W. 1909 A, 48 ("mammoth").
- Kastchenko, N. 1901 A.
- Kindle, E. M. 1924 A, 183, figs. 1-3.
- Knight, C. R. 1920 A, 228, fig.
- Knipe, H. R. 1912 A, 191, fig.
- Koken, E. 1893 B, 588 ("mammut").  
1897 A, ix ("mammut").
- Kotzebue, O. 1821 A, 220 ("mammoth").
- Kunz, G. F. 1916 A, 516, figs.
- Kusnezow, S. K. 1896 A, 186 ("mammoth").
- Lambe, L. M. 1904 C, 31, 39, 50 (in part).  
1910 C, 273.  
1912 A, 14.  
1914 F, 299 ("mammoth").  
1914 H, 401, 403 ("mammoth").  
1917 E, 295.
- Lang, H. 1925 A, 1-10, 43-49 (Mostly on E. beresovkii).
- Lankester, E. R. 1905 A, 93, 111, figs. 62, 76a.
- Lartet, E. 1859 A, 501, pl. xv, fig. 12.
- Lee, Stone, Gale 1915 A, 9 (in part).
- Leydig, F. 1859 A, 740.
- Lönnberg, E. 1907 B, 116, figs. 9, 10.
- Loomis, F. B. 1905 B, 842.
- Lucas, F. A. 1898 E, 718 ("mammoth").  
1901 A, 307.  
1901 F, 490 ("mammoth").  
1901 I, 353, pls. i-v.  
1901 J, 177, figs. 35, 36 ("mammoth").
- Lucas, F. A. 1902 A, 554.  
1902 B, 264 (in part).  
1906 B, 157, 158, 163, pls. xxvii, xxxix.  
1907 A, 46 ("mammoth").  
1907 B, 337 ("mammoth").
- Lull, R. S. 1908 A, 197 (in part), fig. 26.  
1909 A, 652, 663 (in part), figs. 8, 9, 24 (plates i and ii refer to E. beresovkii).  
1914 E, 68, fig. 8.  
1917 A, 477.  
1917 B, 601 (in part), fig. 208.
- Lydekker, R. 1901 D, 361.  
1908 A, 511 ("columbian mammoth").  
1910 E, 352 ("mammoth").
- Macloskie, G. 1884 A, 216.
- Maddren, A. G. 1905 A.
- Mantell, G. A. 1839 A, 140, figs. 23, 24.
- Matschie, P. 1901 A, 308.
- Matthew, W. D. 1915 K, 410 ("mammoth").
- Mayet and Roman 1923 A, 2, 11, 12, 14, 15.
- Meyer, H. 1867 C, 786.
- Middendorff, A. T. 1867 A, 271 ("mammut").
- Moffitt, F. H. 1905 A, 41 ("mammoth").
- Moodie, R. L. 1920 E, 463 ("mammoth").
- Moreau, L. 1914 A, 88.
- Murchison, R. I. 1843 A, 131.  
1846 A, 344 ("mammoth").
- Nehring, A. 1880 A.
- Neuville, H. 1919 A, 193, fig. 1 ("mammoth").
- Newton, E. T. 1882 A, 106.
- Obalski, T. 1904 A, 216 ("mammoth").
- Osborn, H. F. 1903 E, 249.  
1904 F, 46 ("mammoth").  
1905 D, 316.  
1905 H, 226 (in part).  
1905 I, 111 (in part).  
1909 D, 125 (in part).  
1910 B, 420, fig. 183.  
1914 D, 408, fig. 1.  
1915 C, 263.  
1916 B, 541.  
1918 C, 135 (Elephas primigenius); table (Elephas).  
1920 A, 228, 240, figs.  
1924 G, 1, 2, fig. 1 (E. primigenius, E. p. compressus, Mammonteus primigenius).  
1925 A, 11, 19, 21, 23 (Mammonteus primigenius).  
1925 B, 29, 33, fig. 3 (Mammonteus primigenius; M. p. americanus).  
1925 F, 962.
- Owen, R. 1860 E, 391, figs.  
1866 B, 439, figs. 295, 296.  
1868 A, 362, 618.  
1885 B, 31, figs. 1, 2.
- Pavlov, M. 1907 A, 139.  
1909 A, 172, pl. v, figs. 6-9.  
1910 A, 29, pl. ii, figs. 29-42.
- Pfizenmayer, E. 1906 A, 521.  
1910 A, 148, figs. 1-7.
- Pohle, R. 1904 A, 577 ("mammut").
- Pohlig, H. 1892 B, 314 (E. mammoniteus, E. primigenius).
- Pontier, G. 1904 A, 248.  
1910 A, 497.  
1911 A, 465, pl. x, figs. 6-8.
- Preble, E. A. 1923 A, 119.
- Quackenbush, L. S. 1909 A, plates.

- Ranking, J. 1828 A, 371 ("mammoth").  
 Ricci, A. 1901 A, 369, pl. vi.  
 Richardson, J. 1854 B, 83.  
 Rutten, L. M. R. 1909 A, 21, pl. i, figs. 12-14.  
 Salensky, W. 1903 A, 893, fig. 1.  
 1903 B, 1-124, pls. i-xxv.  
 1909 A, 599 ("mammoth").  
 Scharff, R. F. 1895 A, 451.  
 1907 A, 173, fig. 55.  
 1911 A, 78 (in part).  
 Schlesinger, G. 1912 A.  
 Schlosser, M. 1903 I, 120.  
 1916 A, 47.  
 Schmidt, F. 1869 A, 97.  
 Schmidt, O. 1886 A, 236, fig. 42.  
 Schrenck, L. 1871 A, 718 ("mammut").  
 Schuchert, C. 1915 A, 435, 568, fig. 513.  
 Schuchert and Levens 1927 A, 339, 352, fig.  
 Scott, W. B. 1913 A, 196, 207, 426 (in part).  
 Serres, M. 1852 A, 120.  
 1860 A, 301.  
 Shufeldt, R. W. 1889 D, 33, fig.  
 Soergel, W. 1921 A, text-figs. 3-5, 7.  
 Southall, J. C. 1875 A, 596 ("mammoth").  
 1878 A, 422 ("mammoth").  
 Spurr, J. E. 1898 A, 207, 219 ("mammoth").  
 1900 A, 132 ("mammoth").  
 Stanley-Brown, J. 1892 A, 499 ("mammoth").  
 Stefanescu, S. 1919 E, 1332.  
 Stefano, G. 1915 A, 210.  
 Stejneger, L. 1907 A, 479.  
 Stingelin, T. 1902 A, 1, pls. i, ii.  
 Stirrup, M. 1893 B, 334 ("mammoth").  
 Stromer, E. 1906 B, 48.  
 1912 A, 217, fig. 206.  
 Teutzel, W. E. 1898 A, 757-776 ("elephas").  
 Tilesius, W. G. 1815 A, 470, pls. x, xi (E. mam-  
 monteus, E. primordialis, E. primigenius).  
 Tissandier, G. 1877 A, 139 ("mammoth").  
 Tolmachoff, I. P. 1927 A, 66 ("mammoth").  
 1928 A, 294 ("mammoth").  
 Toula, F. 1908 A, 267.  
 Townsend, C. H. 1887 A, 89 ("mammoth").  
 Trouessart, E. L. 1905 A, 603.  
 1913 A, 727.  
 Tukeman, H. 1899 A, 504.  
 Udden, J. A. 1905 A, 47-57 (in part).  
 Van Bommelen, J. F. 1918 A, 575 ("mammoth").  
 Van de Wiele, C. 1903 A, 593.  
 Vollosovic, K. 1909 A, 437 ("mammoth").  
 Ward, H. A. 1866 A, 35.  
 Weber and Abel 1928 A, 473, 475, figs. 304, 307.  
 Wilckens, O. 1911 A, 705 ("mammut").  
 Winge, H. 1904 A, 241.  
 Woodward, A. S. 1923 C, 56, figs. 42-44.  
 Woodward, H. 1904 A, 152.  
 Wright, G. F. 1909 A, 512 ("mammoth").  
 Wüst, E. 1901 A, 247.  
 Zittel and Schlosser 1911 A, 539, fig. 736.  
 1923 A, 631, 631, fig. 778.  
 Doubtless some of the references to American specimens of elephants in the papers cited apply in reality to *Elephas boreus*, others to *E. boreosivkii* and *E. sibiricus*.
- Elephas roosevelti** Hay.  
 Hay, O. P. 1922 F, 101.  
 1914 A, 409, pl. lix (E. primigenius).
- Hay, O. P. 1924 D, 48.  
 1925 A, 1-6, pls. i-iv; text-fig. 1 (E. roosevelti; "Mammonteus primigenius compressus").  
 1926 B, 159.  
 Lindemuth, A. C. 1878 A, 509 ("mammoth").  
 Osborn, H. F. 1922 B, 8, fig. 8 (E. jeffersonii).  
 1923 G, 5, fig. 2 (Mammonteus primigenius compressus).  
 1925 A, 22 (Mammonteus primigenius compressus).  
 1925 B, 33 (Mammonteus primigenius compressus).  
 Pleistocene; Illinois, Wisconsin, Ohio, Indiana.
- Elephas scotti** Barbour.  
 Barbour, E. H. 1925 A, 21, figs. 7-10.  
 Hay, O. P. 1927 D, 280.  
 Pleistocene (Aftonian); Nebraska.
- Elephas washingtoni** Osborn.  
 Osborn, H. F. 1923 E, 4.  
 Hay, O. P. 1927 D, 35.  
 Peterson, O. A. 1928 A, 119, text-fig. 24.  
 Pleistocene; Washington.
- Elephas** sp. indet.  
 All of the remains referred to below are believed to belong in the Pleistocene.  
 Anderson, F. M. 1908 A, 35 ("elephant"). California.  
 Andrews, E. B. 1874 A, 471 ("mammoth"). Ohio.  
 Anonymous 1927 A, 479 ("mammoth"). Oklahoma.  
 Arnold, R. 1903 A, 53 ("elephant"). Santa Rosa Island, California.  
 Ashley, G. H. 1895 A, 334 ("Elephas"). Santa Rosa Island, California.  
 Baker, F. C. 1920 A, 458 (in part) (E. americanus, E. columbi, E. jacksoni, E. primigenius).  
 Bancroft, H. H. 1875 A, 697 ("elephants"). California.  
 Barton, B. S. 1806 B, 157 ("mammoth"). Pennsylvania, New York.  
 1810 A, 340, 342 ("mammoth"). Virginia, New York, Pennsylvania.  
 1814 A ("elephant").  
 Bell, R. 1897 A, 136 A. Edmonton, Alberta.  
 1898 B, 223 ("mammoth"). Hudson Bay, Ungava.  
 Berthoud, E. L. 1872 A, 302 ("elephant"). Colorado.  
 Beyer, S. W. 1899 A, 211 (E. primigenius). Iowa.  
 Bibbins, A. B. 1905 A, 48 ("mammoth"). Washington, D. C.  
 Blake, W. P. 1856 A, 395 (E. primigenius). California.  
 1857 A, 257 (E. primigenius). California.  
 1884 A, 273, fig. 1. Nevada.  
 1899 A, 636 ("mammoth"). California.  
 Bowers, S. 1878 A, 317 ("vertebrates"). Santa Rosa Island, California.  
 Branner, J. C. 1909 A, 7 ("mastodon"). Stanford University, California.  
 Bretz, J. H. 1913 A, 180 ("mammoth"). State of Washington

- Briggs, C. 1838 B, 96 ("mammoth"). Ohio.
- Broadhead, G. C. 1898 A, 376. Missouri.
- Brown, J. S. 1904 A, 119 ("mammoth"). Texas.
- Buckley, S. B. 1876 A, 29 (E. primigenius). Texas.
- Calvin, S. 1910 A, xii ("elephant"). Iowa.
- 1911 A, 210 (E. indianapolis; insufficient description).
- Campbell, G. D. 1883 A, 579 ("mammoth") Carson, Nevada.
- Cannon, G. L. 1888 B, 59, 61 ("elephant") Colorado.
- 1896 in Emmons, S. F. 1896 A, 264 ("elephant"). Colorado.
- Carpenter, F. R. 1888 A, 49 (E. primigenius). South Dakota.
- Clarke, J. M. 1912 A, 500 ("mammoth"). New York.
- Coleman, A. P. 1895 A, 641 ("mammoth"). Ontario.
- 1899 A, 195 ("mammoth"). Ontario.
- 1900 A, 330 ("mammoth or mastodon") Ontario.
- 1907 A, 1248 ("mammoth"). Ontario.
- 1913 B, 34 ("mammoth"). Ontario.
- 1914 A, 448 ("mammoth"). Ontario.
- Collett, J. 1878 A, 246, 293 (E. americanus). Indiana.
- 1881 A, 16, 388 (E. americanus). Indiana.
- 1883 A, 73 ("mammoth"). Indiana.
- Cook, H. J. 1926 D, 335, 2 sp. Colorado, Texas.
- Cooke, C. W. 1926 A, 445 ("mammoth"). Florida.
- 1928 A, 421. Florida.
- Cooper, Smith, and DeKay 1831 A, 371 ("elephant"). Kentucky.
- Cope, E. D. 1878 II, 125 (E. primigenius). Fossil Lake, Oregon.
- 1895 G, 599 (E. primigenius). General.
- Cox, E. T. 1871 A, 103 ("mammoth"). Indiana.
- 1875 A, 214 ("mammoth"). Indiana.
- Cresson, H. T. 1890 A, 469 ("engraved shell"). Delaware.
- Cuvier, G. 1825 A, i, 155. South Carolina, Pennsylvania, Kentucky, Maryland, Virginia, Louisiana, Mexico.
- Dall, W. H. 1868 A, 85. Alaska.
- Dall and Harris 1892 A, 284 (E. primigenius). General.
- Dawson, G. M. 1899 A, 19 A (E. primigenius). Alberta.
- Deussen, A. 1924 A, 110 (E. primigenius); 116 (E. columbi). Texas.
- Diffenderfer, F. R. 1878 A, 62 (E. americana). Chihuahua, Mexico.
- Diller, J. S. 1906 A, 6, 11 ("elephants"). California.
- 1911 A, 27. California.
- Drayton, J. 1802 A, 40 ("elephant"). South Carolina.
- Dryer, C. R. 1889 A, 129 ("mammoth"). Indiana.
- Dumble, E. T. 1920 A, 268. Texas.
- Edwards, J. J. 1902 A, 248 (E. primigenius). Indiana.
- Elrod and Benedict 1892 A, 240 (E. primigenius). Indiana.
- Fairbanks, H. W. 1897 A, 216, 226, 227 ("Elephas"). Santa Rosa Island, California.
- Fairchild, H. L. 1887 A, 20-24 (E. primigenius). General.
- Falconer, H. 1863 A, 67 (E. rupertianus, E. jacksoni, E. americanus).
- Ferguson, H. G. 1917 A, 182 (Elephas). Nevada.
- Foster, J. W. 1838 B, 358 ("elephant"). Ohio.
- 1838 C, 363, figs. (E. jacksoni). Ohio.
- 1839 A, 190, fig. 2 ("elephant"). Ohio.
- 1869 A, 231 (E. primigenius). California.
- 1873 A, fig. 4 (E. primigenius). General.
- Fowke, G. 1902 A, 107 ("mammoth"). Ohio.
- Freudenberg, W. 1910 A, 5. Mexico.
- 1922 A, 26 (E. columbi?); 39 (E. jacksoni). Mexico.
- Furlong, E. L. 1925 A, 139, 140, 142 (Elephas). Mexico. Tequixquiac, Hidalgo: Saltillo, Coahuila: Zumpango, Guerrero; Mexico.
- Gibbes, C. D. 1882 A, 1 (E. primigenius). Carson, Nevada.
- 1882 B, 9, pl. Carson City, Nevada.
- Gidley, J. W. 1912 C, 20 (E. primigenius). General.
- 1924 A, 69 ("Elephas"). Nevada.
- 1928 B, 12, 13, 14, figs. 12-14 ("mammoth"). Pleistocene; Oklahoma, Florida.
- Gilbert, G. K. 1890 A, 303, 304 ("mammoth"). Utah.
- Goddard, P. E. 1926 A, 258. Florida.
- Goodyear, W. A. 1890 A, 169 ("elephant"). Santa Rosa Island, California.
- Harkness, H. W. 1882 A, 2 ("mammoth"). Carson, Nevada.
- Harlan, R. 1831 C, 59 ("elephant"). Virginia.
- Hay, O. P. 1914 A, 67, 437, pl. lvii, fig. 1 (E. primigenius?).
- 1923 A, 484 (E. primigenius?). Iowa.
- 1924 D, 376. Colorado, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, South Dakota, Texas, Wyoming.
- 1926 D, 359. Tuolumne Mountain, California.
- 1927 D, 301, 310 (E. sp. indet.); 305 (E. americanus). Pleistocene; Arizona, California, Idaho, Nevada, Ontario, Oregon, South Dakota, Texas, Utah, Washington, Wyoming.
- Hayden, H. H. 1920 A, 121 ("asiatic elephant"). Maryland, Virginia, South Carolina.
- Haymond, R. 1869 A, 200 (E. primigenius). Indiana.
- Haynes, H. W. 1889 A, 348 ("elephants"). In loess in Nebraska; Walker River, Nevada.
- Henshaw, H. W. 1883 A, 152 ("elephant"). General.
- Hildreth, S. P. 1834 A, 256 ("elephant"). Ohio.
- Holmes, W. H. 1901 A, 423 ("elephant"). California.
- Howorth, H. H. 1905 A, 93 ("mammoth"); 94 (E. columbi); 99, 103 ("elephant").
- Jefferson, T. 1787 A, 64 ("mammoth"). Virginia.
- Kay, G. F. 1921 A, 80 ("proboscidean." May be mastodon). Iowa.
- Knight, W. C. 1903 A, 828 (E. primigenius). Wyoming.

- Knowlton, F. H. 1911 D, 63 ("elephant"). California.
- Lambe, L. M. 1911 B, 271 ("mammoth"). Alberta.
- Lawson, J. S. 1874 A, 379 (E. primigenius). Whidbey Island, Washington.
- Le Conte, J. 1882 A, 922 (E. primigenius?). Nevada.
- 1883 A, 101 (E. americanus). Nevada.
- 1887 A, 515 ("mammoth"). Santa Rosa Island, California.
- Leidy, J. 1836 D, 275 (Elephas). Nicaragua.
- Leverett, F. 1889 A, 179 ("mammoth"). Illinois.
- 1897 A, 71 ("mammoth"). Illinois.
- Lindemuth, A. C. 1878 A, 508 ("mammoth"). Ohio.
- Lindgren, W. 1911 A, 193 ("elephant"). Carson City, Nevada; 51, 52, 212 ("elephant"). California.
- Lloyd, J. U. 1904 A, 43 ("mammoth"). General.
- Loomis, F. B. 1926 B, 262. Florida.
- Lull, R. S. 1908 A, 197 (in part), fig. 25 (E. primigenius). General.
- Lyell, C. 1843 B, 126 ("elephant"). Kentucky.
- 1845 B, II, 59, 65, 69 (E. primigenius).
- 1847 C, lxxxi (E. primigenius). Kentucky.
- 1855 A, I, 348; II, 261 ("elephant").
- McAdams, W. 1883 A, pl. lxxix ("elephant"). Illinois.
- McCornack, E. C. 1920 A, 18, 23. Oregon.
- McGee, W. J. 1891 A, 471 ("mammoth"). Iowa.
- Madison, J. 1805 A, 58 ("mammoth"). Virginia.
- Mather, W. W. 1843 A, 44 ("fossil elephant"). New York.
- 1843 B, 233, 636 ("elephant"). New York.
- Meek, F. B. 1855 A, 215 (E. primigenius). Missouri.
- Mercer, H. C. 1885 A, 1-95 ("mammoth"). On Lenapi stone.
- Merriam, J. C. 1900 A, 613, 614 ("Elephas"). Contra Costa County, California.
- 1914 A, 15 ("Elephas"). Nevada.
- Miller, B. L. 1911 A, 123 (E. americanus). District of Columbia.
- Miller, L. H. 1912 A, 71 (E. primigenius). California.
- Mitchill, S. L. 1826 A, 5 ("mammoth"). Long Island, New York.
- Newberry, J. S. 1861 A, 38 (E. primigenius). Arizona.
- 1870 D, 32 ("mammoth"). General.
- 1873 E, 133 ("mammoth"). Ohio.
- 1873 F, 87 ("elephant"). Ohio.
- Norton, W. H. 1901 A, 377 (E. primigenius). Iowa.
- Owen, D. D. 1857 B, 103 ("mammoth").
- Owen, L. A. 1926 A, 380 ("mammoth"). Pleistocene (Loess); Missouri.
- Owen, R. (of America) 1862 A, 197. Indiana.
- Pavlov, M. 1910 A, 28 (E. americanus).
- Plummer, J. T. 1843 A, 302 ("tusk"). Indiana.
- Putnam, C. E. 1886 A ("elephant"). Iowa.
- Putnam, F. W. 1890 A, 468. General.
- Rae, J. 1879 A, 669 ("mammoth"). General.
- Rath, G. 1886 A, 105 (E. primigenius). Mexico.
- Read, M. C. 1873 A, 526 (E. americanus?). Ohio.
- Rockwell, A. P. 1872 A, 373 ("elephant"). Colorado.
- Russell, I. C. 1890 A, 122 ("mammoth"). Alaska.
- Savage and Udden 1922 A, 178 ("elephant"). Illinois.
- Sellards, E. H. 1919 A, 73 ("elephant"). Texas.
- Shaler, N. S. 1877 A, 197 (E. primigenius). Kentucky.
- Sinclair, W. J. 1903 A, 711. California.
- 1904 A, 18, 20. California.
- 1904 B, 11 (This genus?). Nevada.
- 1908 A, 112 ("elephant"). California.
- Smith, W. G. T. 1900 A, 229 ("Elephas"). Santa Rosa Island, California.
- Stalaker, A. M. 1884 A, 615 ("mastodon"). Iowa.
- Stauffer, C. 1924 A, 40, 41. Minnesota.
- Stearns, R. E. C. 1873 A, 152 ("elephant"). California.
- Sterling, E. 1886 A, 309 ("mammoth"). Ohio.
- 1883 in Putnam, C. E. 1886 A, 309 (E. primigenius). Ohio.
- Sternberg, C. H. 1909 C, 160 (E. primigenius). Oregon.
- Stewart, T. 1828 A, 188 ("mammoth"). New Jersey.
- Stock, C. 1925 A, 113 (E. primigenius). California.
- Stock and Furlong 1928 A, 19. Santa Rosa Island, California.
- Swallow, G. C. 1858 A, 35 (E. primigenius); Missouri.
- Thompson, W. H. 1886 A, 159 (E. primigenius). Indiana.
- Todd, J. E. 1880 A, 14 (E. americanus). Iowa.
- 1894 A, 126 (E. americanus). South Dakota.
- 1896 A, 129 ("mammoth"). Missouri.
- 1899 A, 85 ("mammoth"). South Dakota.
- 1918 A, 45 ("mammoth"). Kansas.
- Udden, J. A. 1899 A, 350 ("elephant"). Iowa.
- 1901 B, 110 ("elephant"). Iowa.
- 1902 A, 423 (E. americanus). Iowa.
- 1903 A, 170 ("mammoth"). Iowa.
- 1912 A, 61 ("proboscidian"). Iowa, Illinois.
- Upham W. 1903 C, 22679 ("mammoth"). General.
- Voy, C. D. 1897 A, 227 (E. primigenius). Santa Rosa Island, California.
- Weidman, S. 1907 A, 430 ("mammoth"). General.
- Whitney, J. D. 1862 A, 129, 133 ("elephant"). Lead Region, Illinois, etc.
- 1864 A, 264 ("elephant"). California.
- 1865 A, 242, 252 ("elephant"). California.
- 1866 A, 162 ("elephant"). Lead Region, Illinois, etc.
- Whittlesey, C. 1866 A, 8 (E. primigenius). Ohio.
- Wilson, T. 1901 A, 299. General.
- Winchell, A. 1861 A, 132 ("elephant"). Michigan.
- 1870 A, 504 ("mammoth"). Michigan.
- Winchell, N. H. 1878 A, 61 ("elephant"). Minnesota.
- 1882 A, 146 ("elephant"). Montana.
- 1885 A, 148, pl. II (E. primigenius). Minnesota.
- 1905 A, 259 (E. primigenius). Illinois.
- 1907 A, 163 ("mammoth"). General.
- Witter, F. M. 1892 A, 67 ("elephant"). Iowa.

- Worthen, A. H. 1866 A, 38, 39 ("mammoth"). Illinois.  
 1873 A, 237, 252 ("mammoth"). Illinois.  
 1890 A, 8 ("mammoth"). Illinois.  
 Wright, G. F. 1903 A, 297 ("mammoth"). New York.  
 1905 A, 18 ("mammoth"). General.
- Wright, G. F. 1908 A, 22, 31 ("mammoth"). General.  
 1911 A, 282 ("mammoth"). General.  
 1911 B, 438, 586, 690 ("mammoth"). General.  
 Yates, E. G. 1890 A, 51, 52 ("elephant"). Santa Rosa Island, California.  
 1915 A, 67. California.

## Order SIRENIA Illiger.

- Illiger, C. 1811 A, 140.  
 Hay, O. P. 1902 A, 532.  
 Abel, O. 1904 A, 1-223.  
 1904 B, 741 ("sirenen").  
 1906 A, 50 ("sirenen").  
 1907 C (80) ("sirenen").  
 1908 A, 479 ("sireniens").  
 1908 B, 139, 143 ("sirenen").  
 1910 B (186) ("sirenen").  
 1912 F, 124, 176, 197 ("sirenen").  
 1913 A, 289 ("sirenen").  
 1913 B, 729, 750b.  
 1914 A, 122, 213.  
 1920 A, 445.  
 1921 A, 217, 232, fig. 83 ("sirenen").  
 1922 B, 2 ("sirenen").  
 1922 E, 368 ("sirene").  
 1923 A, 215 ("sireniens").  
 Allen, J. A. 1882 A, 15.  
 Ameghino, F. 1904 B, 51.  
 1906 A, 407 ("siréniens").  
 Anderson, R. J. 1898 A, 765 ("dugong").  
 1902 A, 1121.  
 Andrews, C. W. 1902 A, 293, 295.  
 1906 A, xx.  
 1909 C, 305.  
 1912 A, 454.  
 1924 A, 304.  
 Anthony, R. 1912 A ("siréniens").  
 Arldt, T. 1907 D, 681.  
 Ash, F. H. 1908 A, 81.  
 Beddard, F. E. 1900 A, 319.  
 1902 A, 333.  
 Black, N. 1900 A, 15.  
 Boas, J. E. V. 1914 B, 577, 586 ("sirenen").  
 Bonaparte, C. L. 1832 A, 293.  
 Branca, W. 1907 A, 9 ("sirenen").  
 Brandt, J. F. 1833 A, 114 ("cétacés herbivores").  
 Braun, M. 1906 B, 131 ("sirenen").  
 Broom, R. 1897 B, 252.  
 1915 A, 162.  
 Brown, A. E. 1878 A, 291.  
 Case, E. C. 1898 C, 830.  
 1904 D, 56, 57.  
 Carus, V. 1875 A, 168.  
 Christol, J. 1834 A, 257 ("dugongs").  
 Clark and Sonntag 1926 A, 454, 459.  
 Cope, E. D. 1885 BB, 71.  
 1891 N, 67, 70.  
 Cuvier, F. 1825 A, 236 ("lamantins").  
 1836 A, 1 ("cétacés herbivores").  
 Dart, R. A. 1923 A, 637.  
 Depéret, C. 1907 B ("siréniens").  
 Depéret and Roman 1920 A, 1-55, pls. i-vii; 14 text-figs. ("siréniens").  
 Dilg, C. 1909 A, 83.  
 Dollo, L. 1889 E, 188 ("siréniens").
- Dollo, S. 1889 L, 415 ("siréniens").  
 1892 D, 118 ("siréniens").  
 1922 A, 216 ("siréniens").  
 Doran, A. H. G. 1878 A, 464.  
 Eggeling, H. 1904 A, 99.  
 Elliot, D. G. 1901 A, 5.  
 Fraas, E. 1905 B, 378.  
 Frassetto, F. 1915 A, 21.  
 Freund, L. 1905 A, 426 ("sirenen").  
 1911 A, 377.  
 1912 A, 557 ("sirenen").  
 1913 A, 253 ("sirenen").  
 1914 A, 353 ("sirenen").  
 1914 B, 706.  
 Fuchs, H. 1908 A, 353 ("sirenen").  
 Gaupp, E. 1913 A, 125 ("sirenen").  
 Gervais, P. 1852 A, 141, 199 ("siréniens").  
 1859 A, 276 ("sirénides").  
 Giebel, C. G. 1855 A, 83.  
 1883 A ("sirenen").  
 Gottlieb, H. 1914 A, 190, 210.  
 Gregory, W. K. 1910 A, 78, 82, 406, 407, 423, 430, 452.  
 1920 A, 184, 245.  
 Hay, O. P. 1915 B, 384.  
 Heilmann, G. 1914 A, 90.  
 Heilprin, A. 1887 A, 339.  
 Hennicke, C. 1902 A, 159, 163.  
 Hülzheimer, M. 1913 A, 570.  
 Hoernes, R. 1886 A, 682.  
 Hogben, L. T. 1919 A, 76.  
 Howes, G. B. 1893 C, 572.  
 1903 A, 326, 328.  
 Howes and Harrison 1893 A, 790.  
 Huxley, T. H. 1863 F, 579, 609, 633.  
 Jaekel, O. 1911 A, 245 (Sirenii).  
 Kampfen, P. N. 1905 A, 633.  
 Kaup, J. J. 1840 A, 673.  
 Kellogg, R. 1924 C, 755.  
 Kingsley, J. S. 1884 A, 210-214.  
 1925 A, 218, 300.  
 Knox, R. 1831 A, 389 ("dugong").  
 Koken, E. 1893 B, 487.  
 Kükenthal, W. 1897 B, 140 ("sirenen").  
 1897 C, 181 ("sirenen").  
 1913 A, 663.  
 1914 A, 561 ("dugong").  
 Larger, R. 1913 A, 718 ("siréniens").  
 Lavocat, A. 1885 A, 46 ("siréniens").  
 Leche, W. 1887 A.  
 1900 A, 1028.  
 1921 A, 72.  
 Leunis and Ludwig 1883 A, 275.  
 Lorenz, L. 1904 B, 142 ("sirenen").  
 Lucas, F. A. 1916 B, 315 ("sea-cows").  
 Lull, R. S. 1909 A, 641.  
 1910 D, 153.

- Lull, R. S. 1912 A, 220, 246.  
1917 B, 322.
- Lydekker, R. 1903 D, 124 ("sea-cows").  
1907 E, 673.
- Major, C. J. F. 1899 B, 62.  
1918 B, 66.
- Matsumoto, H. 1923 A, 111.
- Matthes, E. 1912 A, 594 ("sirenen").  
1915 A ("sirenen").  
1921 B, 139 ("sirenen").  
1921 C, 1-304.
- Matthew, W. D. 1912 A, 156.  
1915 A, 256, 314.  
1915 H, 439 ("sireniens").  
1916 B, 23.
- Mitchell, P. C. 1905 A, 464.
- Nopcsa, F. 1923 B, 354, 357 ("sirenen").
- Osborn, H. F. 1902 E, 356, fig. 1.  
1905 I, 109.  
1905 N, 242.  
1906 B, 56.  
1907 G, 15, 188.  
1907 K, 817, 830.  
1909 E, 139.  
1910 B, 631.  
1917 B, 269, 270 ("sireniens").  
1923 B, 18.
- Osburn, R. C. 1903 A, 653.  
1906 A, 448.
- Owen, R. 1857 E.  
1858 A, 26.  
1868 A, 908.
- Palacký, J. 1902 C, 254 ("sirenen").
- Parker and Haswell 1897 A, 451, 502, figs. 1082, 1083.
- Perrier, E. 1920 A, 152, 229 ("sirénides").
- Peterson, O. A. 1912 B, 164.
- Petronievics, B. 1923 B, 58.
- Pictet, F. J. 1853 A, 368 ("sirénoides").
- Pompeckj, J. F. 1925 A, 10 ("sirenen").
- Reynolds, S. H. 1897 A, 518, 554.
- Ryder, J. 1887 A, 346.  
1887 B, 427, 475 ("sireniens").
- Sabatier, A. 1897 B, 933 ("sirénides").  
1902 A, 100 ("sirénides").
- Schlosser, M. 1899 L, 351 ("sirenen").  
1911 A, 161 ("sirenen").
- Schmidt, O. 1886 A, 242.
- Schmidtgen, O. 1912 A, 465 ("sirenen").
- Schwarz, E. 1924 A, 420 ("sireniens").
- Sc Slater, P. L. 1897 A, 351.
- Scott, W. B. 1913 A, 442.
- Smith, G. E. 1903 B, 49.
- Steinmann, G. 1907 A, 503.  
1912 A, 47 ("sirenen").  
1912 B, 718 ("sirenen").
- Sterling, S. 1910 C, 667 ("sirenen").
- Stromer, E. 1902 B, 555 ("sirenen").  
1912 A, 220, 246.  
1921 A, 41.
- Terra, P. 1911 A, 339.
- Tredgold, A. F. 1897 A, 295.
- Trouessart, E. L. 1905 A, 748.
- Troxell, E. L. 1925 D, 613 ("sireniens").
- True, F. W. 1905 C, 384.  
1912 D, 197, 198.
- Wagner, R. 1843 A, 12.
- Wallace, A. R. 1876 A, i, 502; ii, 210.
- Weber, M. 1904 A, 727.
- Weber and Abel 1928 A, 479, 494, 496, 896.
- Weber and Burlet 1927 A.
- Wilckens, O. 1911 A, 768 ("sirenen").
- Wilder, B. 1875 A, 105.
- Williston, S. W. 1902 F, 263 ("sireniens").  
1912 E, 261.  
1914 A, 62.
- Woodward, A. S. 1898 F, 330 ("sea-cows").  
1909 A, 330.  
1910 B, 470.  
1923 C, 63.
- Woodward, H. 1904 B, 155.
- Wortman, J. L. 1920 A, 16.  
1921 A, 186.
- Yoshiwara and Iwasaki 1902 A, 12, 13.
- Zaalijer, T. 1894 A, 340 ("sirenen").
- Zittel and Schlosser 1911 A, 540.  
1923 A, 632, 636, 670.

### Suborder DESMOSTYLIFORMES Hay.

Hay, O. P. 1923 B, 109.

Abel, O. 1923 E, (135).

### DESMOSTYLIDÆ Osborn.

Osborn, H. F. 1905 H, 223.  
Abel, O. 1913 B, 729, 748, 750a.  
1914 A, 122, 192, 213.  
1919 A, 830.  
1920 A, 445.

Hay, O. P. 1915 B, 385.  
Matsumoto, H. 1918 B, 71.  
Osborn, H. F. 1905 I, 109.  
1910 B, 559.  
Zittel and Schlosser 1923 A, 635, 636.

### CORNWALLIUS Hay. Type *Desmostylus sookensis* Cornwall.

Hay, O. P. 1923 B, 107.  
1924 C, 4.

**Cornwallius sookensis** (Cornwall).

Cornwall, I. E. 1922 A, 121, 4 figs. (Desmostylus).

Clark and Arnold 1923 A, 177, pl. xxix, 5 figs. (Desmostylus).

Cornwall, I. E. 1922 in Abel, O. 1922 E, 366, 394 (Desmostylus).

Hay, O. P. 1923 B, 106, text-fig. 4.  
1924 C, 4, pl. i, figs. 4, 5; pl. ii; text-fig. 1.

Kermode, F. 1917 A, 42, 43, pl. ix (Desmostylus).

Lambe, L. M. 1917 D, 42, pl. ix, figs. 2, 3 (D. hesperus).

Upper Oligocene or Lower Miocene (Sooke);  
British Columbia.

DESMOSTYLUS Marsh. Type *D. hesperus* Marsh.

- Hay, O. P. 1902 A, 583.  
 Abel, O. 1913 B, 748, 750-b.  
     1914 A, 213.  
     1919 A, 830, figs. 829, 830.  
     1922 B, 1.  
     1922 E, 367.  
     1923 A, 213.  
     1926 E, (134).  
 Andrews, C. W. 1924 A, 308.  
 Hannibal, H. 1922 A, 238.  
 Hay, O. P. 1915 B, 381, 397.  
     1923 B, 105, 107.  
     1924 C, 1.  
 Joleaud, L. 1920 A, 499.  
 McCormack, E. C. 1914 A, 3, fig.  
 Matsumoto, H. 1918 A, 59.  
     1918 B, 61.  
 Matthew, W. D. 1916 B, 27.  
     1916 I, 109.  
 Merriam, J. C. 1906 C, 151.  
     1911 D, 403.  
     1915 E, 196, 208.  
 Miller, L. H. 1915 B, 72.  
 Osborn, H. F. 1905 D, 109.  
     1910 B, 344, 394, 549.  
     1922 G, 450.  
 Palmer, T. S. 1904 A, 224, 904.  
 Rogers, A. F. 1924 A, 545.  
 Stromer, E. 1924 A, 254.  
 Trouessart, E. L. 1905 A, 751.  
 Weber and Abel 1928 A, 44, 48, 85, figs. 13, 14.  
 Wiman, C. 1923 A, 225.  
 Yoshiwara and Iwasaki 1902 A (Without generic or specific name).  
 Zittel and Schlosser 1911 A, 542.  
     1923 A, 635.

**Desmostylus californicus** Hay.

Hay, O. P. 1923 B, 106.  
 Upper Miocene (San Pablo); California.

**Desmostylus hesperus** Marsh.

- Hay, O. P. 1902 A, 583.  
 Abel, O. 1922 B, 1.  
     1922 E, 362, pls. i-iii; text-figs. 2-4.  
     1923 A, 213, figs. 1, 3, 4.  
     1926 E, (135).  
 Anderson, F. M. 1911 A, 101 ("Desmostylus"; this species?).  
 Andrews, C. W. 1924 A, 308.  
 Cornwall, I. E. 1922 A, 122.  
 Hannibal, H. 1922 A, 238, pl. xii (*D. hesperus*); 239, pl. xi (*D. cymatias*).  
 Hay, O. P. 1915 B, 381, 397, pls. lvi-lviii.  
     1922 G, 392.  
     1923 B, 105, 107, text-fig. 5.  
     1924 C, 5, pl. i, fig. 3; text-fig. 2.  
 Lambe, L. M. 1916 A, 197.  
 Matsumoto, H. 1918 B, 72.  
 Merriam, J. C. 1911 D, 407, figs. 1-3 (*D. sp.*).  
     1915 E, 194, 197, 203, fig. 21 (This species?).  
 Osborn, H. F. 1902 H, 713.  
     1918 A, 23.  
 Palacký, J. 1902 C, 255.  
 Smith and Packard 1919 A, 97.  
 Yates, L. G. 1903 A, 20, figs. 1-3.  
 Middle Miocene (Temblor); California, Oregon.

**Desmostylus** sp. indet.

- Hay, O. P. 1924 C, 1, pl. i, figs. 1, 2.  
 Kellogg, R. 1927 B, 1 ("Desmostylus"). Miocene (Temblor); California.

## Suborder TRICHECHIFORMES Hay.

Hay, O. P. 1923 B, 109.

Abel, O. 1923 E, (185).

## HALITHERIIDÆ Gill.

- Gill, T. 1872 B, 13, 92.  
 Hay, O. P. 1902 A, 582.  
 Abel, O. 1904 A, 12, 154, 197 (Halicornidæ).  
     1913 A, 353 (Halitheriine).  
 Dollo, L. 1889 L, 421.  
 Freund, L. 1904 A, 363 (Halicores).  
 Matthes, E. 1921 A, 209, figs. 1-6 (Halicores).  
 Matthew, W. D. 1916 B, 24 (Halicornidæ).

- Roger, O. 1896 A, 247 (Halicornidæ).  
 Stromer, E. 1921 A, 41, 52 (Halicornidæ).  
 Trouessart, E. L. 1905 A, 749 (Halicornidæ).  
 Weber, M. 1904 A, 738 (Halicornidæ).  
 Weber and Abel 1928 A, 502 (Halitheriine).  
 Zittel and Schlosser 1911 A, 542 (Halicornidæ).  
     1923 A, 634 (Halicornidæ).

## METAXYTERIUM Christol. Type, none selected.

- Christol, J. 1840, L'Institut, Paris, viii, 322-323.  
 Hay, O. P. 1902 A, 582 (Dioplotherium).  
 Abel, O. 1902 B, 515.  
     1904 A, 12, figs. 2-4, 6, 7, 9, 10-12, 17, 21, 22.  
     1905 D, 393.  
     1907 G, 30, fig. 23.  
     1908 B, 144.  
     1909 E, (244).  
     1912 F, 192, 527, 685.  
     1919 A, 832, figs. 631, 639.  
     1920 A, 446, fig. 679.  
     1923 A, 224.

- Ardt, T. 1907 D, 433.  
 Boas, J. E. V. 1914 B, 586.  
 Capellini, G. 1886 A, 39, pl.  
 Christol, J. 1840, Comptes Rendus, Paris, xi, 527.  
     1841, Ann. Sci. Nat., Paris (2), xv, 381.  
     pl. vii.  
 Depéret, C. 1907 B.  
     1914 A, 1859, 1861.  
 Depéret and Roman 1920 A, 6, 13, 19, 26-33, pl. vii; text-figs. 3, 4, 6, 7, 10.  
 Dollo, L. 1889 L, 416.  
 Flot, L. 1887 A, 137.



- Frassetto, F. 1915 A, fig. 20.  
 Freund, L. 1905 A, 434.  
 Gervais, P. 1852 A, explan. pls. iv, v, vi  
 (Metaxytherium or Halitherium).  
 1859 A, 277 (Halitherium).  
 Hay, O. P. 1922 B, 1.  
 Heilmann, G. 1913 A, 58.  
 Kellogg, R. 1924 C, 765.  
 1925 B, 57.  
 Lepsius, G. R. 1881 A.  
 Lydekker, R. 1887 A, 5 (Syn. of Halitherium).  
 Palmer, T. S. 1904 A, 418, 904 (Metaxytherium);  
 286, 904 (Diplottherium).  
 Schmidtgen, O. 1912 A, 478.  
 Stromer, E. 1921 A, 41, 50.  
 Trouessart, E. L. 1905 A, 750 (Metaxytherium);  
 751 (Diplottherium).  
 True, F. W. 1905 C, 835.  
 Van Oort, E. D. 1903 A, 98.  
 Weber and Abel 1928 A, 498, 502, fig. 331.  
 Zittel, K. A. 1893 B, 198, 202.  
 Zittel and Schlosser 1911 A, 542.  
 1923 A, 634.

### **Metaxytherium floridanum Hay.**

- Hay, O. P. 1922 B, 1, pl. i.  
 Allen, G. M. 1923 A, 233, pl. xxvi; text-fig. 1.  
 Hay, O. P. 1923 A, 379.

### **HALTHERIUM Kaup. Type *Halytherium dubium* Kaup.**

- Kaup, J. 1838, Neues Jahrb. Min., 319 (Halytherium, misprint).  
 Abel, O. 1902 B, 515.  
 1904 A, 4, figs. 1, 16, 20, 24, 25.  
 1905 D, 393.  
 1906 A, 51.  
 1908 B, 144.  
 1909 D, (224).  
 1909 E, (244).  
 1912 F, 192, 527.  
 1913 A, 292.  
 Andrews, C. W. 1902 A, 295.  
 1906 A, 201.  
 1924 A, 306.  
 Arldt, T. 1907 D, 265, 409.  
 Boas, J. E. V. 1914 B, 586.  
 Bronn, H. G. 1862 C, 416.  
 Brown, A. E. 1878 A, 292.  
 Capellini, G. 1886 A, 39.  
 Depéret and Roman 1920 A, 5, 33, 37, 45, 47,  
 text-figs. 1-3, 8, 11, 13.  
 Dollo, L. 1889 L, 416, figs.  
 1892 D, 118.  
 Doran, A. H. G. 1878 A, 469.  
 Fitzinger, L. J. 1842 A, 61.  
 Flot, L. 1885 A, 439, fig.  
 1886 A, 483, pls. xxvi-xxviii.  
 1887 A, 136.  
 Flower, W. H. 1874 B, 1, pl. i.  
 Frassetto, F. 1915 A, fig. 19.  
 Freund, L. 1905 A, 434.  
 1914 A, 360.  
 Gaudry, A. 1884 A, 373, pl. xvii.  
 Gervais, P. 1852 A, 142.  
 1859 A, 277.  
 Giebel, C. G. 1855 A, 83.  
 Heilmann, G. 1913 A, 58.  
 Kaup, J. J. 1840 A, 675.

- Kellogg, R. 1925 B, 59, 67, 68.  
 Matson, G. C. 1915 A, 37, pl. xii, figs. a, b  
 ("manatee").  
 Zittel and Schlosser 1923 A, 634.  
 Miocene or Pliocene (Bone Valley); Florida.  
**Metaxytherium jordani Kellogg.**  
 Kellogg, R. 1925 B, 59, pl. ix, fig. 3; pls. x, xi.  
 Weber and Abel 1928 A, 502.  
 Upper Miocene or Sarmatian; California.  
**Metaxytherium manigaultii (Cope).**  
 Hay, O. P. 1902 A, 583 (Diplottherium).  
 Allen, G. M. 1923 A, 231 (Diplottherium manigaulti).  
 1926 A, 458, pl. ii, figs. 3, 4; pl. iii,  
 figs. 4, 5.  
 Kellogg, R. 1925 B, 59 (To Metaxytherium).  
 Manigault, G. E. 1886 A, 92 ("dugong").  
 Palacký, J. 1902 C, 254 (Diplottherium).  
 Stromer, E. 1921 A, 50 (D. manigaultii).  
 Upper Miocene; South Carolina.

### **Metaxytherium sp. indet.**

- True, F. W. 1906 A, 834, 840, pl. lxxvi, fig. 4  
 ("fossil sirenan." This genus?).  
 Middle Miocene (Calvert); Maryland.

- Kellogg, R. 1924 C, 759, 762.  
 Kingsley, J. S. 1884 A, 214.  
 Krauss, F. 1862 B, 385, pls. vi, vii.  
 Lartet, E. 1866 A, 678.  
 Lepsius, G. R. 1881 A, pls. i-x.  
 Matthew, W. D. 1915 H, 439.  
 1916 B, 24.  
 Owen, R. 1845 B, 372, pl. xevii.  
 Palmer, T. S. 1904 A, 307, 904.  
 Pictet, F. J. 1853 A, 372.  
 Reynolds, S. H. 1897 A, 352, 425, 514, 518.  
 Ryder, J. 1887 B, 475.  
 Schmidtgen, O. 1911 A, 221.  
 1912 A, 457, pl. xxix; text-figs. 1, 2.  
 Stromer, E. 1921 A, 41, 47, 50.  
 1923 A, 259.  
 Toulou, F. 1806 A, 919.  
 Trouessart, E. L. 1905 A, 749.  
 Van Oort, E. D. 1903 A, 95.  
 1905 A, 21.  
 Weber and Abel 1928 A, 484, 498, 503, figs. 314,  
 331, 332.  
 Wilder, B. 1875 A, 111.  
 Woodward, A. S. 1923 C, 69, fig. 65.  
 Zigno, A. 1887 A, 728, pl. xxvii.  
 Zittel and Schlosser 1911 A, 542.  
 1923 A, 634.

### **Halitherium antiquum (Leidy).**

- Hay, O. P. 1902 A, 583 (Trichechus).  
 Allen, G. M. 1923 A, 232 (Manatus).  
 1926 A, 455, pl. ii, figs. 1, 2; pl. iii,  
 figs. 1-3.  
 Hay, O. P. 1919 C, 109, 110, pl. xxvi, figs. 2, 3  
 (Trichechus. This species?).  
 1923 A, 363, 381.  
 Matson and Clapp 1909 A, 136 (Manatus).  
 Palacký, J. 1922 C, 255 (Manatus).

Spencer, J. W. 1895 A, 137 (Manatus).  
 Trouessart, E. L. 1905 A, 748 (Trichechus).  
 Tuomey, M. 1848 A, 165, 166 ("Manatus."  
 This species?).

Miocene (Phosphate beds); South Carolina,  
 Florida.

### **Halitherium inornatum** (Leidy).

Hay, O. P. 1902 A, 584.

Allen, G. M. 1923 A, 232.

Tuomey, M. 1926 A, 457 (Syn? of *H. antiquum*).  
 Palacký, J. 1902 C, 255 (Manatus).  
 Miocene (Phosphate beds); South Carolina.

### **Halitherium** sp. indet.

Lydekker, R. 1887 A, 12 (This genus?). Phos-  
 phate beds; South Carolina.

Van Beneden, P. J. 1880 A, 31. Miocene?;  
 mouth of Potomac.

### HEMICAULODON Cope. Type *H. effodiens* Cope.

Hay, O. P. 1902 A, 583.

Heilprin, A. 1887 A, 340.

Palmer, T. S. 1904 A, 316, 904.

Trouessart, E. L. 1904 A, 751.

### **Hemicaulodon effodiens** Cope.

Hay, O. P. 1902 A, 583.

Allen, G. M. 1923 A, 231.

Kellogg, R. 1924 C, 757.

Rhoads, S. N. 1903 A, 246.

Eocene (Shark River); New Jersey.

### HYDRODAMALIDÆ Palmer.

Hay, O. P. 1902 A, 584.

Arlt, T. 1912 A, 748.

Brandt, J. F. 1833 A, 115 (Rytinæ).

Elliot, D. G. 1901 A, 5.

Grevé, C. 1905 A, 145.

Matsumoto, H. 1918 B, 71 (Rhytinidæ).

Palmer, T. S. 1904 A, 746, 905.

Trouessart, E. L. 1905 A, 752.

Weber, M. 1904 A, 739.

Weber and Abel 1928 A, 495, 503 (Rhytinidæ).

### HYDRODAMALIS Retzius. Type *H. gigas* (Zimmerman).

Hay, O. P. 1902 A, 584.

Abel, O. 1904 A, 138, 193, 218 (Rhytina).

1908 A, 479.

1913 A, 309 (Rhytina).

1913 B, 751 (Rhytina).

1914 A, 216 (Rhytina).

1920 A, 446.

Allen, G. M. 1923 A, 235.

Andrews, C. W. 1906 A, 201 (Rhytina).

Arlt, T. 1907 D, 38 (Rhytina).

Beddard, F. E. 1900 A, 319 (Rhytina).

1902 A, 338 (Rhytina).

Bonaparte, C. L. 1832 A, 293 (Stellerus).

Bonsdorff, E. J. 1871 A, 318 (Rhytina).

Brandt, J. F. 1833 A, 103 (Rytina).

1862 D, 612 (Rhytina).

Bronn, H. G. 1849 A, 703 (Rytina).

Capellini, G. 1886 A, 51 (Rhytina).

Cuvier, F. 1836 A, 38 (Rytina).

Depéret and Roman 1920 A, 23 (Rhytina).

Dollo, L. 1889 L, 416 (Rhytina).

1892 D, 118 (Rhytina).

Doran, A. H. G. 1878 A, 464.

Elliot, D. G. 1901 A, 5.

Fischer, J. B. 1829 A, 503 (Rytina).

Freund, L. 1913 A, 258 (Rhytina).

Giebel, C. G. 1835 A, 84 (Rhytina).

1833 A, pls. xxxvii, lvi, lxi, lxix, lxxxix  
 (Rhytina).

Grevé, C. 1905 A, 145.

Hay, O. P. 1915 B, 386.

Heilprin, A. 1887 A, 340 (Rhytina).

Kampfen, P. N. 1905 A, 634 (Rhytina).

Kellogg, R. 1925 B, 57, 61.

Kingsley, J. S. 1884 A, 210 (Rhytina).

Kükenthal, W. 1897 B, 144 (Rhytina).

Lepsius, G. R. 1881 A.

Leunis and Ludwig 1883 A, 277 (Rhytina).

Leydig, F. 1859 A, 684, 698 (Rhytina).

Lorénz, L. 1904 A, 1-11 (Rhytina).

Matsumoto, H. 1918 B, 67, 68 (Rhytina).

Matthew, W. D. 1916 B, 27 (Rhytina).

Meckel, J. F. 1825 A (Rytina).

Owen, R. 1868 A, 906 (Rhytina).

Palmer, T. S. 1904 A, 335, 905.

Pander and Alton 1826 A, 8 (Rytina).

Reynolds, S. H. 1897 A, 533, fig. 92 (Rhytina).

Ryder, J. 1887 B, 475 (Rhytina).

Schlosser, M. 1911 A, 163 (Rhytina).

Stromer, E. 1921 A, 52 (Rhytina).

Taschenberg, O. 1899 A, 4672 (Rhytina).

Toldt, C. 1905 A, 337 (Rhytina).

Trouessart, E. L. 1905 A.

Van Oort, E. D. 1903 A, 97 (Rhytina).

Weber, M. 1904 A, 739 (Rhytina).

Weber and Abel 1928 A, 495, 503 (Rhytina).

Winge, H. 1906 A, 176 (Rhytina).

Zittel and Schlosser 1911 A, 542 (Rhytina).

1923 A, 635 (Rhytina).

### **Hydrodamalis gigas** (Zimmerman).

Hay, O. P. 1902 A, 584.

Abel, O. 1902 A, 181 (Rhytina stelleri).

1902 B, 515 (Rhytina stelleri).

1904 A, 138, 196 (Rhytina).

1908 B, 146 (Rhytina).

1912 F, 193, 526 (Rhytina).

1923 A, 225 (Rhytina stelleri).

Beddard, F. E. 1900 A, 47 (Rhytina).

Brandt, J. F. 1833 A, 103, pl. ii (Rhytina  
 stelleri).

Brown, A. E. 1878 A, 298 (Rhytina borealis).

Cuvier, F. 1836 A, 41-71, 376 (Rytina borealis).

Depéret, C. 1914 A, 1859 (Rhytina stelleri).

Depéret and Roman 1920 A, 4, 29, 43, text-figs.  
 1, 8 (Rhytina stelleri).

Dilg, C. 1909 A, 84 (Rhytina stelleri).

Dybowski, — 1883 A, 72 (Rhytina stelleri).

- Elliot, D. G. 1901 A, 5.  
 Fraas, E. 1905 B, 378 (Rhytina stelleri).  
 Gervais, P. 1859 A, 276 (Rhytina stelleri).  
 Grévy, C. 1905 A, 146, figs. 1-5 (H. stelleri).  
 1911 A, 37, fig. ("Steller's seekuh").  
 Kellogg, R. 1925 B, 58 (H. stelleri).  
 Kinsley, J. S. 1884 A, 211 (Rhytina stelleri).  
 Lankester, E. R. 1905 A, 20, figs. 13, 14 (Rhytina stelleri).  
 Lönnberg, E. 1907 A, 1, fig. 1 (Rhytina).  
 Lorenz, L. 1904 A, 7, pl. 1, figs. 6, 7 (Rhytina).  
 1904 B, 142.  
 Lucas, F. A. 1916 B, 316, fig. ("rytina").  
 Lydekker, R. 1901 C, 253 (Rhytina).  
 McIntosh, — 1911 A, 81 ("Rhytina").
- Meunier, S. 1903 A, 772 (Rhytina stelleri).  
 Moreau, L. J. 1900 A, 109 (Rhytina stelleri).  
 Osborn, H. F. 1910 B, 494, 559 (Rhytina stelleri).  
 Osburn, R. C. 1903 A, 659 (Rhytina stelleri).  
 Palacký, J. 1902 C, 235 (Rhytina stelleri).  
 Pütter, A. 1923 A, 221 ("steller's seekuh").  
 Rousseau, L. F. E. 1856 A, 8 (Rytina borealis).  
 Schnudt, O. 1886 A, 243 (Rhytina stelleri).  
 Selater, P. L. 1897 A, 351 (Rhytina stelleri).  
 Shufeldt, R. W. 1889 D, 35, fig. (Rhytina stelleri).  
 Woodward, A. S. 1923 C, 68, fig. 64.  
 Zigno, A. 1887 A, 732, pl. xxvii, fig. 5 (Rhytina borealis).

## TRICHECHIDÆ Gill.

- Unless otherwise indicated the authors, as quoted, use the name *Manatidæ* for this family.
- Hay, O. P. 1902 A, 583 (Trichechidæ).  
 Abel, O. 1904 A, 200.  
 1907 G, 34 ("seeküh").  
 1913 B, 729, 751a.  
 1914 A, 122.  
 Arldt, T. 1907 D, 665.  
 1912 A, 703, 748.  
 Brandt, J. F. 1833 A, 114 (Halicoreæ).  
 Cleland, J. 1863 B, 302 (Manati).  
 Cuvier, G. 1825 A, v, pt. 1, 235-271, pls. xix, xx ("lamantins").  
 Dollo, L. 1889 L, 421.  
 Elliot, D. G. 1901 A, 5.
- Gervais, P. 1853 B, 35 ("siréniens").  
 Gray, J. E. 1821 A, 309.  
 Leche, W. 1887 A ("seeküh").  
 Lobbey, J. L. 1908 A, 109.  
 Matson and Sanford 1913 A, 146 ("manatees").  
 Matsumoto, H. 1918 B, 71.  
 Palmer, T. S. 1904 A, 774, 833 (Trichechida).  
 Pander and Alton 1826 A, 8 ("lamantine").  
 1827 A, 1 ("seeküh").  
 Trouessart, E. L. 1905 A, 748.  
 Wallace, A. R. 1876 A, ii, 210.  
 Weber, M. 1904 A, 738.  
 Weber and Abel 1928 A, 503.  
 Winge, H. 1906 A, 71, 173 (Manatini).  
 Zittel and Schlosser 1911 A, 542.  
 1923 A, 634, 636.

TRICHECHUS Linnæus. Type *T. manatus* Linnæus.

- Unless otherwise indicated the authors, as quoted, employ the name *Manatus* for this genus.
- Hay, O. P. 1902 A, 583 (Trichechus).  
 Abel, O. 1904 A, 138, 200, 204.  
 1908 A, 479 (Manatus, Trichechus).  
 1908 B, 147.  
 1908 G, (48).  
 1909 D, (225).  
 1912 F, 684.  
 1913 A, 309.  
 1920 A, 445.  
 1921 A, 302.  
 Adloff, P. 1903 A, 367.  
 1910 B, 246.  
 Aichel, O. 1918 A, 502.  
 1918 B, 1-109, pls. iv, v.  
 1926 A, 43.  
 Albrecht, P. 1883 B, 35.  
 Ameghino, F. 1904 B, 51.  
 1906 A, 407 (Trichechus).  
 Anderson, R. J. 1909 A, 745.  
 Andrews, C. W. 1902 A, 293.  
 1906 A, 201.  
 Arldt, T. 1907 C, 674.  
 1907 D, 154.  
 Beddard, F. E. 1902 A, 335.  
 Beyer, H. 1908 A, 82 ("seekuh").  
 Bolz, L. 1913 A, 89.  
 Bonaparte, C. L. 1832 A, 293.  
 Brandt, J. F. 1833 A, 115.  
 Bronn, H. G. 1848 A, 700.
- Bronn, H. G. 1849 A, 703.  
 Broom, R. 1901 B, 739 ("manati").  
 Brown, A. E. 1878 A, 292.  
 Carnot, A. 1892 A, 1190, 1191 ("lamantin").  
 Cuvier, F. 1826 A, 6.  
 Cuvier, G. 1805 A.  
 1825 A, v, pt. 1, 242-253, pl. xix ("lamantins").  
 Dependorf, T. 1898 A, 393, 397.  
 1907 A, 560.  
 Dilg, C. 1909 A, 85.  
 Dollo, L. 1889 L, 416.  
 1892 D, 118.  
 Doran, A. H. G. 1878 A, 468, pl. lxiii.  
 Eimer, G. H. T. 1901 A, 259.  
 Elliot, D. G. 1901 A, 5.  
 Fisher, J. B. 1829 A, 501.  
 Fitzinger, L. J. 1842 A, 66.  
 Flower, W. H. 1874 B, 2.  
 Fraas, E. 1905 B, 378.  
 Freund, L. 1904 A, 372.  
 1905 A, 434.  
 1908 A.  
 1911 A, 385.  
 1912 A, 557.  
 1913 A, 258.  
 1914 A, 360.  
 Giebel, C. G. 1855 A, 83.  
 1883 A, pls. xxxvi, lxv.  
 Gill, T. 1907 A, 494 (Trichechus).  
 Gottlieb, H. 1914 A, 212.  
 Gregory, W. K. 1920 A, 182.

- Grobbe, K. 1904 A, 142.  
 Gudernatsch, J. F. 1909 A, 225.  
 Hanson, F. B. 1919 B, 81.  
 Hay, O. P. 1915 B, 385 (Trichechus).  
 1922 G, 392.  
 Heilmann, G. 1914 A, 90.  
 Heilprin, A. 1887 A, 339, 340 ("manatee").  
 Hennicke, C. 1902 A, 160.  
 Hogben, L. T. 1919 A, 76.  
 Howes and Harrison 1893 A, 790.  
 Humboldt, A. 1838 A, 1.  
 Humphreys, J. 1908 A, 8 ("manatee").  
 Kampfen, P. N. 1905 A, 633, fig. 82.  
 Kehler, F. A. 1896 A, 357, fig. 40.  
 Kellogg, R. 1925 B, 64.  
 Kingsley, J. S. 1884 A, 210.  
 1925 A, 219, fig. 230.  
 Küstlin, O. 1844 A.  
 Krauss, F. 1862 B, 389.  
 Kükenthal, W. 1897 B, 140.  
 1897 C, 182.  
 1913 A, 684.  
 Leche, W. 1887 A, pl. xciv.  
 1900 A, 1000.  
 Leunis and Ludwig 1883 A, 276.  
 Leydig, F. 1859 A, 684.  
 Lorenz, L. 1904 A, 9.  
 Marcus, H. 1921 A, 571, pls. xviii, xix.  
 Martins, C. 1857 A, 69 ("lamantins").  
 Matsumoto, H. 1918 B, 67, 68.  
 1923 A, 107, 111.  
 Matthes, E. 1912 B, 489.  
 1921 B, 142.  
 1921 C, 116.  
 Matthew, W. D. 1915 A, 256.  
 1916 B, 24.  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1924 C, 503.  
 Osborn, H. F. 1907 G, 189, fig. 19 (Trichechus).  
 1910 B, 445, 559.  
 Owen, R. 1868 A, 892.  
 Palmer, T. S. 1904 A, 683, 834 (Trichechus).  
 Peters, W. 1872 A, 15 (Trichechus).  
 Pocock, R. I. 1916 G, 547.  
 Pohle, H. 1921 A, 116.  
 Reynolds, S. H. 1897 A, 546.  
 Rogenhofer, A. 1908 A, (43).  
 Rousseau, L. F. E. 1856 A, 2.  
 Scharff, R. F. 1911 A, 279, 360 (Trichechus).  
 Schlosser, M. 1911 A, 163.  
 Schmidt, O. 1886 A, 242.  
 Slater, P. L. 1897 A, 351.  
 Scott, W. B. 1913 A, 442.  
 Seeley, H. G. 1876 C, 177.  
 Stannius, H. 1846 B, 2 pls. ("manati").  
 Stroner, E. 1921 A, 51.  
 Terra, P. 1911 A, 340.  
 Tonnes, C. S. 1878 A, 34 ("manatee").  
 Trouessart, E. L. 1905 A, 748.  
 Van Oort, E. D. 1903 A, 95.  
 Vioq-d'Azyr, F. 1792 A, cvii (Manatini).  
 Wagner, R. 1843 A.  
 Wallace, A. R. 1876 A I, 130; II, 210.  
 Weber, M. 1904 A, 738.  
 Weber and Abel 1928 A, 483, 495, figs. 313, 315, 318, 322.  
 Weber and Burlet 1927 A, 143, 237.  
 Wilder, B. 1875 A, 111.  
 Winge, H. 1906 A, 176.  
 Wright, G. F. 1911 B, 436 ("sea-cow").  
 Zittel and Schlosser 1911 A, 542.  
 1923 A, 634.
- Trichechus? giganteus (DeKay).**  
*DeKay, J. C.* 1842 C, 123 (Manatus).  
*Allen, G. M.* 1923 A, 231 (Manatus).  
*Case, E. C.* 1904 D, 56, pl. xxvi, fig. 1.  
*Palmer, W.* 1917 A, 120 (Hydrodomalis sp.).  
*Shattuck, G. B.* 1904 A, xciv.  
*Trouessart, E. L.* 1905 A, 748.  
 Upper Miocene (Calvert); Maryland.  
 The type of this species may belong to a cetacean.
- Trichechus latirostris Harlan.**  
*Harlan, R.* 1823, Jour. Acad. Nat. Sci. Phil., III, 394.  
*Hay, O. P.* 1902 A, 534 (T. manatus).  
*Abel, O.* 1904 A, 138, 146, 149, 172, 191, pl. iv, figs. 1a, 1b; pl. vii, figs. 8-10; text-figs. 14, 15 (Manatus latirostris).  
 1907 G, 9, 31, figs. 6, 24 (Manatus americanus).  
 1908 A, 494, fig. 24 (M. latirostris).  
 1908 E, 403 (M. latirostris).  
 1912 F, 114, 193 (M. latirostris).  
*Anderson, R. J.* 1898 A, 765 ("manatee").  
 1908 A, 547 ("manatee").  
*Beddard, F. E.* 1897 B, 47 (Manatus).  
 1900 A, 317 ("manatee").  
*Brown, A. E.* 1898 A, 293 (M. latirostris).  
*Camerano, L.* 1915 A, 6, pl. iii, fig. 5 (T. manatus).  
*Chapman, H. C.* 1875 A, 452 ("manatee").  
*Conklin, W. A.* 1873 A, 166 (M. latirostris).  
*Crane, A.* 1881 A, 456, fig. (M. americanus).  
*Cuvier, F.* 1836 A, 7, pls. i-iii (M. americanus).  
*Dart, R. A.* 1923 A, 620 (T. manatus).  
*Dilg, C.* 1909 A, 85 (M. latirostris).  
*Elliot, D. G.* 1901 A, 6, pl. iii (M. latirostris).  
*Fischer, J. B.* 1829 A, 502 (Manatus latirostris).  
*Gudernatsch, J. F.* 1909 A, 225, figs. A-C (M. latirostris).  
*Hay, O. P.* 1923 A, 376 (T. manatus).  
*Kingsley, J. S.* 1884 A, 212.  
*Kükenthal, W.* 1897 B, 140 (T. latirostris).  
*Lorenz, L.* 1904 A, 9, pl. i, figs. 8, 9 (T. manatus).  
 1904 B, 143 (T. manatus).  
*Lucas, F. A.* 1916 B, 313 ("manatee").  
*Matthes, E.* 1912 B, 489 (M. latirostris).  
*Miller, G. S.* 1924 C, 503 (T. latirostris).  
*Murie, J.* 1880 A, 19, pls. v-ix (M. americanus).  
*Oswald, F.* 1911 A, 410 (M. americanus).  
*Pander and Alton* 1826 A, 9 (Manatus).  
 1827 A, 1 ("lamantin").  
*Reche, O.* 1905 B, 243 (M. americanus).  
*Ryder, J.* 1887 B, 475 ("manatee").  
*Sellards, E. H.* 1916 B, 104 (T. manatus).  
*Thomas and Lydekker* 1898 A, 814 ("manatee").  
*Wilder, B.* 1875 A, 105 ("manatee").  
 Recent; eastern coast of Florida: Pleistocene and possibly earlier; Florida.  
 Some of the citations to T. latirostris may refer to the West Indian species.

**Trichechus** sp. indet.

Hay, O. P. 1902 A, 584.

Rhoads, S. N. 1903 A, 246.

## Order NOTOUNGULATA Roth.

Roth, S. 1903 A, 11, 12.

Ameghino, F. 1893 A, 276 (Toxodontia).

Gregory, W. K. 1910 A, 370, 383, 448, 466.

Hennig, E. 1921 A, 260 (Notungulata).

Lydekker, R. 1893 D, pt. 3, 2 (Toxodontia).

Matthew, W. D. 1910 G, 152.

1915 F, 429.

1928 B, 977.

Matthew and Granger 1925 A, 2 (Notungulata).

Osborn, H. F. 1907 G, 16 (Notungulata).

Osborn, H. F. 1907 H, 613 (Notungulata).

1910 B, 560.

Scott, W. B. 1896 C, 308 (Toxodontia).

1912 A, 287 (Toxodontia).

Weber, M. 1904 A, 702 (Toxodontia).

Weber and Abel 1928 A, 422, 504.

Woodward, A. S. 1898 B, 307 (Ancylopoda).

Zittel, K. A. 1890 A, 474 (Toxodontia).

Zittel and Schlosser 1911 A, 511.

1923 A, 603, 636.

## Suborder ENTELONYCHIA Ameghino.

Ameghino, F. 1893 A, 312.

Matthew, W. D. 1915 F, 429.

1921 D, 214.

Scott, W. B. 1912 A, 239.

Scott, W. B. 1913 A, 482, 680.

Weber and Abel 1928 A, 509.

Zittel and Schlosser 1911 A, 521.

1923 A, 613.

## ARCTOSTYLOPIDÆ Schlosser.

Schlosser, M. 1923 in Zittel and Schlosser 1923 A, 614.

Matthew, W. D. 1915 F, 429 (Isotemnidae).

Matthew and Granger 1925 A, 2, 5.

Weber and Abel 1928 A, 540.

## ARCTOSTYLOPS Matthew.

Matthew, W. D. 1915 F, 429.

1916 I, 109.

1921 D, 214.

1928 B, 977, 983.

Matthew and Granger 1925 A, 2, 4.

Zittel and Schlosser 1923 A, 605, 614, 666, 684.

Type *A. steini* Matthew.**Arctostylops steini** Matthew.

Matthew, W. D. 1915 F, 429, pl. xv; text-figs. 1-3.

1914 K, 167 ("notungulate").

1928 B, 960.

Weber and Abel 1928 A, 510, fig. 342.

Zittel and Schlosser 1923 A, 614, fig. 738.

Lower Eocene (Wasatch); Wyoming.

## Order ANCYLOPODA Cope.

Hay, O. P. 1902 A, 690.

Abel, O. 1912 F, 388.

1913 B, 730, 755a.

1914 A, 122.

1919 A, 888.

1920 A, 453.

1920 B, 23.

Ameghino, F. 1897 B, 261.

1901 A, 406.

1902 B, 10 ("ancylopodos").

1905 C, 381 ("ancilopodos").

Andrews, C. W. 1923 B, 1095.

Arlt, T. 1907 D, 619.

Beddard, F. E. 1902 A, 211.

Cope, E. D. 1891 N, 67, 76, 90.

Gregory, W. K. 1910 A, 99, 351, 397.

Howes, G. B. 1902 A, 523.

Kampfen, F. N. 1905 A, 627.

Koken, E. 1901 B, 224.

Major, C. J. F. 1899 B, 64.

Matthew, W. D. 1910 G, 152.

Osborn, H. F. 1893 M, 95 (Ord. Ancylopoda; subord. Perissonychidae).

1902 E, 356, fig. 1.

1907 G, 15, 184.

1910 B, 68, 558.

1913 B, 264.

1925 B, 18.

Palacký, J. 1902 A, 3.

Pilgrim, G. E. 1913 A, 298.

Scott, W. B. 1913 A, 224, 238, 291, 353, 675.

Trouessart, E. L. 1905 A, 587.

Weber, M. 1904 A, 588, 694.

Weber and Abel 1928 A, 426, 626, 686.

Woodward, A. S. 1904 B, 159.

Zittel and Schlosser 1923 A, 613.

## Superfamily CHALICOTHERIOIDÆ, new name.

The authors, as quoted, use the name Chalicotherioidea.

Hay, O. P. 1902 A, 690.

Abel, O. 1920 B, 23.

Case, E. C. 1898 C, 833.

1899 B, 168.

Gill T. 1872 B, 71.

Gregory, W. K. 1910 A, 397.

1920 A, 247.

Holland and Peterson 1913 A, 198.

Merriam, J. C. 1914 E, 818.

Osborn, H. F. 1913 B, 264.

Peterson, O. A. 1907 A, 733.

Schlosser, M. 1901 B, 300.

Weber and Abel 1928 A, 688.

## CHALICOTHERIIDÆ Gill.

- Hay, O. P. 1902 A, 690.  
 Abel, O. 1912 F, 645 ("chalicotheriden").  
     1913 B, 730, 755a.  
     1914 A, 148, 286.  
     1920 A, 453 ("chalicotheriiden").  
     1921 A, 284 ("chalicotheriiden").  
     1922 C, 270.  
 Ameghino, F. 1893 B, 442.  
     1893 D, 14.  
 Arldt, T. 1907 D, 645 (Chalicotheridæ).  
     1912 A, 700, 746 (Chalicotheridæ).  
 Cope, E. D. 1880 U, 152.  
 Depéret, C. 1892 A, 61 ("chalicothéridés").  
     1906 B, 1122 ("chalicothéridés").  
     1907 B ("chalicothéridés").  
     1908 A, 303.  
     1912 A, 707 ("chalicothéridés").  
 Lydekker, R. 1915 C, 622.  
 Matthew, W. D. 1909 C, 104, 108, 111, 113, 115, 119.  
     1924 C, 152.  
     1926 C, 168, 169, fig. 26 ("chalicotheres").  
 Matthew, W. D. 1928 B, 968, 979, fig. 15 ("chalicotheres").  
 O'Harra, C. C. 1920 A, 96.  
 Osborn, H. F. 1905 H, 218.  
     1905 I, 107.  
     1909 D, 80, 123.  
     1910 B, 610.  
 Palacký, J. 1902 A, 3 ("chalicotherien").  
     1903 B, 311, 313 ("chalicotheriden").  
 Reynolds, S. H. 1897 A, 509, 519.  
 Sauvage, H. E. 1882 A, 105.  
 Schlosser, M. 1902 J, 257 ("chalicotheriiden").  
 Scott, W. B. 1913 A, 291, 354, 678.  
     1916 A, 117 ("chalicotheres").  
 Seeley, H. G. 1886 A, 476.  
 Trouessart, E. L. 1905 A, 595 (Chalicotheridæ).  
 Weber, M. 1904 A, 585.  
 Weber and Abel 1928 A, 426.  
 Weber and Burlet 1927 A, 136.  
 Winge, H. 1906 A, 71, 155 (Chalicotheriini).  
 Zittel and Schlosser 1911 A, 467.  
     1923 A, 554, 602.

## MACROTHERIINÆ Holland and Peterson.

- Holland and Peterson 1913 A, 202.  
 Winge, H. 1906 A, 71, 155 (Chalicotheriini).  
 Zittel and Schlosser 1923 A, 555.

CHALICOTHERIUM Kaup. Type *C. goldfussi* Kaup.

- Hay, O. P. 1902 A, 691.  
 Abel, O. 1912 F, 388, 389.  
     1920 B, 23-60, figs. 3, 5, 7, 10-12.  
     1921 A, 282, 290, figs. 105-108.  
     1922 C, 119, figs. 108-111.  
     1926 B, 359.  
 Arldt, T. 1907 D, 203, 253.  
 Barbour, E. H. 1906 C, 781.  
 Beddard, F. E. 1902 A, 211.  
 Bronn, H. G. 1848 A, 282.  
     1849 A, 706.  
 Case, E. C. 1899 B, 168.  
 Depéret, C. 1892 A, 61.  
     1907 B.  
 Dollo, L. 1889 C, 680.  
 Falconer, H. 1844 A, 239.  
     1868 A, 1, 192, 208, 221.  
 Falconer and Murchison 1852 A, 91.  
     1867 A, 103.  
 Filhol, H. 1879 A, 206.  
 Gaudry, A. 1891 C, 89.  
 Gervais, P. 1859 A, 169.  
 Giehel, C. G. 1855 A, 69.  
 Heilprin, A. 1887 A, 372.  
 Hoernes, R. 1886 A, 669.  
 Koken, E. 1901 B, 223.  
 Lambe, L. M. 1904 C, 29.  
     1905 D, 370 A.  
 Lemoine, V. 1889 A, 259.  
 Matthew, W. D. 1928 B, 979, fig. 15.  
 Morriam, J. C. 1907 A, 381.  
 Osborn, H. F. 1893 M, 95.  
 Osborn, H. F. 1905 H, 201.  
     1907 G, 87, 184.  
     1910 B, 216, 357, 558.  
 Palmer, T. S. 1904 A, 178, 909.  
 Pietet, F. J. 1853 A, 337.  
 Reynolds, S. H. 1897 A, 360, 432, 508, 525, fig. 106.  
 Sauvage, H. E. 1882 A, 106.  
 Schlosser, M. 1883 B, 160.  
     1883 D, 164.  
     1903 I, 75, 181, 209, 211, 219.  
 Scott, W. B. 1896 D, 50.  
     1913 A, 354.  
 Trouessart, E. L. 1905 A, 596.  
 Weber, M. 1904 A, 694.  
 Weber and Abel 1928 A, xviii, 686, 688, fig. 477.  
 Zittel and Schlosser 1911 A, 468.  
     1923 A, 555, fig. 690.  
 Chalicotherium bilobatum Cope.  
 Hay, O. P. 1902 A, 691.  
 Lambe, L. M. 1904 C, 29, 38, 51.  
     1905 D, 370 A.  
     1908 A, 11, 54, pl. iii, figs. 7-9.  
 Matthew, W. D. 1909 C, 104 (This genus?).  
 Palacký, J. 1902 A, 3.  
 Peterson, O. A. 1906 C, 62.  
     Lower Oligocene (White River); Canada.  
 Chalicotherium sp. indet.  
 Peterson, O. A. 1928 A, 110, fig. 20 (This genus?).  
     Miocene or Pliocene (Brown's Park); Colorado.

## MOROPODIDÆ Marsh.

Marsh, O. C. 1877 D, 249.

Holland and Peterson 1913 A, 221.

## MOROPODINÆ Holland and Peterson.

Holland and Peterson 1913 A, 201, 202, 206.  
Abel, O. 1920 B, 47.

Zittel and Schlosser 1923 A, 554.

MOROPUS Marsh. Type *M. distans* Marsh.

- Hay, O. P. 1902 A, 691.  
Abel, O. 1920 B, 28.  
1921 A, 282, 290.  
1926 B, 359, 373, 452.  
Barbour, E. H. 1908 A, 209.  
1908 B, pls. iii, iv, vi-ix.  
Beddard, F. E. 1902 A, 211.  
Christman, E. S. 1921 A, 623.  
Cooper, C. F. 1920 A, 357.  
Eastman, C. R. 1914 B, 689.  
1915 C, 658.  
Gregory, W. K. 1910 A, 397.  
1920 A, 195.  
Haug, E. 1911 A, 1705.  
Heilprin, A. 1887 A, 338.  
Hoernes, R. 1886 A, 664.  
Holland and Peterson 1913 A, 272, 4 text-figs.  
Lee, Stone, Gale 1915 A, 34, pl. vi.  
Matthew, W. D. 1901 B, 374.  
1909 C, 111, 113, 119.  
1913 C, 287.  
1914 L, 269.  
1917 A, 576.  
1918 F, 121.  
1923 C, 408.  
1924 E, 748.  
1928 B, 979, fig. 15.  
Mernan, J. C. 1911 B, 207, 208, 215.  
Moodie, R. L. 1923 B, 126, fig. 10, pl. xxii.  
Osborn, H. F. 1907 F, 872.  
1909 D, 72, 74.  
1910 B, 224, 230, 235, 286, 558.  
1912 G, 246-249.  
1918 A, 16.  
1918 B, 181.  
1919 C, 250.  
Palacký, J. 1902 A, 3.  
1903 B, 311.  
Palmer, T. S. 1904 A, 432, 909.  
Peterson, O. A. 1906 C, 60.  
1907 A, 734.  
Schlosser, M. 1899 U, 461.  
Schmidt, O. 1886 A, 125.  
Schuchert and Levene 1927 A, 338, fig.  
Scott, W. B. 1913 A, 238, 356, fig. 185.  
Sternberg, C. H. 1917 A, 21 (Moropusus).  
Trouessart, E. L. 1905 A, 596.  
Weber and Abel 1928 A, 687, fig. 475.  
Zittel and Schlosser 1911 A, 468.  
1923 A, 555, 672.
- Moropus distans** Marsh.  
Hay, O. P. 1902 A, 691.  
Holland and Peterson 1913 A, 207, 217, 221, 1 fig.  
Matthew, W. D. 1909 C, 108.  
Merriam, J. C. 1911 B, 271.  
Merriam and Sinclair 1907 A, 186.  
Peterson, O. A. 1906 B, 491.  
1907 A, 734, figs. 1-4.  
Sinclair, W. J. 1906 A, 66.  
Upper Oligocene (John Day); Oregon.

**Moropus elatus** Marsh.

- Hay, O. P. 1902 A, 691.  
Abel, O. 1919 A, 872, figs. 668, 669.  
1920 B, 28, 39, figs. 1, 9, 11.  
1925 A, 63, fig. 41.  
1926 B, 376, figs. 243, 452.  
Anonymous 1510 A, 157.  
Barbour, E. H. 1908 A, 215 (M. elatus); 211, 215, pls. i, ii; text-figs. 1-5 (M. cooki).  
1908 B, pls. i, ii, v, x, xi (M. cooki).  
1909 A, 252 (M. cooki).  
Cockerell, T. D. A. 1923 D, 271 (M. cooki, M. elatus).  
Cook, H. J. 1912 D, 41, 42 (M. elatus?, M. cooki).  
Cooper, C. F. 1920 A, 339.  
Eastman, C. R. 1912 C, 658.  
Figgins, J. D. 1924 A, 16, fig. ("Moropus").  
Holland, W. J. 1908 F, 809, fig. 2.  
Holland and Peterson 1913 A, 206, 217, 222, pls. xlviii-1, lli-xxvii; 77 text-figs.; 223 (M. elatus a syn.).  
Matthew, W. D. 1909 C, 113 (This species?).  
1922 D, 359, figs. 7, 11.  
Moodie, R. L. 1923 B, 134, fig. 9.  
O'Harra, C. C. 1920 A, 98, 156, pls. xvii, xxvii (M. elatus); 97, 156, pl. xxxi; text-fig. 39 (M. cooki).  
Osborn, H. F. 1918 B, 131 (M. cooki).  
1919 C, 251, fig. 1 (M. cooki).  
Palacký, J. 1903 B, 317.  
Peterson, O. A. 1906 C, 46, 60.  
1907 A, 734, figs. 6-26.  
1913 A, 673.  
Scott, W. B. 1913 A, 240, fig. 130.  
Weber and Abel 1928 A, xviii, 686, 688, fig. 477.  
Zittel and Schlosser 1923 A, 555, fig. 689.  
Middle Miocene (Harrison); Nebraska.

**Moropus hollandi** Peterson.

- Peterson, O. A. 1913 A, 673.  
Holland and Peterson 1913 A, 217, 232, 3 figs.  
O'Harra, C. C. 1920 A, 156.  
Middle Miocene (Harrison); Nebraska.

**Moropus matthewi** Holland and Peterson.

- Holland and Peterson 1913 A, 217, 230.  
Matthew, W. D. 1924 C, 153 ("Moropus").  
O'Harra, C. C. 1920 A, 156.  
Middle Miocene; Colorado.

**Moropus maximus** Holland and Peterson.

- Holland and Peterson 1913 A, 217, 230, 1 fig. (This genus?).  
Lower Miocene (Harrison); Nebraska.

**Moropus maximus** Holland and Peterson.

Holland and Peterson 1913 A, 217, 234.  
 Matthew, W. D. 1924 C, 153 ("Moropus").  
 Middle Miocene (Virgin Valley); California.

**Moropus oregonensis** Leidy.

Leidy, J. 1873 B, pl. ii, fig. 1 (Lophiodon).  
 Holland and Peterson 1913 A, 217, 219, fig. 5.  
 Matthew, W. D. 1909 C, 108.  
 Miocene (Bridge Creek); Oregon.

**Moropus parvus** Barbour.

Barbour, E. H. 1908 B, 222, text-fig. 5.  
 1909 A, 252.  
 Cook, H. J. 1912 D, 41.  
 Miocene (Harrison); Nebraska.

**Moropus petersoni** Holland.

Holland, W. J. 1908 F, 809, fig. 1.  
 Cook, H. J. 1912 D, 41.  
 Holland and Peterson 1913 A, 217, 226, 249, pl. h; 24 text-figs.  
 O'Harra, C. C. 1920 A, 156.  
 Miocene (Harrison); Nebraska.

**Moropus senex** Marsh.

Hay, O. P. 1902 A, 691.  
 Holland and Peterson 1913 A, 206, 217, 222, 1 fig.  
 Matthew, W. D. 1909 C, 108.  
 Merriam, J. C. 1911 B, 271.  
 Merriam and Sinclair 1907 A, 186.  
 Peterson, O. A. 1907 A, 734, fig. 5.  
 Sinclair, W. J. 1906 A, 66.  
 Oligocene (John Day); Oregon.

**Moropus** sp. indet.

Buwalda, J. P. 1916 A, 77. Mohave desert; California.  
 Loomis, F. B. 1923 A, 222. Miocene (Harrison); Nebraska.  
 Matthew, W. D. 1901 B, 358.  
 1909 C, 115. Middle Miocene; Colorado.  
 Merriam, J. C. 1911 B, 205, 267, figs. 39-45 (This genus?). Miocene (Virgin Valley); Nevada.  
 Osborn, H. F. 1913 B, 263, figs. 2, 3c (This genus?).

## Order PERISSODACTYLA Owen.

Hay, O. P. 1902 A, 607.  
 Abel, O. 1912 D, 604 ("mesaxonier").  
 1912 F, 232 ("mesaxonier").  
 1913 B, 729, 752b.  
 1914 A, 122, 150, 234.  
 1919 A, 853.  
 1920 A, 449.  
 1924 B, 18 ("perissodactylen").  
 1926 B, 398 ("perissodactylen").  
 Ameghino, F. 1889 A, 1022.  
 1897 B, 262 ("perissodactyles").  
 1906 A, 300 ("perissodactyles").  
 1912 B, 172 ("perissodactyles").  
 Arldt, T. 1907 D, 672.  
 Bayer, F. 1897 A, 147 ("perissodactyles").  
 Reddard, F. E. 1902 A, 235.  
 Behlen, H. 1906 A ("unpaarhufer").  
 Bensley, B. A. 1901 C, 252.  
 Bertelli, D. 1909 A, 162 ("perissodactyli").  
 Black, D. 1915 A, 353.  
 Blainville, H. M. D. 1819 A, 41 ("groupe à système de doigts impairs").  
 Boas, J. E. V. 1884 B, 392 ("perissodactylen").  
 1914 B, 577, 595 ("perissodactylen").  
 Branca, W. 1907 A, 9 ("perissodactylen").  
 Broom, R. 1915 A, 162.  
 Brown, A. E. 1904 B, 55.  
 Burmeister, H. 1879 B, 474 (Imparidigitata).  
 Carus, V. 1875 A, 156.  
 Clark and Sonntag 1926 A.  
 Cope, E. D. 1885 BB, 72.  
 1891 N, 84, 89, 90.  
 Depéret, C. 1904 B, 43 ("imparidigités").  
 1907 B ("imparidigités").  
 1912 A, 710 ("perissodactyls").  
 Doran, A. H. G. 1878 A, 419.  
 Eimer, G. H. T. 1901 A, 257.  
 Fairchild, H. L. 1894 A, 207, 208.  
 Fischer, E. 1903 A, 713 ("perissodactylen").

Flower, W. H. 1873 B, 95 ("perissodactyles").  
 1892 A, 13.  
 Frassetto, F. 1915 A ("perissodactyli").  
 Freund, L. 1906 A, 115 ("einhufer").  
 1911 A, 386.  
 Gaudry, A. 1908 A, 1133 ("perissodactyles").  
 Gaupp, E. 1905 D, 1037.  
 1913 A, 125.  
 Gidley, J. W. 1912 B, 179.  
 Giebel, C. G. 1883 A ("einhufer").  
 Gregory, W. K. 1910 A, 347, 385, 387-397, 450, 457 (Perissodactyla); 466 (Mesaxonia).  
 1912 F, 290 ("perissodactyls").  
 1914 D, 294.  
 1916 A, 248 ("perissodactyls").  
 1920 A, 193, 243, 247.  
 1927 J, 443 ("perissodactyls").  
 Haeckel, E. 1868 A, 475.  
 1873 A, 544, 554.  
 Hasse and Schwarck 1870 A, 129 (Solidungula).  
 Hay, O. P. 1912 D, 580.  
 1914 A, 143.  
 Heilprin, A. 1887 A, 368.  
 Hensel, R. 1879 A, 529 ("einhufer").  
 Hescheler, K. 1906 A, 81 ("unpaarhufer").  
 Hiltzheimer, M. 1913 A, 567 ("unpaarhufer").  
 Hoernes, R. 1886 A, 665.  
 Hogben, L. T. 1919 A, 75 ("perissodactyls").  
 Huxley, T. H. 1863 E, 555.  
 1870 F, 527.  
 1880 E, 460 (Perissodactyla).  
 Jaekel, O. 1911 A, 241 (Mesodactyli).  
 Kampfen, P. N. 1905 A, 573.  
 Keuchenius, P. E. 1913 A, 449.  
 Kingsley, J. S. 1925 A, 214, 297, fig. 320.  
 Knottnerus-Meyer, T. 1907 A, 4, 96, 101.  
 Koken, E. 1893 B, 482, 500 ("unpaarhufer").  
 Kraglievich, L. 1926 C, 75.  
 Kükenthal, W. 1913 A, 682.



- Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 267.  
 Lull, R. S. 1904 C, 2.  
 1917 B, 295.  
 Lydekker, R. 1907 B, 4.  
 1916 A, 1.  
 Major, C. J. F. 1880 A, 22, 36 (Imparidigitata).  
 1899 B, 62.  
 Matthew, W. D. 1906 B, 361 ("perissodactyls").  
 1909 C, 133.  
 1909 D, 301, 309, 333, 549.  
 1910 G, 152 ("perissodactyls").  
 1912 A, 159.  
 1915 A, 234, fig. 16.  
 1915 K, 448 ("perissodactyls").  
 1917 A, 573.  
 1921 D, 214.  
 1926 C, 169 ("perissodactyls").  
 1928 B, 948, 960, 963, 979.  
 Mead, C. S. 1906 A, 481.  
 Meckel, F. 1809 A, tab. 1 (Solipeda).  
 1823 A, 1 ("einhufner").  
 Mitchell, P. C. 1905 A, 476.  
 O'Harra, C. C. 1920 A, 90 ("perissodactyls").  
 Osborn, H. F. 1902 E, 356, fig. 1.  
 1905 H, 214, fig. 2.  
 1905 I, 99.  
 1905 N, 242.  
 1907 G, 15, 72, 76, 174.  
 1909 D, 133.  
 1910 B, 627.  
 1918 C, 133.  
 1925 B, 18.  
 1925 C, 750.  
 Owen, R. 1857 E.  
 1858 A, 27.  
 1868 A, 898.  
 Palacký, J. 1908 B, 305.  
 Parker and Haswell 1897 A, 452, 505.  
 Perna, G. 1906 A, 122.  
 Perrier, E. 1920 A, 354 ("perissodactyles").  
 Pictet, F. J. 1853 A, 294 ("perissodactyles").  
 Puccioni, N. 1908 A, 41 ("perissodactyll").  
 Rehs, J. 1914 A, 2, 46.  
 Reynolds, S. H. 1897 A, 487, 550.  
 Rosenberg, A. 1873 A, 132.  
 Schlosser, M. 1898 B, 360.  
 1903 I, 179.  
 1905 A, 324.  
 1911 A, 165 ("perissodactylen").  
 Schmidt, O. 1886 A, 127, 135, 189.  
 Schwarz, E. 1924 A, 421 ("perissodactyls").  
 Scott, W. B. 1896 D, 47, 57 ("perissodactyls").  
 1913 A, 234, 255, 266, 270, 275, 280, 288, 514,  
 687 (Perissodactyla); 60, 290 (Chelodac-  
 tyla).  
 1916 A, 116.  
 1928 B, 257.  
 Seeley, H. G. 1878 A, 224.  
 1886 A, 466, 474.  
 Sefve, I. 1913 A, 362 ("mesaxonier").  
 1914 A, 240 ("perissodactylen").  
 Stehlin, H. G. 1905 A, 566 ("perissodactylen").  
 1916 B, 1531 ("perissodactylen").  
 Steinmann, G. 1907 A, 487.  
 Stromer, E. 1912 A, 204, 244 (Mesaxonia).  
 1916 A, 404, 413.  
 Taschenberg, O. 1899 A, 4434.  
 Terra, P. 1911 A, 308.  
 Thacker, A. G. 1922 A, 600, 603.  
 Tornier, G. 1888 A, 299 ("perissodactylen").  
 1894 B, 103 ("perissodactylen").  
 Trouessart, E. L. 1905 A, 604.  
 Van Bemmelen, J. F. 1918 A, 572 ("perissodac-  
 tyles").  
 Wallace, A. R. 1876 A, i, 135.  
 Weber, M. 1904 A, 588, 591 (Diplarthra, in  
 part; Mesaxonia); 597 (Perissodactyla).  
 Weber and Abel 1928 A, 426, 626, 631, 649, 658,  
 892.  
 Weber and Burlet 1927 A.  
 Wilder, B. 1872 B, 320.  
 Winge, H. 1906 A, 71.  
 Woodward, A. S. 1898 D, 335.  
 1918 A, lxix ("perissodactyls").  
 Woodward, H. 1904 B, 159.  
 Wright, R. R. 1883 A, 235.  
 Zittel and Schlosser 1911 A, 414.  
 1923 A, 528, 669.

*Superfamily EQUOIDÆ, new form.*

- Hay, O. P. 1902 A, 608 (Equoidea).  
 Arloing, S. 1867 A, 72 ("solipèdes").  
 Bonaparte, C. L. 1832 A, 292 (Solidungula).  
 Burmeister, H. 1879 B, 475 (Solidungula).  
 Carus and Engelmann 1861 A, 1297 (Solipeda).  
 Case, E. C. 1898 C, 833 (Hippoidea).  
 1899 B, 163 (Hippoidea).  
 Cope, E. D. 1891 N, 86 (Equoidea).  
 Flower, W. H. 1873 B, 96 (Solidungula).  
 Gidley, J. W. 1912 B, 179 (Hippoidea).  
 Gregory, W. K. 1920 A, 247 (Hippoidea).  
 Hay, O. P. 1914 A, 145 (Equoidea).  
 Osborn, H. F. 1910 B, 555 (Hippoidea).  
 Owen, R. 1857 F (Solidungula).  
 Schlosser, M. 1901 B, 300 (Hippoidea).  
 Trouessart, E. L. 1905 A, 635 (Hippoidea).  
 Weber, M. 1904 A, 614, 619 (Hippoidea); 612  
 (Solidungula).  
 Weber and Abel 1928 A, 426, 674 (Hippoidea).  
 Weber and Burlet 1927 A, xv (Hippoidea).  
 Winge, H. 1906 A, 70, 143, 151 (Equids).

*EQUIDÆ Gray.*

The writer is indebted to Dr. W. D. Mat-  
 thew for the arrangement of the Equidæ here  
 adopted.

- Gray, J. E. 1821 A, 307.  
 Hay, O. P. 1902 A, 608.  
 Abel, O. 1902 B, 516 ("equiden").  
 1904 B, 741 ("equiden").  
 1910 B, (186) ("pferde").

- Abel, O. 1912 F, 232 ("pferde").  
 1913 B, 730, 733b.  
 1914 A, 244.  
 1919 A, 860.  
 1920 A, 451.  
 1921 A, 181, 252, 261 ("pferde")  
 1925 B, 443.

- Abel, O. 1926 D, 63 ("equiden").  
1926 H, (159) ("equiden").  
1928 B, 1-102.
- Adloff, P. 1903 A, 359 ("pferde").
- Ameghino, F. 1889 A, 1012.  
1893 B, 442.  
1893 D, 15.  
1904 C, 37.  
1906 A, 285.  
1912 B, 170 ("equides").
- Anderson, R. J. 1911 A, 639.  
1912 D, 253.  
1912 E, 907.
- Andrews, C. W. 1903 C, 2 ("horses").
- Anthony, R. 1912 A ("équidés").
- Antonius, O. 1912 A, (64) ("pferde").  
1913 A, 241 ("equiden").  
1913 B, 235 ("equiden").  
1919 A, 273 ("pferde").  
1923 A, (31).
- Aridt, T. 1907 D, 653.  
1909 C, 457 ("pferde").
- Aureggio, — 1914 A, 337 ("chevaux").
- Baird, S. F. 1876 A, ccviii ("horses").
- Bayer, F. 1897 A, 147.
- Beddard, F. E. 1902 A, 237.
- Behlen, H. 1906 A, 196.
- Berthoud, E. L. 1879 A, 153 ("horses").
- Beyer, H. 1908 A, 81 ("einhufer").
- Boas, J. E. V. 1914 B, 595 ("pferde").
- Bonaparte, C. L. 1832 A, 292.
- Boule, M. 1905 A, 1864 ("équidés").  
1910 A, 1 ("équidés").
- Boule and Thevenin 1920 A, 79, 120 ("équidés").
- Bradley, O. C. 1903 A, 112.
- Buwalda, J. P. 1914 C, 350 ("horses").
- Carter, J. T. 1922 A, 606 ("horses").
- Carus, V. 1875 A, 159.
- Case, E. C. 1899 B, 163.
- Chubb, S. H. 1912 A, 113.
- Colyer, J. F. 1905 A, 42 ("horses").
- Cope, E. D. 1885 EE, 607 ("horses").
- Cunningham, J. T. 1904 A, 777 ("horses").
- Cuvier, F. 1825 A, 224 ("chevaux").
- Cuvier, G. 1803 A, 166 ("chevaux").  
1805 A ("chevaux").  
1825 A, ii, 99-113, pls. i-iii ("chevaux").
- Depéret, C. 1905 A, 1518 ("équidés").  
1906 B, 1121, 1122 ("équidés").  
1908 A, 304.  
1911 A, 577 ("équidés").  
1912 A, 708 ("équidés").
- Diener, C. 1912 A, 216 ("pferde").
- Dietrich, K. 1841 A, 85 ("einhufer").
- Dopp, K. E. 1904 A, 21 ("horses").
- Doran, A. H. G. 1878 A, 420.
- Duerst, J. U. 1908 A, 384.
- Eaton, J. E. 1928 A, 133 ("horses").
- Eichwald, E. 1835 A, 680 ("Equi").
- Ewart, J. C. 1909 A, 219.
- Fairchild, H. L. 1894 A, 208 ("horses").
- Filhol, H. 1889 A, 222 ("équidés").
- Flower, W. H. 1892 A, 42, 66.
- Frassetto, F. 1903 A, 188.
- Freund, L. 1911 A, 387.
- Fürbringer, M. 1902 A, 202 ("equiden").
- Gadow, H. 1913 A, 135 ("horses").
- Gaudry, A. 1891 C, 133 ("pferde").
- Geoffroy St. Hilaire, I. 1835 A, 97.
- Gervais, P. 1853 B, 35 ("chevaux").  
1859 A, 76 ("équidés").
- Gidley, J. W. 1907 A, 865.  
1927 D, 265 ("horses").
- Giebel, C. G. 1855 A, 63 (Solidungula).
- Gill, T. 1904 B, 737 ("horses").
- Granger, W. 1908 A, 221.
- Gray, J. E. 1821 A, 307.  
1825 B, 342.  
1869 A, 262.
- Gregory, W. K. 1917 D, 623, 634.  
1920 A, 195.  
1920 B, 265.  
1927 A, 601 ("horses").  
1927 F, 390 ("horses").  
1927 J, 440, 445, figs. 1, 2 ("horses").
- Hay, O. P. 1912 D, 580.  
1914 A, 145.  
1923 A, 484.  
1924 D, 377.  
1927 E, 77 ("horses").
- Hayden, F. V. 1871 A, 105 ("horses").
- Hescheler, K. 1906 A, 31 ("equiden").
- Hinze, R. 1910 A, 372 ("einhufer").
- Hoernes, R. 1886 A, 671.
- Hogben, L. T. 1919 A, 75.
- Hrdlička, A. 1903 A, 379.
- Hubrecht, A. A. W. 1897 A, 8 ("horses").
- Hull, E. 1914 A, 612 ("horses").
- Huxley, T. H. 1868 C, 318 ("horses").  
1870 F, 532.  
1880 E, 457.  
1881 A, 454 ("horses").
- Ihering, H. 1909 A, 285 ("pferde").
- Joleaud, L. 1919 B, 177 ("équidés").  
1919 C, 311 ("équidés").
- Joly, G. 1898 A, 1579 ("équidés").
- Kampfen, P. N. 1905 A, 577, 580.
- Keuchenius, P. E. 1913 A, 446.
- Knottnerus-Meyer, T. 1907 A, 4, 96, 101.
- Koken, E. 1901 B, 222 ("equiden").
- Kraglievich, L. 1926 C, 63.
- Lankester, E. R. 1905 A, 132 ("horses").
- Larger, R. 1913 A, 701 ("équidés").
- Le Damany, P. 1903 B, 275 ("équidés").
- Ledouble, A. F. 1906 A, 550 ("équidés").
- Leunis and Ludwig 1883 A, 269.
- Lobley, J. L. 1908 A, 200, 204, 212.
- Lull, R. S. 1904 C, 6.  
1910 D, 154 ("horses").  
1917 B, 709.  
1918 C, 186 ("horses").
- Lydekker, R. 1903 B, 199.  
1904 A, 16 ("horses").  
1907 A, 1.  
1907 B, 8.  
1912 A.  
1916 A, 3.
- Mannu, A. 1923 A, 161 ("equiden").
- Marsh, O. C. 1874 E, 288 ("horses").
- Matson and Sanford 1913 A, 146 ("horses").
- Matthew, W. D. 1903 A, 3, figs.  
1909 C, 125.  
1909 D, 302.  
1910 G, 155.

- Matthew, W. D. 1910 H, 477 ("horses").  
 1913 B, 286, 291.  
 1914 B, 387.  
 1914 G, 233.  
 1915 A, 196, 197, 235, fig. 17.  
 1915 K, 451, fig. 17 ("horses").  
 1916 C, 522.  
 1916 J, 1, 12 ("horses").  
 1917 A, 574.  
 1920 C, 473 ("horses").  
 1921 D, 214.  
 1924 E, 745.  
 1924 G, 629 ("horses").  
 1926 C.  
 1928 B, 968 ("horses").  
 Meckel, J. F. 1825 A ("einhufer").  
 Merriam, J. C. 1915 E, 212.  
 1915 F, 255 ("horses").  
 Montgomery, T. H. 1901 A, 21734 ("horses").  
 Moodie, R. L. 1918 A, 171.  
 O'Hara, C. C. 1910 A, 93, 147.  
 1920 A, 100.  
 Ohm, — 1908 A, 356 ("pferde").  
 Osborn, H. F. 1903 D, 673 ("horses").  
 1905 D, 315 ("horses").  
 1905 H, 202, fig. 4.  
 1905 I, 104.  
 1905 K, 608 ("horses").  
 1906 C, 776, 831.  
 1907 E, 747.  
 1907 G, 175.  
 1909 D, 125.  
 1910 B, 614.  
 1910 C, 80 ("horses").  
 1910 D, 736.  
 1911 C, pl. iii; text-fig 9 ("horses").  
 1912 B, 266 ("horses").  
 1915 D, 284 ("horses").  
 1924 K, 275 ("horses").  
 1925 F, 962 ("equines").  
 Owen, R. 1868 A, 879.  
 Palacký, J. 1903 B, 310 ("equiden").  
 Pavlow, M. W. 1925 A, 313, seq.  
 Perna, G. 1916 A, 122.  
 Perrier, E. 1920 A, 355 ("équidés").  
 Pocock, R. I. 1902 A, 304.  
 1905 A, 517.  
 Pohle, H. 1921 A, 115.  
 Pompeckj, J. F. 1925 A, 13 ("pferde").  
 Rehs, J. 1914 A, 46.  
 Retterer, E. 1884 A, 496, 509 ("solipèdes").
- Reynolds, S. H. 1897 A, 430, 471, 487, 496.  
 Rutten, L. M. R. 1909 A, 51.  
 Sauvage, H. E. 1882 A, 103, 105.  
 Scharff, R. F. 1911 A, 146 ("horses").  
 Schlesinger, G. 1909 A (141).  
 1914 A, 210, figs. ("pferde").  
 Schlosser, M. 1911 A, 165 ("equiden").  
 Schmidt, O. 1886 A, 201.  
 Schuchert, C. 1915 A, 937.  
 Schwarz, E. 1922 A, 150 ("horses").  
 1922 B, 132 ("pferde").  
 1924 A, 421 ("horses").  
 Scott, W. B. 1896 D, 47, 53, 57 ("horses").  
 1913 A, 290, 291.  
 1916 A, 115, 117 ("horses").  
 1917 A, 177 ("horses").  
 1928 A, 333 ("horses").  
 Seeley, H. G. 1872 A, 277 ("horses").  
 Sefve, I. 1910 A, 4 ("pferde").  
 1912 A.  
 1913 A, 366 ("pferde").  
 Serres, M. 1860 A, 301 ("cheveaux").  
 Steinmann, G. 1907 A, 489.  
 1912 B, 718 ("pferde").  
 Taschenberg, O. 1899 A, 4546.  
 Terra, P. 1911 A, 309.  
 Thacker, A. G. 1914 A, 283.  
 Tornier, G. 1888 A, 301 ("equiden").  
 1891 A, 199 ("equiden").  
 1908 A, 196 ("pferde").  
 1909 C, 540 ("equiden").  
 Tornquist, A. 1897 A, 683 ("pferde").  
 Trouessart, E. L. 1905 A, 637.  
 Underhill, B. M. 1907 A, 115, 118.  
 Veith, A. 1912 A ("hippiden").  
 Vic-d'Azyr, F. 1792 A, ex ("solipèdes").  
 Wallace, A. R. 1876 A, I, 112, 115, 125; II, 211.  
 Walmsley, T. 1918 A, 326.  
 Weber, M. 1904 A, 612, 614, 619.  
 Weber and Abel 1928 A, 426, 633, 650, 653, 676.  
 Weinberg, R. 1903 A, 491 (Anchilophus).  
 Windle, B. C. A. 1905 A, 1052 ("equiden").  
 Winge, H. 1906 A, 71, 143, 151 (Equini).  
 Woodward, A. S. 1917 D, lxxi ("horses").  
 1923 A, 29 ("horses").  
 Wright, G. F. 1908 A, 34 ("horses").  
 Wright, R. R. 1883 A, 246.  
 Zietzschmann, O. 1917 A, 440 ("equiden").  
 Zittel and Schlosser 1911 A, 454.  
 1923 A, 540, 602, 667.
- HYRACOTHERIINÆ Cope.
- Cope, E. D. 1881 G, 381.  
 Hay, O. P. 1902 A, 608.  
 Abel, O. 1913 B, 753b.  
 Ameghino, F. 1893 B, 443 (Hyracotheriidae).  
 1902 B, 9.  
 Antonius, O. 1919 A, 275, 292 (Protohippinae).  
 Ardit, T. 1909 C, 458 ("hyrachotherien").  
 1912 A, 700 (Hyracotherinae).  
 Depéret, C. 1901 A, 199 ("hyrachothéridés").  
 1905 C, 703 ("hyrachothéridés").  
 1911 A, 577 ("hyrachothéridés").  
 Gidley, J. W. 1907 A, 867, 871, 934.  
 Lydekker, R. 1912 A, 263 (Hyracotheriidae).  
 Major, C. J. F. 1880 A, 25 ("hyrachotherien").
- Matthew, W. D. 1928 B, 967 ("hyrachotheriinae").  
 Osborn, H. F. 1910 B, 619.  
 1922 D, 721 ("4-toed horses").  
 Palmer, T. S. 1904 A, 748, 936.  
 Sauvage, H. E. 1882 A, 105 (Hyracotherinae).  
 Stehlin, H. G. 1905 A, 548 ("orohippiden").  
 Trouessart, E. L. 1905 A, 610 (Hyracotheriidae).  
 Wallace, A. R. 1876 A, I, 135 (Anchitheridae);  
 II, 212 (Anchitheridae).  
 Weber, M. 1904 A, 619.  
 Weber and Abel 1928 A, 650, 675 (Palaeohippidae).  
 Zittel and Schlosser 1911 A, 457.  
 1923 A, 542.

HYRACOTHERIUM Owen. Type *H. leporinum* Owen.

- Owen, R. 1840 G, 162.  
 Hay, O. P. 1902 A, 610 (Pliolophus).  
 Abel, O. 1913 B, 753b, 754a, figs. 103, 104.  
 1919 A, 860, fig. 655.  
 1928 B, 22, 62, 63, 88.  
 Ameghino, F. 1904 A, 532.  
 1906 A, 295, 301.  
 Anonymous 1898 A, 373.  
 Beddard, F. E. 1902 A, 247.  
 Bensley, B. A. 1901 C, 252.  
 Bronn, H. G. 1848 A, 603.  
 Case, E. C. 1899 B, 163.  
 Chardin, P. T. 1927 A, 27, pl. v, fig. 22.  
 Depéret, C. 1901 A, 200 (Pliolophus); 207 (Hyracotherium).  
 1904 B, 22.  
 1905 C, 703.  
 1907 B.  
 1912 A, 707.  
 Floderus, M. 1910 A, 98, fig. 1.  
 Flower, W. H. 1892 A, 28.  
 Geol. Magazine 1914 A, 486 (Hyracotherium, Pliolophus).  
 Giebel, C. G. 1855 A, 70.  
 Gill, T. 1904 B, 737.  
 Granger, W. 1909 A, 239 (Pliolophus).  
 Keuchenius, P. E. 1913 A, 448.  
 Lankester, E. R. 1905 A, 136, figs. 92, 94.  
 Lemoine, V. 1889 A, 238.  
 Lull, R. S. 1917 B, 610.  
 Lydekker, R. 1903 D, 123 ("hyracothere").  
 1904 A, 17, figs. 1, 3.  
 1908 A, 507.  
 1912 A, 241.  
 1915 C, 620.  
 Major, C. J. F. 1872 A, 153.  
 Matthew, W. D. 1913 F, 15.  
 1928 B, 968.  
 Osborn, H. F. 1902 D, 260, fig. 1.  
 1907 G, 83, figs. 135, 159, 161, 164, 165, 210.  
 Owen, R. 1868 A, 375, 792.  
 Palacký, J. 1903 B, 307.  
 Palmer, T. S. 1904 A, 344, 637.  
 Pavlow, M. W. 1925 A, 314, 321.  
 Schlosser, M. 1898 E, 125.  
 1921 A, 123.  
 Steinmann, G. 1907 A, 490.  
 Thorpe, M. R. 1927 A, 167.  
 Trouessart, E. L. 1905 A, 611.  
 Veith, A. 1912 A, 1, 11.  
 Weber, M. 1904 A, 619, 693.  
 Wortman, J. L. 1903 A, xv, 431.  
 Zittel, K. A. 1895 A, 305.  
 Zittel and Schlosser 1911 A, 458.  
 1923 A, 543.

EOHIPPIUS Marsh. Type *E. validus* Marsh.

- Hay, O. P. 1902 A, 608 (Eohippus); 610 (Protorohippus).  
 Abel, O. 1914 A, 246 (Protorohippus).  
 1926 A, 225.  
 1926 B, 396, 399, 443.  
 1926 H, (160).  
 1928 B, 17, 19, 62, figs. 3, 4, 6, 10, 14, 84, 93.  
 Ameghino, F. 1908 A, 295.  
 Anonymous 1904 B, 40 (Protorohippus).  
 1908 B, 121.  
 Arldt, T. 1907 D, 253, 257.  
 1909 C, 458 ("Hyracotherium").  
 Beasley, W. L. 1903 A, 451, fig. 4.  
 Beddard, F. E. 1902 A, 248.  
 Berry, E. W. 1922 A, 110 (Eohippus, Protorohippus).  
 Berthoud, E. L. 1879 A, 154.  
 Carter, J. T. 1922 A, 606.  
 Chardin, T. 1922 A, 83 (Eohippus, Systemodon).  
 Cope, E. D. 1880 U, 149.  
 Depéret, C. 1901 A, 200, 203 (Hyracotherium); 222 (Eohippus, Protorohippus).  
 1912 A, 707.  
 Fairchild, H. L. 1894 A, 209.  
 Flower, W. H. 1908 I, 121.  
 Fürbringer, M. 1902 A, 202.  
 Gidley, J. W. 1918 B, 59.  
 1927 D, 266, fig.  
 Gill, T. 1904 B, 737.  
 Granger, W. 1908 A, 231, 234 (Includes Protorohippus).  
 1908 B, 256.  
 1911 A, 85.  
 1914 A, 202.  
 Gregory, W. K. 1912 F, 285.  
 1917 D, 623.  
 Gregory, W. K. 1920 A, 195.  
 1927 F, 393.  
 1927 I, 557.  
 1927 J, 445, figs. 1, 2.  
 Grinnell, G. B. 1923 A, 335.  
 Haug, E. 1911 A, 1523.  
 Heilmann, G. 1916 A, 122, fig. 209.  
 1926 A, 160.  
 Heilprin, A. 1887 A, 371, 372.  
 Hutchinson, H. N. 1910 A, 242, fig. 69 (Protorohippus).  
 Huxley, T. 1880 E, 458, 468.  
 1913 in Lull, R. S. 1913 A, 4, figure.  
 Keuchenius, P. E. 1913 A, 448.  
 Lankester, E. R. 1905 A, 140, fig. 95 (Hyracotherium).  
 Lee, Stone, Gale 1915 A, 40.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1905 C, 296.  
 1926 A, 19, 60, 82, 97, pl. v, figs. 7, 11, 12, 16.  
 Lucas, F. A. 1901 J, 159.  
 1902 B, 227 (Protorohippus).  
 Lull, R. S. 1904 C, 6.  
 1907 A, 164, 171 (Eohippus); 172, fig. 6 (Protorohippus).  
 1910 D, 154.  
 1913 A, 12.  
 1917 B, 301, 610, figs. 212-214.  
 Lydekker, R. 1907 A, 2, fig. 1 (Protorohippus).  
 1912 A, 273 (Eohippus, Protorohippus).  
 Matthew, W. D. 1903 A, 12, pl. iii; text-fig. 1 (Eohippus); 15, pl. iv; text-fig. (Protorohippus).  
 1908 I, 121.  
 1909 C, 102 (Eohippus, Protorohippus).

- Matthew, W. D. 1913 F, 15, figs. 2, 3, 4, 16, 19, 21.  
 1914 G, 234.  
 1915 A, 236, 313 (Eohippus); 239 (Systemodon).  
 1915 K, 413, 421, 455.  
 1916 J, 5, 11, 12, fig. 2.  
 1917 A, 574.  
 1920 C, 475.  
 1921 D, 219.  
 1924 B, 630.  
 1924 E, 749.  
 1924 G, 630.  
 1926 C, 141, 167, 170, figs. 1-7, 26, 27.  
 1928 B, 964, 967, 977, figs. 10, 15 (Syn. of Hyracotherium).  
 Matthew and Granger 1917 B, 417 ("Eohippus").  
 1925 E, 5 (Systemodon).  
 1926 A, 3.  
 Montgomery, T. H. 1901 A, 21733.  
 Noack, T. 1880 A, 78.  
 O'Harra, C. C. 1910 A, 93.  
 1920 A, 100.  
 Osborn, H. F. 1903 D, 674 (Eohippus, Protorohippus).  
 1904 R, 6.  
 1905 I, pls. ix, x; text-figs. 166, 197 (Protorohippus).  
 1907 G, 162, figs. 135, 166 (Eohippus); 178, figs. 166, 197 (Protorohippus).  
 1909 D, 23, 125.  
 1910 B, 614, figs. 34, 35.  
 1912 B, 261, fig. 4.  
 1912 G, 235, fig. 2.  
 1912 L, 187, fig. 4.  
 1915 B, 212, fig. 4.  
 1919 B, 558.  
 1926 A, 183.  
 Palmer, T. S. 1904 A, 263, 937 (Eohippus); 585, 938 (Protorohippus); 658, 941 (Systemodon).  
 Petronievics, B. 1921 A, 102.  
 Sauvage, H. E. 1882 A, 106 ("eohippe").  
 Scharff, R. F. 1911 A, 147.  
 Schlosser, M. 1921 A, 124, text-fig. 1.  
 Schuchert, C. 1910 A, 599.  
 Schuchert and Levene 1927 A, 344, fig.  
 Scott, W. B. 1913 A, 280, 302, 303, 304, 305, figs. 153, 154.  
 1917 A, 102, 105.  
 Seeley, H. G. 1886 A, 475 (Systemodon); 476 (Phiolophus).  
 Shufeldt, R. W. 1889 D, 11.  
 Stehlin, H. G. 1905 A, 553, 556 (Eohippus); 549, 556 (Protorohippus).  
 Steinmann, G. 1907 A, 490.  
 Thorpe, M. R. 1927 A, 167.  
 Trouessart, E. L. 1905 A, (Subg. of Hyracotherium).  
 Troxell, E. L. 1916 A, 344.  
 Underhill, B. M. 1907 A, 117.  
 1910 A, 79.  
 Veith, A. 1912 A, 12 (Eohippus, Protorohippus).  
 Weber, M. 1904 A, 619 (Eohippus, Protorohippus); 624 (Systemodon).  
 Weber and Abel 1928 A, xxiii, 660, 677, 681, fig. 469.  
 Wieland, G. R. 1903 B, 412 (Eohippus, Protorohippus).  
 Wood, H. E. 1927 B, 13, tab. 1a, ii, vii.  
 Wright, R. R. 1883 A, 250.  
 Zittel and Schlosser 1911 A, 458.  
 1923 A, 543, 544, 550.
- Eohippus angustidens (Cope).**  
 Hay, O. P. 1902 A, 609 (E. index, in part).  
 Gidley, J. W. 1926 E, 41 (This species?).  
 Granger, W. 1908 A, 223 (Orohippus); 235, 244, 259 (Eohippus).  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 95.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.
- Eohippus borealis Granger.**  
 Granger, W. 1908 A, 242, 261, fig. 4; pl. xv, fig. 3.  
 Abel, O. 1926 B, 412, figs. 262, 423.  
 1928 B, 19, 22, fig. 7.  
 Loomis, F. B. 1907 B, 357.  
 1926 A, 8, 72, pl. i.  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1910 B, 116.  
 Lower Eocene (Wasatch); Wyoming.
- Eohippus craspedotus (Cope).**  
 Hay, O. P. 1902 A, 609.  
 Abel, O. 1926 B, 396, 408, fig. 260 (E. craspedotum).  
 1928 B, 19, fig. 1.  
 Granger, W. 1908 A, 225 (Hyracotherium); 244 (Eohippus).  
 Loomis, F. B. 1919 A, 217 (E. kraspidotus).  
 1926 A, 80.  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1904 F, 13 (Hyracotherium).  
 Seeley, H. G. 1886 A, 476 (Hyracotherium).  
 Sinclair and Granger 1911 A, 91.  
 Stehlin, H. G. 1905 A, 548 (Hyracotherium).  
 Lower Eocene (Wind River); Wyoming.
- Eohippus cristatus (Wortman).**  
 Hay, O. P. 1902 A, 609.  
 Chardin, T. 1922 A, 73 (Hyracotherium).  
 Depéret, C. 1901 A, 203 (Hyracotherium).  
 Granger, W. 1908 A, 226 (Eohippus); 239 (Hyracotherium).  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1909 D, 38.  
 Lower Eocene (Wasatch); Wyoming.
- Eohippus cristonensis (Cope).**  
 Hay, O. P. 1902 A, 610 (Phiolophus).  
 Granger, W. 1908 A, 224 (Orotherium); 237, 263, fig. 5 (Eohippus).  
 Gregory, W. K. 1917 D, 633, fig. 1.  
 Loomis, F. B. 1907 B, 357 (E. cristonense).  
 Matthew, W. D. 1909 C, 95.  
 Merrill, G. P. 1907 A, 43 (Hyracotherium crist.); 51 (Orotherium cristonense, O. laevii).  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.
- Eohippus cuspidatus (Cope).**  
 Cope, E. D. 1875 C, 22 (Orohippus).

- Hay, O. P. 1902 A, 609 (E. index, in part).  
 Granger, W. 1908 A, 223 (Orohippus), 235 (Syn. ? of *E. angustidens*).  
 Matthew, W. D. 1909 C, 95.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.

### ***Eohippus etsagicus* (Cope).**

- Cope, E. D. 1884 O, pl. lvi, fig. 5 (Systemodon; no description).  
 Granger, W. 1908 A, 225 (Systemodon); 238, 240, 243, 259 (Eohippus).  
 Matthew, W. D. 1909 C, 95 (Heloxyus).  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus index* (Cope).**

- Hay, O. P. 1902 A, 609.  
 Abel, O. 1928 B, 19.  
 Cope, E. D. 1874 B, 441, 459.  
 Depéret, C. 1901 A, 203 (Hyracotherium).  
 Gidley, J. W. 1926 E, 41.  
 1927 D, 269, fig.  
 Granger, W. 1908 A, 222 (Orotherium); 234, pl. xv, fig. 1 (Eohippus).  
 Loomis, F. B. 1926 A, 72.  
 Matthew, W. D. 1909 C, 95.  
 Merrill, G. P. 1907 A, 36 (Eohippus index); 51 (\* (Orohippus angustidens, *O. cuspidatus*).  
 Osborn, H. F. 1909 D, 39.  
 1912 G, 235.  
 Seeley, H. G. 1886 A, 476 (Hyracotherium).  
 Trouessart, E. L. 1905 A, 611.  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus montanus* (Wortman).**

- Hay, O. P. 1902 A, 610 (Pliolophus).  
 Granger, W. 1908 A, 226 (Hyracotherium); 239 (Eohippus).  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 95.  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus pernix* Marsh.**

- Hay, O. P. 1902 A, 609.  
 Abel, O. 1912 F, 234, fig. 162.  
 1913 B, 754, fig. 102.  
 1914 A, 136, fig. 94.  
 1914 D, 26, fig. 1.  
 1920 A, 449, fig. 686.  
 1922 C, 274, fig. 231.  
 Depéret, C. 1901 A, 203.  
 Granger, W. 1908 A, 224 (=E. index?).  
 Lull, R. S. 1907 A, 171, fig. 7.  
 Lydekker, R. 1912 A, 273.  
 Matthew, W. D. 1909 C, 95.  
 1917 A, 574.  
 Schlesinger, G. 1914 A, 211, figs. 2, 3.  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus resartus* Granger.**

- Granger, W. 1908 A, 240, figs. 1, 2.  
 Hay, O. P. 1902 A, 610 (E. tapirinus, in part).  
 Abel, O. 1928 B, 19.  
 Loomis, F. B. 1907 B, 357.  
 1926 A, 72, pl. v.  
 Matthew, W. D. 1909 C, 95.  
 1926 C, 152, fig. 9.  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus? tapirinus* (Cope).**

- Hay, O. P. 1902 A, 610.  
 Ameghino, F. 1906 A, 107, fig. 120 (Hyracotherium).  
 Depéret, C. 1901 A, 203 (Hyracotherium).  
 Granger, W. 1908 A, 223 (Orohippus); 240 (Eohippus).  
 Matthew, W. D. 1909 C, 94 (Systemodon).  
 Merrill, G. P. 1907 A, 43 (Hyracotherium); 51 (Orohippus).  
 Peterson, O. A. 1919 A, 103 ("tapirinus").  
 Reeside, J. B. 1924 A, 46 (Systemodon).  
 Trouessart, E. L. 1905 A, 611.  
 Troxell, E. L. 1922 B, 288 (Systemodon).  
 Veith, A. 1912 A, 12 (Hyracotherium).  
 Zittel and Schlosser 1911 A, 458, fig. 635.  
 1923 A, 543, fig. 674.  
 Lower Eocene (Wasatch); New Mexico.  
 Granger, as cited, regards the type of this species as generically indeterminate.

### ***Eohippus validus* Marsh.**

- Hay, O. P. 1902 A, 610.  
 Granger, W. 1908 A, 224, 236, pl. xv, fig. 2.  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1910 B, 117, 128.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.

### ***Eohippus vasacensis* (Cope).**

- Hay, O. P. 1902 A, 610.  
 Cope, E. D. 1872 PP, 2 (Notharctus; Lophiotherium vasachiensis).  
 Depéret, C. 1901 A, 203 (Hyracotherium).  
 Granger, W. 1908 A, 222, 244 (Lophiotherium).  
 Matthew, W. D. 1909 C, 95.  
 Merrill, G. P. 1907 A, 43 (Hyracotherium); 51 (Orohippus).  
 Osborn, H. F. 1909 D, 39.  
 1912 G, 235, fig. 2.  
 Lower Eocene (Wasatch); Wyoming.

### ***Eohippus venticolus* (Cope).**

- Hay, O. P. 1902 A, 610 (Protrohippus).  
 Abel, O. 1914 A, 246, fig. 215.  
 1926 B, 410, fig. 261-263.  
 1928 B, 20, 22, figs. 2, 5, 7.  
 Cope, E. D. 1891 N, 62, 63, 85, figs. 32d, 57 (Hyracotherium).  
 Flower, W. H. 1892 A, 29 (Hyracotherium).  
 Granger, W. 1908 A, 225 (Hyracotherium); 245, 260, 263, figs. 3, 5 (Eohippus).  
 1910 A, 236.  
 Gregory, W. K. 1917 D, 633, fig. 1.  
 Leuthardt, F. 1891 A, 113, pl. v, fig. 4 (Hyracotherium).  
 Loomis, F. B. 1926 A, 80, pl. vi.  
 Lydekker, R. 1912 A, 273 (Protrohippus).  
 Matthew, W. D. 1909 C, 95.  
 1913 F, 18, fig. 8.  
 1915 D, 3 (Hyracotherium).  
 1917 A, 574.  
 1926 C, 152, fig. 10.  
 Osborn, H. F. 1901 A, pls. i, ii (Protrohippus).  
 1904 F, 13, 25, 38, fig. 8 (Protrohippus).  
 1904 R, 4, figs. 1, 1a, 8 ("Protrohippus").  
 1910 B, 130, 134, 135.

Sinclair and Granger 1911 A, 91 (This species?).  
 Stehlin, H. G. 1905 A, 578.  
 Stromer, E. 1912 A, 207, fig. 194.  
 Terra, P. 1911 A, 312, fig. 133 (Hyracotherium).  
 Trouessart, E. L. 1905 A, 612 (Protorohippus).  
 Weber, M. 1904 A, 619, fig. 448 (Hyracotherium).  
 Williams, H. S. 1897 A, 685, fig. ("Protorohippus").  
 Woodward, A. S. 1904 B, 160 (Protorohippus).  
 1923 C, 32 (Protorohippus).  
 Zittel and Schlosser 1911 A, 457, fig. 634.  
 1923 A, 543, fig. 673.  
 Lower Eocene (Wind River); Wyoming, New Mexico.

**OROHIPPUS Marsh. Type *O. pumilis* Marsh = *O. typicus* Granger.**

Hay, O. P. 1902 A, 611 (Orohippus, Helohippus).  
 Abel, O. 1909 E, (246).  
 1914 A, 246.  
 1926 B, 396, 399, 409, 411, figs. 262, 263.  
 1926 H, (160).  
 1928 B, 23, 93.  
 Anonymous 1906 B, 228.  
 1908 B, 121.  
 Arldt, T. 1907 D, 257.  
 1909 C, 458.  
 Baird, S. F. 1876 A, 322.  
 Beddard, F. E. 1902 A, 248.  
 Berthoud, E. L. 1879 A, 154.  
 Boas, J. E. V. 1914 B, 595.  
 Cope, E. D. 1880 U, 149 (Orotherium).  
 Delafontaine, M. 1875 A, 174.  
 Depéret, C. 1901 A, 221, 222.  
 1912 A, 707.  
 Fürbringer, M. 1902 A, 203.  
 Granger, W. 1908 A, 230 (Helotherium, Orotherium, Oligotomus, Helohippus, syns.); 247 (Orohippus); 251, 255 (Aminippus; subgenus, to replace *Orotherium*).  
 1908 B, 256.  
 Gregory, W. K. 1906 A, 13.  
 1908 A, 121.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 371, 372.  
 Huxley, T. H. 1876 F, 186.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1926 A, 62, 82, 97, fig. 16.  
 Lull, R. S. 1907 A, 173, figs. 4, 6 (Orohippus); 173 (Helohippus).  
 1913 A, 12.  
 1917 B, 611, fig. 215.  
 Lydekker, R. 1907 A, 6, fig. 1-b.  
 1912 A, 272 (Orohippus, Heliohippus).  
 Marsh, O. C. 1874 E, 288, 293, fig. 75.  
 Matthew, W. D. 1907 A, 175.  
 1908 I, 121.  
 1909 C, 102 (Helotherium, Oligotomus, Orohippus, Orotherium).  
 1912 A, 15.  
 1913 F, 16, 25, figs. 5, 16, 19.  
 1914 G, 234.  
 1915 A, 236, 313.  
 1915 K, 413, 455.  
 1916 J, 6, 11, 12.  
 1917 A, 574.  
 1920 C, 475.

**Eohippus sp. indet.**

Gidley, J. W. 1926 E, 41 (This genus?). Lower Eocene (Wasatch); Wyoming.  
 Granger, W. 1908 A, 246.  
 1911 A, 85, figs. Lower Eocene (Wasatch); Wyoming.  
 Granger and Simpson 1928 A, 1. Wasatch (Sand Coulee); Wyoming.  
 Matthew, W. D. 1912 C, 186, fig. Lower Eocene (Wasatch); Wyoming.  
 Sinclair and Granger 1911 A, 108.  
 Wegemann, C. H. 1918 A, 59. Lower Eocene (Wasatch); Wyoming.  
 Wood, H. E. 1927 B, tab. vii.

Matthew, W. D. 1924 B, 630.  
 1924 E, 748.  
 1924 G, 630.  
 1926 C, 150, 167, figs. 7, 26, 27.  
 1928 B, 967, 977, fig. 15 (Orohippus, Aminippus).  
 Montgomery, T. H. 1901 A, 21734.  
 Noack, T. 1880 A, 78.  
 Osborn, H. F. 1908 D, 750, fig. 3.  
 1909 D, 23, 49, 52.  
 1910 B, 625.  
 1912 G, 237.  
 1917 B, 258, fig.  
 1925 C, 750.  
 Palmer, T. S. 1904 A, 481, 937 (Orohippus); 315, 937 (Helohippus, Oligotomus, Orotherium); 315, 942 (Helotherium).  
 Petronievics, B. 1921 A, 102.  
 Regnault, F. 1903 A, 110.  
 Rogenhofer, A. 1908 A, (42).  
 Sauvage, H. E. 1882 A, 106, fig. ("orohippe").  
 Schlesinger, G. 1914 A, 214, fig. 7.  
 Schmidt, O. 1886 A, 213, fig. 8.  
 Schuchert, C. 1910 A, 599.  
 Schuchert and Levene 1927 A, 344, 346, fig.  
 Scott, W. B. 1913 A, 272, 302.  
 Seeley, H. G. 1878 A, 224.  
 Shufeldt, R. W. 1889 D, 11.  
 Stehlin, H. G. 1905 A, 549, 556.  
 Thorpe, M. R. 1927 A, 167.  
 Trouessart, E. L. 1905 A, 614.  
 Underhill, B. M. 117, 119, fig. 1.  
 Veith, A. 1912 A, 12.  
 Villada, M. M. 1903 A, 442.  
 Weber, M. 1904 A, 619.  
 Weber and Abel 1928 A, xxiii, 677, fig. 469.  
 Zittel and Schlosser 1911 A, 458.  
 1923 A, 544, 550.

**Orohippus agilis Marsh.**  
 Hay, O. P. 1902 A, 611.  
 Abel, O. 1912 F, 234, fig. 162.  
 1913 B, 754, fig. 102.  
 1914 A, 136, fig. 94.  
 1914 D, 26, fig. 1.  
 1920 A, 449, fig. 686.  
 1922 C, 274, 276, fig. 231.  
 Delafontaine, M. 1875 A, 174.  
 Granger, W. 1908 A, 228, pl. xvi, fig. 5 (Orohippus); 257 [O. (Aminippus)].  
 Lull, R. S. 1907 A, 173, fig. 8.

- Marsh, O. C. 1874 E, 289, 291, fig. 73.  
 Matthew, W. D. 1909 C, 98.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus atavus Granger.**

- Granger, W. 1908 A, 253, 261, pl. xv, fig. 4;  
 text-fig. 4.  
 Abel, O. 1926 B, 412, fig. 262.  
 1928 B, 24, fig. 7.  
 Loomis, F. B. 1926 A, 83.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus ballardi (Marsh).**

- Hay, O. P. 1902 A, 611.  
 Cope, E. D. 1872 NN, 2 (Lophiotherium ballardii).  
 Granger, W. 1908 A, 227 (Lophiotherium); 248,  
 pl. xvi, fig. 4 (Orohippus).  
 Lull, R. S. 1913 A, 2.  
 Matthew, W. D. 1909 C, 98.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus cinctus (Cope).**

- Hay, O. P. 1902 A, 611.  
 Granger, W. 1908 A, 228 (Oligotomus cinctus=?  
 Orohippus ballardi).  
 Matthew, W. D. 1909 C, 98.  
 Trouessart, E. L. 1905 A, 615.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus major Marsh.**

- Hay, O. P. 1902 A, 611.  
 Granger, W. 1908 A, 228, 250, pl. xvi, fig. 2.  
 Marsh, O. C. 1874 E, 289.  
 Matthew, W. D. 1909 C, 98.  
 Trouessart, E. L. 1905 A, 614.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus osbornianus (Cope).**

- Hay, O. P. 1902 A, 611.  
 Abel, O. 1928 B, 26, 84, figs. 8, 9.  
 Anonymous 1908 A, 723.  
 Granger, W. 1908 A, 229 (Hyracotherium); 252,  
 pl. xvii (Orohippus).  
 Loomis, F. B. 1926 A, 83, pls. vii, x.  
 Matthew, W. D. 1908 G, 89.  
 1909 C, 98.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus procyoninus Cope.**

- Cope, E. D. 1872 OO, 1 (Helotherium).  
 Hay, O. P. 1902 A, 612.  
 Granger, W. 1908 A, 227 (Heliotherium procyoninum=? Orohippus pumilus).  
 Marsh, O. C. 1874 B, 249 (Syn? of O. pumilus).

- Matthew, W. D. 1909 C, 98.  
 Trouessart, E. L. 1905 A, 614 (Syn. of O. pumilus).  
 Middle Eocene (Bridger); Wyoming.

**Orohippus progressus Granger.**

- Granger, W. 1908 A, 250, 261, pl. xviii, fig. 1;  
 text-fig. 4.  
 Abel, O. 1926 B, 412, fig. 262.  
 1928 B, 23, fig. 7.  
 Peterson, O. A. 1919 A, 101.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus pumilus (Marsh).**

- Hay, O. P. 1902 A, 611 (Helohippus).  
 Granger, W. 1908 A, 226, 232 (Lophiodon); 227,  
 247 (Orohippus).  
 Marsh, O. C. 1874 E, 289.  
 Matthew, W. D. 1909 C, 98.  
 Middle Eocene (Bridger); Wyoming.

**Orohippus sylvaticus (Leidy).**

- Hay, O. P. 1902 A, 612.  
 Granger, W. 1908 A, 226 (Lophiotherium); 255  
 [O. (Aminippus)]; pl. xviii, fig. 2 (Orohippus).  
 Matthew, W. D. 1909 C, 98.  
 Merrill, G. P. 1907 A, 44 (Lophiotherium).  
 Middle Eocene (Bridger); Wyoming.

**Orohippus typicus Granger.**

- Granger, W. 1908 A, 249, 260, pl. xvi, fig. 3 (To  
 replace *Orohippus pumilus* Marsh, preoccu-  
 pied).  
 Hay, O. P. 1902 A, 612 (Orohippus pumilus).  
 Granger, W. 1908 A, 227 (O. pumilus).  
 Lull, R. S. 1913 A, 4 (O. pumilus).  
 Middle Eocene (Bridger); Wyoming.

**Orohippus uintanus (Marsh).**

- Hay, O. P. 1902 A, 612.  
 Granger, W. 1908 A, 228 (Orotherium); 256 [O.  
 (Aminippus)]; 263, fig. 5; pl. xvi, fig. 6 (Oro-  
 hippus).  
 Gregory, W. K. 1917 D, 633.  
 Lull, R. S. 1913 A, 4.  
 Matthew, W. D. 1909 C, 98.  
 Merrill, G. P. 1907 A, 51 (Orotherium vintan-  
 um).  
 Middle Eocene (Bridger); Wyoming.

**Orohippus sp. indet.**

- Hatcher, J. B. 1901 A, 134, pl. i, fig. 7. Oligo-  
 cene (White River); Nebraska.

**EPHIPIPPUS Marsh. Type *E. gracilis* Marsh.**

- Hay, O. P. 1902 A, 612.  
 Abel, O. 1914 A, 246.  
 1926 B, 396, 399, 411, 414, fig. 263.  
 1926 H, (160).  
 1928 B, 24, 35, 63, 84, fig. 6.  
 Arldt, T. 1907 D, 257.  
 Beasley, W. L. 1903 A, 451.  
 Berry, E. W. 1922 A, 111.  
 Bronn, H. G. 1848 A, 463 (Ephippus).  
 Case, E. C. 1899 B, 164.

- Depéret, C. 1901 A, 221, 222.  
 1912 A, 710.  
 Giebel, C. G. 1855 A, 103.  
 Granger, W. 1908 A, 231, 257.  
 1908 B, 256.  
 Haug, E. 1911 A, 1528.  
 Loomis, F. B. 1926 A, 62, fig. 16.  
 Lull, R. S. 1907 A, 173.  
 1913 A, 12.  
 1917 B, 611, 613.



- Lydekker, R. 1912 A, 271.  
 Matthew, W. D. 1903 A, 16, pl. iv.  
     1909 C, 102.  
     1913 F, 16, 25, figs. 6, 19.  
     1914 G, 234.  
     1915 A, 236, 313.  
     1915 K, 413, 455.  
     1916 J, 7, 11.  
     1924 B, 630.  
     1924 D, 1.  
     1924 E, 748.  
     1924 G, 630.  
     1926 C, 150, 152, fig. 7.  
     1928 B, 967, 977, fig. 15.  
 Osborn, H. F. 1903 E, 674.  
     1910 B, 14, 170, 555.  
 Palmer, T. S. 1904 A, 267, 937.  
 Peterson, O. A. 1919 A, 101.  
 Scharff, R. F. 1911 A, 147.  
 Schuchert and Levene 1927 A, 346, fig.  
 Scott, W. B. 1913 A, 266, 301, 302.  
 Stehlin, H. G. 1905 A, 549, 556.  
 Thorpe, M. R. 1927 A, 167.  
 Trouessart, E. L. 1905 A, 614.  
 Underhill, B. M. 1907 A, 117, 120.  
 Veith, A. 1912 A, 12.  
 Weber, M. 1904 A, 620.  
 Weber and Abel 1928 A, xxxiii, 677, 681, fig. 469.  
 Wieland, G. R. 1903 B, 412.  
 Winge, H. 1906 A, 149 (Ephippus).  
 Wright, R. R. 1883 A, 250.
- Zittel and Schlosser 1911 A, 458.  
     1923 A, 544, 550, 666, 669.
- Epihippus gracilis** Marsh.  
 Hay, O. P. 1902 A, 612.  
 Granger, W. 1908 A, 229 (Anchitherium); 258, pl. xviii, fig. 4 (Epihippus).  
 Loomis, F. B. 1926 A, 84.  
 Lull, R. S. 1907 A, 173.  
     1913 A, 3.  
 Marsh, O. C. 1874 E, 289 (Orohippus).  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1919 A, 101.  
     Upper Eocene (Uinta); Utah.
- Epihippus parvus** Granger.  
 Granger, W. 1908 A, 258, pl. xviii, fig. 3.  
 Loomis, F. B. 1926 A, 84.  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1919 A, 102, pl. xlii, figs. 12-16.  
     Upper Eocene (Uinta); Utah.
- Epihippus uintensis** Marsh.  
 Hay, O. P. 1902 A, 612.  
 Granger, W. 1908 A, 229 (Orohippus); 258 pl. xviii, fig. 5 (Epihippus. Syn. of E. gracilis?).  
 Gregory, W. K. 1917 D, 633, fig. 1.  
 Lull, R. S. 1907 A, 173.  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1919 A, 101.  
     Upper Eocene (Uinta); Utah.

## ANCHITHERIINÆ Osborn.

- Hay, O. P. 1902 A, 608 (Hyracotheriinae).  
 Arldt, T. 1912 A, 700, 746.  
 Gervais, P. 1852 A, 63, explan. pl. xxx (Anchitherium).  
     1859 A, 83 (Anchitherium).  
 Gidley, J. W. 1907 A, 867, 871, 934.  
 Lydekker, R. 1912 A, 263 (Anchitheridæ).  
 Major, C. J. F. 1877 A, 7 (Anchitheridæ).  
 Matthew, W. D. 1915 A, 196.  
 Osborn, H. F. 1910 B, 233, 333, 555.  
 Romer, A. S. 1926 B, 332.  
 Schlosser, M. 1898 C, 373.  
 Zittel and Schlosser 1911 A, 460.  
     1923 A, 545.

MESOHIIPPUS Marsh. Type *Anchitherium bairdi* Leidy.

- Marsh, O. C. 1875 B, 248.  
 Hay, O. P. 1902 A, 612 (Miohippus, in part).  
 Abel, O. 1913 B, 754a, fig. 104.  
     1914 A, 246.  
     1919 A, 862, fig. 656.  
     1920 A, 450, fig. 688.  
     1926 B, 396, 399, 414, 434, 451.  
     1926 H, (160).  
     1928 B, 20, 29, 34, 63, 88, 93, figs. 3, 4, 14.  
 Ameghino, F. 1889 A, 556, 557 (Anchitherium)  
     1893 B, 443.  
     1893 D, 15.  
     1904 A, 231, 232.  
 Anonymous 1898 A, 373.  
     1908 B, 121.  
 Arldt, T. 1907 D, 247.  
 Beasley, W. L. 1903 A, 451.  
 Beddard, F. E. 1902 A, 248.  
 Berry, E. W. 1922 A, 111.  
 Berthoud, E. L. 1879 A, 154.  
 Boas, J. E. V. 1914 B, 596, figs. 43-45.  
 Case, E. C. 1899 B, 164.  
 Condon, T. 1902 A, 123 ("Anchitherium").  
     1910 A, 104.  
 Cope, E. D. 1880 U, 156.  
 Depéret, C. 1912 A, 708, 710.  
 Douglass, E. 1905 A, 211.  
     1909 C, 231, 283.  
 Floderus, M. 1910 A, 98, fig. 1.  
 Gidley, J. W. 1906 D, 386.  
     1907 A, 867.  
     1908 B, 237, 241.  
 Gregory, W. K. 1908 A, 121.  
     1912 F, 285.  
     1917 D, 633, fig. 1.  
     1920 A, 193.  
 Haug, E. 1911 A, 1528, 1529.  
 Heilmann, G. 1916 A, 125, fig. 209.  
 Heilprin, A. 1887 A, 371, 372.  
 Hescheler, K. 1906 A, 31.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1926 A, 60, 63, 64, 104, figs. 7, 8, 11, 12, 21.  
     1928 A, 142.  
 Lull, R. S. 1904 C, 6.  
     1907 A, 173, fig. 6.  
     1910 D, 154.  
     1913 A, 12.  
     1917 B, 301, 610, figs. 216-218.  
 Lydekker, R. 1904 A, 18.

- Lydekker, R. 1907 A, 6, figs. 1a, 2b.  
1912 A, 265.
- Matsumoto, H. 1921 A, 75.
- Matthew, W. D. 1903 A, 16, pl. v.  
1907 A, 175.  
1908 I, 121.  
1909 C, 111.  
1913 F, 17, 25, figs. 2, 3, 7, 16, 21.  
1914 G, 234.  
1915 A, 236, 313.  
1915 K, 420, 455.  
1916 J, 7, 9, 11, figs. 2, 3.  
1917 A, 574.  
1920 C, 475.  
1924 B, 630.  
1924 D, 1.  
1924 E, 748.  
1924 G, 630.  
1926 B, 5, 6.  
1926 C, 141, 167, figs. 1-7, 27.  
1928 B, 979, fig. 15.
- Merriam, J. C. 1911 B, 258.  
1913 G, 424.
- Merriam and Sinclair 1903 A, 95.
- Moodie, R. L. 1922 C, 367, fig. 24.
- Noack, T. 1880 A, 78.
- O'Harra, C. C. 1910 A, 95, 129.  
1920 A, 101, fig. 40.
- Osborn, H. F. 1904 R, 7.  
1905 J, 282.  
1907 G, 17 5, figs. 161, 164.  
1910 B, 623, fig. 223.  
1917 B, 266, fig.  
1918 A, 4, 5, 20, 22, 36  
1925 C, 750.
- Palacký, J. 1903 B, 312.
- Palmer, T. S. 1904 A, 414, 937.
- Pavlov, M. W. 1925 A, 314, 318.
- Peterson, O. A. 1919 A, 103.
- Petronievics, B. 1921 A, 102.
- Sauvage, H. E. 1882 A, 108, fig. ("meschippe").
- Scharff, R. F. 1911 A, 147.
- Schlesinger, G. 1914 A, 212, figs. 4, 7.
- Schlosser, M. 1897 B, 19.  
1899 I, 349.  
1899 R, 316.  
1901 A, 491.  
1903 I, 181.  
1924 A, 68.
- Schmidt, O. 1886 A, 213, fig. 38.
- Schuchert and Levene 1927 A, 346, fig.
- Scott, W. B. 1913 A, 685, figs. 133, 154.  
1917 A, 102, 105.
- Sefve, I. 1927 A, 81.
- Shufeldt, R. W. 1889 D, 11, fig.
- Sinclair, W. J. 1905 D, 483.  
1924 A, 122.  
1925 A, 61.
- Stehlin, H. G. 1905 A, 549, 556, 578.
- Steinmann, G. 1907 A, 491.
- Thorpe, M. R. 1923 E, 241.  
1927 A, 168.
- Trouessart, E. L. 1905 A, 616 (Subg. of *Miohippus*).
- Underhill, B. M. 1907 A, 117, 120, fig. 1.
- Wallace, A. R. 1876 A, 1, 135.
- Weber, M. 1904 A, 620.
- Weber and Abel 1928 A, xxiii, 679.
- Winge, H. 1906 A, 149 (Mesippus).
- Wright, R. R. 1883 A, 250.
- Zittel and Schlosser 1911 A, 500.  
1923 A, 546, 670.
- Meshippus assiniboensis Lambe.**
- Lambe, L. M. 1905 C, 50, 51, pl. ii, fig. 8.  
1908 A, 10, 37, pl. iii, figs. 22-24.
- Matthew, W. D. 1909 C, 104.
- Osborn, H. F. 1918 A, 10, 37, 44, text-fig. 24.  
Lower Oligocene (White River); Assiniboia.
- Meshippus bairdi Leidy.**
- Hay, O. P. 1902 A, 613 (Miohippus).
- Abel, O. 1926 A, 243 (M. bairdi).  
1926 B, 322, 397, 414, figs. 253, 264, 269.  
1926 H, (160) (M. bairdi).  
1928 B, 29, 33, figs. 11, 15, 19 (M. bairdi).
- Ameghino, F. 1889 A, 556, 557 (Anchitherium).
- Cook, H. J. 1912 D, 37 (M. bairdi).
- Darton, N. H. 1905 A, 173.
- Douglass, E. 1901 B, 242 (Miohippus).  
1903 A, 150.  
1908 B, 270.
- Gaudry, A. 1906 A, 25.
- Gervais, P. 1859 A, 360 (Anchitherium).
- Gidley, J. W. 1903 B, 474, 476.  
1927 D, 269, fig.
- Giebel, C. G. 1883 A, pl. xlni (Anchitherium).
- Lambe, L. M. 1908 A, 35.
- Lankester, E. R. 1905 A, 141, fig. 97.
- Loomis, F. B. 1926 A, 102, pl. viii.
- Lull, R. S. 1907 A, 174.
- Lydekker, R. 1912 A, 268 (Miohippus).
- Marsh, O. C. 1874 E, 290 (Anchitherium).
- Major, C. J. F. 1877 A, 4 (Anchitherium).
- Matthew, W. D. 1901 B, 357, 369, 371.  
1902 H, 40.  
1903 A, 16, fig. 2 (Miohippus).  
1909 C, 106.  
1913 F, 18, figs. 8, 19.  
1926 C, 151, fig. 7.
- Merrill, G. P. 1907 A, 22 (Anchitherium); 48 (Meshippus); 53 (Palaeotherium).
- O'Harra, C. C. 1910 A, 96, pls. xxxi, xxxii.  
1920 A, 152, pls. xvi, xxxiii.
- Osborn, H. F. 1902 H, 715.  
1904 B, 168, 172, pl. iv; text-fig. 3.  
1904 F, 13, 36.  
1905 H, 206.  
1905 I, 82.  
1918 A, 5, 6, 11, 37, 45, pl. i, figs. 3, 4; pl. ii, figs. 4, 13; pl. xxxix, figs. 15, 19; pl. li, figs. 7, 11; text-figs. 25, 26.
- Schlosser, M. 1898 C, 373.  
1899 R, 316.
- Scott, W. B. 1913 A, 300, fig. 152.
- Sinclair, W. J. 1905 A, 142.  
1924 A, 99, 101, 102, 122, fig. 8 (M. bairdi).
- Stehlin, H. G. 1905 A, 578.
- Trouessart, E. L. 1905 A, 616.
- Veith, A. 1912 A, 12, 21 (Meshippus, Anchitherium).
- Weber and Abel 1928 A, 678, fig. 465.
- Woodward, A. S. 1898 B, 327, fig. 187.

Zittel and Schlosser 1911 A, 460, fig. 641.

1923 A, 546, fig. 680.

Middle Oligocene (Brule); South Dakota, Nebraska, Colorado?, Montana?.

### **Mesohippus celer (Marsh).**

Hay, O. P. 1902 A, 613 (Miohippus).

Abel, O. 1912 F, 234, fig. 162.

1913 B, 754, fig. 102.

1914 A, 136, fig. 94.

1914 D, 26, fig. 1.

1920 A, 449, fig. 686.

1922 C, 274, fig. 231.

Cook, H. J. 1912 D, 34.

Lambe, L. M. 1905 A, 245.

Lull, R. S. 1907 A, 174, fig. 9.

Marsh, O. C. 1874 E, 290 (Anchitherium).

Matthew, W. D. 1909 C, 104.

O'Harra, C. C. 1920 A, 159.

Osborn, H. F. 1904 B, 168, 169.

1918 A, 10, 36, 37, pl. ii, fig. 9; text-fig. 17.

Zittel and Schlosser 1911 A, 460, fig. 640.

Lower Oligocene (Chadron); South Dakota, Nebraska.

### **Mesohippus cuneatus (Cope).**

Hay, O. P. 1902 A, 614 (Miohippus).

Osborn, H. F. 1918 A, 11, 37, 47.

Middle Oligocene (Cedar Creek); Colorado.

### **Mesohippus eulophus Osborn.**

Osborn, H. F. 1904 B, 173, fig. 5.

Matthew, W. D. 1909 C, 106.

Osborn, H. F. 1918 A, 11, 37, 49, pl. i, fig. 6; pl. ii, fig. 8; text-fig. 29.

Veith, A. 1912 A, 16.

Middle Oligocene (Cedar Creek); Colorado.

### **Mesohippus exoletus (Cope).**

Hay, O. P. 1902 A, 614 (Miohippus).

Matthew, W. D. 1909 C, 106.

Osborn, H. F. 1904 B, 173.

1918 A, 11, 37, 47.

Trouessart, E. L. 1905 A, 616 (Syn. of *M. bairdii*).

Middle Oligocene (Cedar Creek); Colorado.

### **Mesohippus grallipes Sinclair.**

Sinclair, W. J. 1925 A, 58, 61, pl. iii, fig. 1.

Loomis, F. B. 1926 A, 106, pl. ix.

Upper Oligocene (Protoceras); South Dakota.

### **Mesohippus hypostylus Osborn.**

Osborn, H. F. 1904 B, 170, pl. v a; text-fig. 2.

Abel, O. 1928 B, 38, figs. 16, 19.

Cook, H. J. 1912 D, 34.

Douglass, E. 1908 B, 269, pl. lxx, figs. 7-9 (This species?).

Matthew, W. D. 1909 C, 101.

O'Harra, C. C. 1920 A, 149.

Osborn, H. F. 1918 A, 6, 10, 37, 41, pl. i, fig. 2; pl. ii, fig. 3; text-fig. 22.

Lower Oligocene (Chadron); South Dakota, Nebraska.

### **Mesohippus latidens Douglass.**

Douglass, E. 1903 A, 161, fig. 7.

Lambe, L. M. 1905 A, 244.

Matthew, W. D. 1909 C, 104.

Osborn, H. F. 1904 B, 168, 170.

1918 A, 10, 37, 39, text-fig. 19.

Lower Oligocene (Thompson's Creek); Montana.

### **Mesohippus montanensis Osborn.**

Osborn, H. F. 1904 B, 170.

Lambe, L. M. 1905 A, 245.

1905 C, 46.

1908 A, 31.

Matthew, W. D. 1909 C, 104.

1913 F, 23, fig. 19.

1926 C, 151, fig. 7.

Osborn, H. F. 1918 A, 10, 37, 39, pl. ii, fig. 1; text-fig. 20.

Lower Oligocene (White River); Montana.

### **Mesohippus obliquidens Osborn.**

Osborn, H. F. 1904 B, 173, pl. v c; text-fig. 4.

Cook, H. J. 1912 D, 37.

Matthew, W. D. 1909 C, 106.

O'Harra, C. C. 1920 A, 152.

Osborn, H. F. 1918 A, 11, 37, 48, pl. i, fig. 5; pl. ii, fig. 7; text-fig. 28.

Middle Oligocene (Brule); South Dakota, Nebraska.

### **Mesohippus planidens Lambe.**

Lambe, L. M. 1905 C, 49, 51, pl. ii, fig. 7.

1908 A, 10, 37, 38, pl. iii, fig. 21.

Matthew, W. D. 1909 C, 104.

Osborn, H. F. 1918 A, 10, 37, 44, text-fig. 24.

Lower Oligocene (White River); Assiniboia.

### **Mesohippus portentus Douglass.**

Douglass, E. 1908 B, 268, pl. lxx, figs. 1-4.

Loomis, F. B. 1926 A, 104.

Osborn, H. F. 1918 A, 10, 37, 40, text-fig. 21.

Lower Oligocene (White River); Montana.

### **Mesohippus praecidens Lambe.**

Lambe, L. M. 1905 C, 46, 51, pl. ii, fig. 2.

1908 A, 10, 34, 38, pl. iii, fig. 14.

Matthew, W. D. 1909 C, 104.

Osborn, H. F. 1918 A, 10, 37, 42, text-fig. 24.

Lower Oligocene (White River); Assiniboia.

### **Mesohippus propinquus Lambe.**

Lambe, L. M. 1905 C, 47, 51, pl. ii, figs. 3, 4.

1908 A, 10, 35, 38, pl. iii, figs. 15, 16.

Matthew, W. D. 1909 C, 104.

Osborn, H. F. 1918 A, 10, 37, 43, text-fig. 24.

Lower Oligocene (White River); Assiniboia.

### **Mesohippus protenolophus Osborn.**

Osborn, H. F. 1904 B, 171.

Abel, O. 1928 B, 404, fig. 257.

1928 B, 32.

Cook, H. J. 1912 D, 34.

Loomis, F. B. 1926 A, 104.

Matthew, W. D. 1909 C, 104.

O'Harra, C. C. 1920 A, 149.

Osborn, H. F. 1918 A, 10, 37, 41, pl. i, fig. 1; pl. ii, fig. 2; text-fig. 23.  
Lower Oligocene (White River); South Dakota, Nebraska.

**Mesohippus stenolophus** Lambe.

Lambe, L. M. 1905 C, 48, 51, pl. ii, fig. 6.  
1908 A, 10, 36, 38, pl. iii, figs. 18-20.  
Matthew, W. D. 1909 C, 104.  
Osborn, H. F. 1918 A, 37, 43, text-fig. 24.  
Lower Oligocene (White River); Assiniboia.

**Mesohippus trigonostylus** Osborn.

Osborn, H. F. 1918 A, 5, 11, 37, 47, pl. ii, figs. 5, 6; text-fig. 27.  
O'Hara, C. C. 1920 A, 152.  
Sinclair, W. J. 1924 A, 124.  
Middle Oligocene (Brule); South Dakota.

**Mesohippus westoni** (Cope).

Hay, O. P. 1902 A, 614 (Miohippus).  
Lambe, L. M. 1904 C, 27, 38, 50.  
1905 A, 243, pl. xiv.  
1905 C, 44, 51, pl. ii, fig. 1.  
1905 D, 367 A.  
1908 A, 10, 33, 38, pl. iii, figs. 10-13.  
Matthew, W. D. 1903 B, 218.  
Osborn, H. F. 1903 G, 699.  
1904 B, 168, 169.  
1918 A, 10, 37, 38, pl. ii, fig. 10; text-fig. 18.  
Lower Oligocene (Cypress Hills); Canada.

**Mesohippus** sp. indet.

Lambe, L. M. 1905 D, 367A. Oligocene (Cypress Hills); Canada.  
Matthew, W. D. 1901 B, 356.  
Osborn, H. F. 1904 B, 168.  
1918 A, 16. Miocene (Alum Bluff); Florida.  
Wanless, H. R. 1923 A, 220. Lower Oligocene (White River); Nebraska.

**MIOHIPPIUS** Marsh. Type *M. annectans* Marsh.

Hay, O. P. 1902 A, 612.  
Abel, O. 1919 A, 862.  
1926 B, 396, 399, 415, 451.  
1926 H, (161).  
1928 B, 36, 93.  
Arlt, T. 1907 D, 865.  
Beddard, F. E. 1902 A, 248, 249.  
Depéret, C. 1912 A, 710.  
Fairchild, H. L. 1894 A, 209.  
Fürbringer, M. 1902 A, 203 (Mesohippus, Miohippus).  
Gidley, J. W. 1906 D, 386.  
Gregory, W. K. 1920 B, 269.  
1927 J, 444, figs. 1, 2.  
Haug, E. 1911 A, 1529, 1705.  
Heilprin, A. 1887 A, 371, 372.  
Lobley, J. L. 1908 A, 212.  
Loomis, F. B. 1926 A, 65, 108, 111, figs. 9, 21.  
Lull, R. S. 1907 A, 173, 175, fig. 4.  
1917 B, 611.  
Lydekker, R. 1904 A, 18.  
1912 A, 266.  
Marsh, O. C. 1874 E, 289, 291, fig. 75.  
Matsumoto, H. 1921 A, 75, 88.  
Matthew, W. D. 1902 H, 40 (Anchitherium).  
1907 A, 175.  
1909 C, 111.  
1913 F, 17, figs. 19, 21.  
1914 G, 234.  
1915 A, 236, 313.  
1915 K, 413, 456.  
1916 J, 9, 12.  
1917 A, 574.  
1924 B, 630.  
1924 D, 1.  
1924 E, 748.  
1924 G, 630.  
1926 B, 5, 6.  
1926 C, 150, 161, 167, fig. 7.  
1928 B, 979, fig. 15.  
Merriam, J. C. 1913 G, 424.  
1915 G, 99.  
Noack, T. 1880 A, 78.

O'Hara, C. C. 1910 A, 96, 129.  
Osborn, H. F. 1910 B, 227, 230, 555.  
1912 G, 246.  
1918 A, 4, 5, 22, 51.  
Palacký, J. 1903 B, 312.  
Palmer, T. S. 1904 A, 426, 937.  
Pavlow, M. 1915 A, 35.  
Regnault, F. 1903 A, 110.  
Scharff, R. F. 1911 A, 147.  
Schlosser, M. 1898 C, 373.  
1924 A, 68.  
Schmidt, O. 1886 A, 213, fig. 38.  
Schuchert and Levene 1927 A, 347, fig.  
Scott, W. B. 1913 A, 299.  
Sefve, I. 1927 A, 81.  
Shufeldt, R. W. 1889 D, 11.  
Sinclair, W. J. 1924 A, 122.  
1925 A, 61.  
Thorpe, M. R. 1927 A, 168.  
Trouessart, E. L. 1905 A, 616, 617.  
Underhill, B. M. 1907 A, 117, 120.  
Veith, A. 1912 A, 13.  
Wallace, A. R. 1876 A, i, 135.  
Wanless, H. C. 1923 A, 231.  
Weber, M. 1904 A, 620.  
Weber and Abel 1928 A, xxiii, 679.  
Wright, R. R. 1883 A, 251.  
Zittel and Schlosser 1911 A, 460 (Syn. of Anchitherium).  
1923 A, 546, 550, 671, 672.

**Miohippus acutidens** (Sinclair).

Sinclair, W. J. 1905 A, 141, pl. xviii (Mesohippus).  
Abel, O. 1914 A, 248, fig. 219 (Mesohippus).  
Loomis, F. B. 1926 A, 112.  
Matthew, W. D. 1909 C, 108 (Mesohippus).  
Merriam and Sinclair 1907 A, 186, 191, 192 (Mesohippus).  
Osborn, H. F. 1909 D, 68 (Mesohippus).  
1918 A, 12, 52, 64, pl. iii, figs. 14, 15; text-fig. 43.  
Upper Oligocene (John Day); Oregon.

**Miohippus anceps** Marsh.

- Hay, O. P. 1902 A, 613.  
 Abel, O. 1912 F, 234, fig. 162.  
     1913 B, 754, fig. 102.  
     1914 A, 136, fig. 94.  
     1914 D, 26, fig. 1.  
     1920 A, 449, fig. 686.  
     1922 C, 274, fig. 231.  
 Douglass, E. 1903 A, 151 (This species?).  
 Joleaud, L. 1919 D, 413 (Kalobatippus).  
 Loomis, F. B. 1926 A, 109.  
 Lull, R. S. 1907 A, 176, fig. 10.  
 Marsh, O. C. 1874 E, 290 (Anchitherium).  
 Matthew, W. D. 1909 C, 108.  
 Merriam and Sinclair 1907 A, 186 (Mesohippus).  
 Osborn, H. F. 1904 B, 168 (This genus?).  
     1918 A, 12, 52, 58, text-fig. 36.  
     Upper Oligocene (John Day); Oregon.

**Miohippus annectens** Marsh.

- Hay, O. P. 1902 A, 613.  
 Douglass, E. 1903 A, 151 (This species?).  
 Loomis, F. B. 1926 A, 112.  
 Lull, R. S. 1907 A, 176.  
     1913 A, 4.  
 Marsh, O. C. 1874 E, 290, fig. 74.  
 Matthew, W. D. 1909 C, 108 (M. annectens);  
     113 (This species?).  
 Merriam and Sinclair 1907 A, 186 (Mesohippus).  
 Osborn, H. F. 1904 B, 168.  
     1918 A, 12, 52, 63, pl. iii, figs. 14, 15; text-  
     fig. 43.  
     Upper Oligocene (John Day); Oregon: Mio-  
     cene (Harrison); Montana.

**Miohippus blackbergi** Hay.

- Hay, O. P. 1924 A, 4, pl. i, figs. 4-8; pl. iii, fig. 3.  
     Upper Miocene (Fleming); Texas.

**Miohippus brachylophus** (Cope).

- Hay, O. P. 1902 A, 613.  
 Matthew, W. D. 1909 C, 108 (Mesohippus).  
 Merriam and Sinclair 1907 A, 186 (Mesohippus).  
 Osborn, H. F. 1904 B, 168 (Mesohippus).  
     1918 A, 12, 52, 60, pl. iii, fig. 9; pl. v, fig. 3;  
     text-fig. 38.  
     Upper Oligocene (John Day); Oregon.

**Miohippus brachystylus** (Osborn).

- Osborn, H. F. 1904 B, 175, pl. v e; text-fig. 6  
     (Mesohippus).  
 Cook, H. J. 1912 D, 38 (Mesohippus).  
 Douglass, E. 1908 B, 270, pl. lxx, figs. 5, 6 (Meso-  
     hippus. This species?).  
 Lambe, L. M. 1905 C, 48, 51, pl. ii, fig. 5 (Meso-  
     hippus).  
     1908 A, 10, 36, pl. iii, fig. 17 (Mesohippus).  
 Loomis, F. B. 1926 A, 108.  
 Matthew, W. D. 1909 C, 104 (Mesohippus brachy-  
     stylus); 108 (Mesohippus brachystylus?).  
 O'Harra, C. C. 1920 A, 154 (Mesohippus).  
 Osborn, H. F. 1918 A, 5, 12, 51, 52, pl. i, fig. 8;  
     pl. iii, fig. 2; text-fig. 31.  
 Sinclair, W. J. 1905 A, 142 (Mesohippus).  
     Lower Oligocene (White River); Canada:  
     Upper Oligocene (Brule); South Dakota, Ne-  
     braska.

**Miohippus condoni** (Leidy).

- Hay, O. P. 1902 A, 613.  
 Loomis, F. B. 1926 A, 112.  
 Marsh, O. C. 1874 E, 290.  
 Matthew, W. D. 1909 C, 108.  
 Merriam, J. C. 1907 A, 186 (Mesohippus).  
 Osborn, H. F. 1904 B, 168.  
     1918 A, 12, 52, 63, pl. in, fig. 12; text-fig.  
     42.  
     Upper Oligocene (John Day); Oregon.

**Miohippus crassiscuspis** Osborn.

- Osborn, H. F. 1904 B, 178.  
 Cook, H. J. 1912 D, 38.  
 Loomis, F. B. 1926 A, 108.  
 Matthew, W. D. 1909 C, 108.  
 O'Harra, C. C. 1920 A, 154.  
 Osborn, H. F. 1904 B, 177 (M. crassiscuspis,  
     Mesohippus copei, in part).  
     1904 F, 13 (Mesohippus copei, limb).  
     1918 A, 12, 50, 52, 57, pl. iii, fig. 11; text-  
     fig. 35.  
     Upper Oligocene (Brule); South Dakota, Ne-  
     braska.

**Miohippus equiceps** (Cope).

- Hay, O. P. 1902 A, 614.  
 Loomis, F. B. 1926 A, 109.  
 Matthew, W. D. 1909 C, 108 (Mesohippus equi-  
     ceps); 113 (Mesohippus equiceps?).  
 Merriam and Sinclair 1907 A, 186, 188, 189, 190,  
     191, 192 (Mesohippus).  
 Osborn, H. F. 1904 B, 168 (Mesohippus).  
     1918 A, 12, 52, 59, pl. iii, fig. 10; pl. v, figs.  
     4, 5; pl. vi, fig. 1; text-fig. 37.  
     Upper Oligocene (John Day); Oregon: Lower  
     Miocene? (Harrison); Montana.

**Miohippus equinanus** Osborn.

- Osborn, H. F. 1918 A, 13, 52, 65, pl. iii, fig. 6;  
     text-fig. 45.  
 Hay, O. P. 1924 A, 5.  
 Loomis, F. B. 1926 A, 113.  
 O'Harra, C. C. 1920 A, 156.  
     Lower Miocene (Lower Rosebud); South Da-  
     kota.

**Miohippus gemmarosæ** Osborn.

- Osborn, H. F. 1918 A, 6, 13, 52, 66, pl. iii, fig. 7;  
     pl. iv, figs. 1-4, 9; text-figs. 46, 47.  
 Abel, O. 1928 B, 41, fig. 19.  
 Hay, O. P. 1924 A, 6.  
 Loomis, F. B. 1926 A, 113.  
 O'Harra, C. C. 1920 A, 156.  
     Lower Miocene (Lower Rosebud); South Da-  
     kota.

**Miohippus gidleyi** Osborn.

- Osborn, H. F. 1904 B, 178, pl. v g; text-fig. 8.  
 Cook, H. J. 1912 D, 38.  
 Loomis, F. B. 1926 A, 108.  
 Matthew, W. D. 1909 C, 108.  
 O'Harra, C. C. 1920 A, 154.  
 Osborn, H. F. 1918 A, 5, 12, 52, 56, pl. i, fig. 10;  
     pl. iii, fig. 4; pl. xxxix, figs. 1, 16, 19; pl. li,  
     figs. 8, 12; text-fig. 34.

Sinclair, W. J. 1925 A, 58.

Upper Oligocene (Brule); South Dakota, Nebraska.

**Miohippus intermedius** Osborn and Wortman.

Hay, O. P. 1902 A, 614.

Cook, H. J. 1912 D, 38 (Mesohippus).

Lambe, L. M. 1905 C, 49 (Mesohippus).

Loomis, F. B. 1926 A, 108, pl. ix.

Lull, R. S. 1907 A, 174 (Mesohippus).

Lydekker, R. 1912 A, 268.

Matthew, W. D. 1901 B, 370, 371 (Mesohippus).  
1909 C, 108 (Mesohippus).

1926 C, 155, figs. 12, 13.

O'Harra, C. C. 1910 A, 97, pl. xxxiii, fig. 2.

1920 A, 103, 154, fig. 42 (Mesohippus).

Osborn, H. F. 1904 B, 168, 176, fig. 7 (Mesohippus).

1904 F, 13 (Mesohippus).

1918 A, 12, 52, 54, pl. i, fig. 9; pl. iii, fig. 3; text-fig. 32.

Schlosser, M. 1898 C, 373 (Mesohippus).

1899 R, 316, 317 (Mesohippus).

Sinclair, W. J. 1925 A, 55, pl. iii, fig. 2.

Stromer, E. 1912 A, 203, fig. 188 (Mesohippus).

Veith, A. 1912 A, 12, 22 (Mesohippus).

Weber and Abel 1928 A, 678, fig. 465.

Woodward, A. S. 1898 B, 328, fig. 188 (Mesohippus).

Upper Oligocene (Brule); South Dakota, Nebraska.

**Miohippus longicristis** (Cope).

Hay, O. P. 1902 A, 614.

Matthew, W. D. 1909 C, 108.

Merriam and Sinclair 1907 A, 186 (Mesohippus).

Osborn, H. F. 1904 B, 168 (Mesohippus).

1918 A, 12, 52, 61, pl. v, fig. 1.

Upper Oligocene (John Day); Oregon.

**Miohippus metenulophus** (Osborn).

Osborn, H. F. 1904 B, 174, pl. v d (Mesohippus).

Cook, H. J. 1912 D, 38 (Mesohippus).

Gregory, W. K. 1920 B, pl. xviii.

Loomis, F. B. 1926 A, 108.

Lull, R. S. 1913 A, 3 (Mesohippus).

Matthew, W. D. 1909 C, 108 (Mesohippus).

O'Harra, C. C. 1920 A, 154 (Mesohippus).

Osborn, H. F. 1918 A, 12, 51, 52, pl. i, fig. 7; pl. iii, fig. 1; text-fig. 30.

Upper Oligocene (Brule); South Dakota, Nebraska.

**Miohippus navasotæ** Hay.

Hay, O. P. 1924 A, 5, pl. i, figs. 9-13.

Upper Miocene (Fleming); Texas.

**Miohippus primus** Osborn.

Osborn, H. F. 1918 A, 12, 52, 61, pl. iii, fig. 13; pl. iv, fig. 5; text-fig. 39.

Loomis, F. B. 1926 A, 109.

Upper Oligocene (Middle John Day); Oregon.

**Miohippus quartus** Osborn.

Osborn, H. F. 1918 A, 12, 52, 62, pl. iii, fig. 8; pl. iv, figs. 6, 8; pl. v, fig. 2; text-figs. 40, 41.

Matthew, W. D. 1926 C, 155, fig. 11.

Upper Oligocene (John Day); Oregon.

**Miohippus validus** (Osborn).

Osborn, H. F. 1904 B, 177 (Mesohippus).

Abel, O. 1928 B, 39, fig. 17.

Cook, H. J. 1912 D, 38.

Loomis, F. B. 1926 A, 108.

Matthew, W. D. 1909 C, 108.

O'Harra, C. C. 1920 A, 154.

Osborn, H. F. 1918 A, 12, 52, 55, pl. i, fig. 4; pl. iii, fig. 5; text-fig. 33.

Sinclair, W. J. 1925 A, 58, 62.

Upper Oligocene (Brule); South Dakota, Nebraska.

**ANCHITHERIUM** Meyer. Type *A. aurelianense* (Blainville).

Hay, O. P. 1902 A, 615.

Abel, O. 1909 E (246).

1912 C, (61).

1912 F, 235, fig. 164.

1913 B, 754a, fig. 104.

1914 A, 246.

1926 H, (162), (163) (Kalobatippus).

1928 B, 63, 68, figs. 40, 41 (Anchitherium);  
63, 71, 82 (Kalobatippus).

Ameghino, F. 1889 A, 1006.

1904 A, 126, 231, 232.

Antonius, O. 1913 A, 245.

Ardt, T. 1907 D, 255, 257.

Beddard, F. E. 1902 A, 248.

Boas, J. E. V. 1914 B, 597, figs. 43, 44.

Boule, M. 1905 A, 1664.

Bronn, H. G. 1848 A, 72.

1849 A, 706.

Case, E. C. 1899 B, 164.

Condon, T. 1902 A, 127, pls. xxii, xxiii ("Anchitherium").

Depéret, C. 1905 A, 1518.

Edinger, T. 1928 A, 390, fig. 7.

Flower, W. H. 1892 A, 38, 72.

Fejérváry, G. J. de 1921 B, 183.

Gaudry, A. 1875 D, 1282.

1896 A, 87, fig. 62.

Gervais, P. 1859 A, 83.

Gidley, J. W. 1907 A, 867.

Gregory, W. K. 1920 B, 269 (Kalobatippus).

Heilprin, A. 1887 A, 371, 372.

Hoernes, R. 1886 A, 671.

Huxley, T. H. 1870 F, 533.

1876 F, 185.

Joleaud, L. 1919 D, 412.

Lobley, J. L. 1908 A, 212.

Loomis, F. B. 1926 A, 108, 113, 115 (Kalobatippus).

Lull, R. S. 1913 A, 13.

1917 B, 611.

Lydekker, R. 1904 A, 18, fig. 3.

1907 A, 5.

1912 A, 263, 266.

1912 B, 221.

Marsh, O. C. 1874 E, 291.

Matsumoto, H. 1921 A, 88 (Kalobatippus).

Matthew, W. D. 1901 B, 369, 374, 445.

1903 A, 19.

1907 A, 172, 178.

1909 C, 111, 119.

1913 F, 17, 25, fig. 16.

1915 A, 236, 314.

1915 K, 456.

1924 E, 748 (Kalobatippus).

1926 C, 166, 167 (Kalobatippus).

1928 B, 979, fig. 15.

Merriam, J. C. 1913 G, 424.

Osborn, H. F. 1901 F, 499.

1901 G, 159.

1902 H, 715.

1907 G, 162, figs. 135, 161, 164.

1909 D, 75.

1910 B, 606.

1912 G, 246, fig. 9.

1915, in Cope and Matthew 1915 A, pl. cviii (Kalobatippus; type *Anchitherium præstans* Cope).

1918 A, 4, 5 (Anchitherium); 4, 5, 69 (Kalobatippus).

Palmer, T. S. 1904 A, 102, 937.

Pictet, F. J. 1853 A, 313.

Scharff, R. F. 1911 A, 148.

Schlosser, M. 1903 I, 76, 211, 219.

Schmidt, O. 1886 A, 203, fig. 36.

Scott, W. B. 1913 A, 299.

Seeley, H. G. 1878 A, 224.

Sefve, I. 1927 A, 80.

Thorpe, M. R. 1927 A, 168.

Tims, H. W. M. 1903 A, 143, fig. 3b.

Tornier, G. 1888 A, 308.

Underhill, B. M. 1907 A, 117.

Veith, A. 1912 A, 5.

Wallace, A. R. 1876 A, 1, 119, 125, 135.

Weber, M. 1904 A, 620.

Weber and Abel 1928 A, xix, 417, 677, 683, fig. 260.

Winge, H. 1906 A, 149.

Zittel, K. A. 1897 A, 126.

Zittel and Schlosser 1911 A, 460.

1923 A, 541, figs. 670, 671.

### *Anchitherium agatense* (Osborn).

Osborn, H. F. 1918 A, 13, 69, 71, pl. v, fig. 7; pl. xxxix, figs. 17, 20, 40; text-fig. 50 (Kalobatippus).

Abel, O. 1926 B, 435, 448 (Kalobatippus).

Joleaud, L. 1919 D, 413 (Kalobatippus).

Loomis, F. B. 1926 A, 119, fig. 26 (Kalobatippus).

Miller, G. S. 1920 B, 191 (Kalobatippus).

O'Harra, C. C. 1920 A, 157 (Kalobatippus).

Romer, A. S. 1926 B, 326, figs. 1-4.

Lower Miocene (Lower Harrison); Nebraska.

### *Anchitherium gracile* (Marsh).

Hay, O. P. 1902 A, 618 (Pliohippus).

Gidley, J. W. 1907 A, 875, 911 (Pliohippus).

Lull, R. S. 1907 A, 178 (Pliohippus).

Matthew, W. D. 1909 C, 117 (Protohippus).

Osborn, H. F. 1918 A, 16, 69, 71, text-figs. 49, 51 (Kalobatippus).

Romer, A. S. 1926 B, 332 (Kalobatippus).

Trouessart, E. L. 1905 A, 639 (Pliohippus).

Troxell, E. L. 1916 A, 344 (Pliohippus).

Lower Miocene (Upper John Day); Oregon.

### *Anchitherium præstans* (Cope).

Hay, O. P. 1902 A, 614 (Miohippus).

Cope and Matthew 1915 A, pl. cviii, figs. 1-8 (Anchitherium, Kalobatippus).

Gregory, W. K. 1920 B, pl. xviii (Kalobatippus).

Joleaud, L. 1919 D, 413 (Kalobatippus).

Loomis, F. B. 1926 A, 114, fig. 22 (Kalobatippus).

Matthew, W. D. 1909 C, 108.

Miller, G. S. 1920 B, 191 (Kalobatippus).

Osborn, H. F. 1904 B, 168.

1909 D, 68.

1918 A, 12, 69, 70, pl. v, figs. 6, 10, 12; pl.

vi, fig. 3; pl. li, figs. 10, 14; text-figs. 48-51 (Kalobatippus).

Romer, A. S. 1926 B, 327 (Kalobatippus).

Schlosser, M. 1898 C, 374.

1899 R, 317 (Mesohippus).

Zittel and Schlosser 1923 A, 546.

Lower Miocene (Upper John Day); Oregon.

## HYPOHIPPIUS Leidy. Type *H. affinis* Leidy.

Hay, O. P. 1902 A, 615.

Abel, O. 1909 E, (247).

1914 A, 246.

1926 B, 396, 399, 435, 447.

1928 B, 63, 70, fig. 43.

Ameghino, F. 1904 A, 266, 493.

Anonymous 1908 B, 122.

Arlt, T. 1909 C, 458.

Barbour, E. H. 1914 A, 171.

Beasley, W. L. 1903 A, 451.

Douglass, E. 1909 A, 477.

Gidley, J. W. 1904 B, 191, 194.

1906 D, 386.

1907 A, 867, 880.

1908 B, 237.

Gregory, W. K. 1908 A, 122.

1912 F, 286.

1917 D, 633, fig. 1.

1920 B, 269.

Haug, E. 1911 A, 1705, 1706.

Loomis, F. B. 1910 C, 293 (Hypohippus)

1925 A, 248.

1926 A, 18, fig. 6.

Lull, R. S. 1904 C, 6.

1907 A, 177.

1913 A, 12.

1917 B, 224, 298, 611, fig. 219.

Lydekker, R. 1912 A, 261, fig.

Matsumoto, H. 1921 A, 75, 85, 88.

Matthew, W. D. 1903 A, 19, pls. v, vi.

1907 A, 175.

1908 I, 122.

1909 C, 119.

1913 F, 17, 25, fig. 16.

1915 A, 236, 313.

1915 K, 456.

1916 J, 11.

1918 A, 211.

1924 C, 69, 153, 157, 171 (Hypohippus); 172

(Dryomhippus)

- Matthew, W. D. 1924 E, 748.  
1926 C, 166, 167.  
1926 D, 453, fig. 5.
- Matthew and Cook 1909 A, 386.
- Merriam, J. C. 1907 A, 381.  
1911 B, 206, 208, 215, 217, 221, 258.  
1913 G, 424 (Hypohippus); 420 (subgenus Drymohippus, type *D. nevadensis*).  
1915 F, 255.  
1916 A, 181 (Hypohippus, Drymohippus).  
1917 A, 443.  
1919 A, 472.
- Osborn, H. F. 1904 O, 156.  
1904 R, 9.  
1905 I, 92, pl. x.  
1905 J, 282.  
1905 K, 608.  
1909 D, 78, 80, 81.  
1910 B, 618, fig. 148.  
1915 B, 222.  
1917 B, 266, 267, fig.  
1918 A, 4, 5, 15, 20, 22, 28, 29, 203.
- Palmer, T. S. 1904 A, 342, 937.
- Pavlow, M. W. 1925 A, 317.
- Romer, A. S. 1926 B, 332.
- Schlosser, M. 1924 A, 68.
- Scott, W. B. 1913 A, 297, 300.
- Stock, C. 1926 A, 62.
- Thorpe, M. R. 1927 A, 168.
- Trouessart, E. L. 1905 A, 618.
- Troxell, E. L. 1916 A, 339.
- Weber and Abel 1928 A, 677, 683.
- Winge, H. 1906 A, 149 (Hypohippus).
- Zittel and Schlosser 1911 A, 461.  
1923 A, 547, 673, 679.
- Hypohippus affinis** Leidy.  
Hay, O. P. 1902 A, 615.  
Ameghino, F. 1904 A, 260, fig. 362.  
Barbour, E. H. 1914 A, 173, fig. 1.  
Cook, H. J. 1912 D, 44 (This species?).  
Gidley, J. W. 1906 C, 135, fig. 1.  
1907 A, 879.  
Loomis, F. B. 1926 A, 118.  
Matthew, W. D. 1909 C, 117.  
1918 A, 186, 211 (This species?).  
1924 C, 66.
- Merriam, J. C. 1911 B, 258.  
1913 G, 421.  
1917 A, 436 (This species?).  
1919 A, 450, 472, 527, figs. 28-31 (This species?).
- Merrill, G. P. 1907 A, 22 (Anchitherium); 42 (Hypohippus).
- O'Harra, C. C. 1920 A, 158.
- Osborn, H. F. 1918 A, 25, 28, 204, 207, pl. xxxv, fig. 1; text-fig. 169.
- Palacký, J. 1903 B, 817 (Hypohippus).
- Sinclair, W. J. 1915 A, 76 (This species?).  
Upper Miocene or Lower Pliocene (Niobrara River); Nebraska: Pliocene (Snake Creek); Nebraska: Miocene (Barstow); California.
- Hypohippus equinus** (Scott).  
Hay, O. P. 1902 A, 615 (Anchitherium).  
Abel, O. 1912 F, 234, fig. 162.  
1913 B, 754, fig. 102.  
1914 A, 136, fig. 94.
- Abel, O. 1914 D, 26, fig. 1.  
1920 A, 449, fig. 686.  
1922 C, 274, fig. 231.  
1926 B, 400.
- Ameghino, F. 1904 A, 230, 231, fig. 306.
- Beddard, F. E. 1902 A, 249.
- Gidley, J. W. 1904 B, 192.  
1907 A, 875, 923.  
1908 B, 236, fig. 1 (This species?).
- Lull, R. S. 1907 A, 176, fig. 11.  
1917 B, 615, fig. 219.
- Matsumoto, H. 1921 A, 75.
- Matthew, W. D. 1909 C, 115.  
1924 C, 171.
- Merriam, J. C. 1911 B, 258.
- Osborn, H. F. 1904 F, 13, 14, 35.  
1918 A, 16, 17, 203, 204, text-fig. 167.
- Romer, A. S. 1926 B, 326.
- Trouessart, E. L. 1905 A, 617 (Anchitherium).  
Middle Miocene (Deep River); Montana, Colorado; (Virgin Valley); Nevada.
- Hypohippus matthewi** Barbour.  
Barbour, E. H. 1914 A, 171, pls. i, ii.  
Abel, O. 1926 B, 399, 424, 435, fig. 270.  
1928 B, 70.
- Barbour and Cook 1917 A, 172.
- Loomis, F. B. 1926 A, 118.
- Osborn, H. F. 1918 A, 29, 204, 209, text-fig. 171.
- Stock, C. 1926 A, 62.  
Upper Miocene or Lower Pliocene (Devil's Gulch), Nebraska.
- Hypohippus nevadensis** Merriam.  
Merriam, J. C. 1913 G, 420, 421, figs. 1, 2 [Hypohippus (Drymohippus)].  
Clark, B. L. 1921 A, table.  
Loomis, F. B. 1926 A, 118.  
Louderback, G. D. 1924 A, 9.  
Merriam, J. C. 1916 A, 182, figs. 18, 19 [Hypohippus (Drymohippus)].  
Osborn, H. F. 1918 A, 22, 204, 208, text-fig. 170.  
Stock, C. 1926 A, 62, pl. xi; text-fig. 1 [Hypohippus (Drymohippus)].  
Miocene (Stewart Valley); Nevada: (Cedar Mountain); California.
- Hypohippus osborni** Gidley.  
Gidley, J. W. 1907 A, 876, 930.  
Abel, O. 1928 B, 70, fig. 42.  
Gidley, J. W. 1927 D, 268, fig.  
Gregory, W. K. 1920 B, 273, pl. xviii.  
Loomis, F. B. 1926 A, 12, 116, pl. ii, figs. 22, 26.  
Louderback, G. D. 1924 A, 9 (This species?).  
Lydekker, R. 1912 A, 264.  
Matthew, W. D. 1909 C, 113.  
1924 C, 66, 72, 171.  
1926 C, 166, fig. 14.
- Matthew and Cook 1909 A, 386.
- Merriam, J. C. 1911 B, 205, 214, figs. 25-28 (This species?).  
1913 G, 421.  
1916 A, 186, fig. 20 (This species?).
- Osborn, H. F. 1910 B, 295, fig. 147.  
1918 A, 17, 19, 204, 207, pl. v, fig. 9; pl. vi, fig. 4; pl. xxxv, figs. 2, 4; pl. xxxix, figs. 8, 11; pl. li, figs. 2, 5; text-figs. 51, 168.
- Peterson, O. A. 1906 C, 57.



Romer, A. S. 1926 B, 335.

Stock, C. 1926 A, 62.

Upper Miocene (Pawnee Creek); Colorado: (Lower Snake Creek); Nebraska: (Virgin Valley); Nevada: (Cedar Mt.); California.

### **Hypohippus pertinax** Matthew.

Matthew, W. D. 1918 A, 188, 211.

1924 C, 66, 171.

Osborn, H. F. 1918 A, 28.

Upper and Middle Miocene (Snake Creek, Sheep Creek); Nebraska.

### **Hypohippus** sp. indet.

Buwalda, J. P. 1916 A, 80. Miocene (Mojave Desert); California.

Buwalda, J. P. 1924 A, 572. Middle Neocene (Payette); Idaho.

Gidley, J. W. 1906 C, 136, fig. 2. Miocene; South Dakota.

1908 B, 240, figs. 4, 5 (This genus?). Miocene (Virgin Valley); Nevada.

Matthew, W. D. 1909 C, 115, 117. Miocene (Middle); Colorado: (Arikaree); South Dakota.

Merriam, J. C. 1911 B, 259, fig. 24. Miocene (Virgin Valley); Nevada.

1917 A, 436, 438.

Sinclair, W. J. 1915 A, 76. Pliocene (Snake Creek); Nebraska: (Republican River); Kansas.

## **EQUINÆ.**

Hay, O. P. 1902 A, 616.

Antonius, O. 1919 A, 275.

Ardt, T. 1907 D, 257.

1909 C, 458 ("equinen," "protohippinen").

1912 A, 746 (Equinæ); 700, 746 (Protohippinae).

Gidley, J. W. 1907 A, 869, 871 (Equinæ); 868, 871, 934 (Protohippinae).

Hay, O. P. 1914 A, 151 (Equinæ); 146 (Protohippinae).

Lydekker, R. 1912 A, 262 (Protohippinae).

Matthew, W. D. 1907 A, 175 (Protohippinae).

Osborn, H. F. 1909 D, 86 (Equinæ); 78 (Hippotherinae).

Pavlov, M. W. 1925 A, 317, 320 (Protohippinae).

Troxell, E. L. 1916 A, 341 (Protohippinae).

Weber, M. 1904 A, 621.

Zittel and Schlosser 1911 A, 461.

1923 A, 547.

## **PARAHIPPUS** Leidy. Type *Anchitherium cognatum* Leidy.

Leidy, J. 1858 E, 26.

Hay, O. P. 1902 A, 615 (Anchippus, Desmatippus); 616 (Merychippus, in part).

Abel, O. 1909 E, (247).

1912 F, 629.

1914 A, 247.

1926 B, 360, 396, 400, 415, 423, 434, 454, fig. 255 (Parahippus); 396, 435 (Archæohippus).

1926 H, (161) (Parahippus); (162) (Archæohippus).

1928 B, 36, 63, 93 (Parahippus); 67 (Archæohippus).

Ameghino, F. 1904 A, 264 (Anchippus); 265, 493 (Parahippus).

Ardt, T. 1909 C, 458.

Barbour, E. H. 1914 C, 222.

Beddard, F. E. 1902 A, 249 (Desmatippus).

Boas, J. E. V. 1914 B, 597 (Altippus).

Boule and Thevenin 1920 A, 117.

Case, E. C. 1899 B, 164 (Desmatippus).

Cockerell, T. D. A. 1908 B, 683.

Douglass, E. 1908 B, 271 (Altippus, type *A. tazus* Douglass).

Gidley, J. W. 1904 B, 192, 194.

1906 D, 385 (Archæohippus, type *Anchitherium ultimum* Cope).

1907 A, 867, 881, 921.

Gregory, W. K. 1920 B, 269.

1927 J, 444, figs. 1, 2.

Haug, E. 1911 A, 1705, 1706.

Heilmann, G. 1916 A, 122.

Loomis, F. B. 1910 C, 293.

1925 A, 248.

1926 A, 60, 64, 121, figs. 7, 8, 9, 24 (Parahippus); 120 (Archæohippus).

Lull, R. S. 1913 A, 7, 12 (Parahippus, Merychippus).

1917 B, 611.

Lydekker, R. 1912 A, 265 (Parahippus, Anchippodus, Desmatippus).

Major, C. J. F. 1877 A, 5.

Marsh, O. C. 1874 E, 290 (Parahippus); 291 (Anchippus).

Matsumoto, H. 1921 A, 75.

Matthew, W. D. 1901 B, 370, 371, 374 (Anchippus); 373 (Desmatippus).

1907 A, 172, 175, 176, 178 (Parahippus); 175 (Archæohippus).

1909 C, 119 (Parahippus, Archæohippus).

1913 F, 17, 25, figs. 10, 16, 19.

1914 G, 234.

1915 A, 236, 313.

1915 K, 413, 456.

1916 J, 9, 11.

1918 A, 211.

1924 B, 630.

1924 C, 69, 153, 157 (Parahippus); 157 (Desmatippus); 158 (Archæohippus).

1924 D, 1.

1924 E, 748, 751.

1924 G, 630.

1926 B, 5, 6.

1926 C, 150, 161, figs. 7, 15 (Parahippus); 166 (Archæohippus).

1928 B, 979, fig. 15.

Matthew and Cook 1909 A, 386.

Merriam, J. C. 1911 B, 217, 221 (Parahippus); 207 (Archæohippus).

1913 G, 420, 433 (Parahippus); 420, 424, 431 (Archæohippus).

1915 E, 233.

1915 F, 255.

- Merriam, J. C. 1919 A, 472, 478 (Parahippus); 476 (Archæohippus).  
 O'Harra, C. C. 1910 A, 96, 131.  
 Osborn, H. F. 1904 B, 168 (Miohippus, Parahippus).  
 1907 F, 872.  
 1909 D, 132 (Parahippus); 78 (Archæohippus).  
 1910 B, 627 (Parahippus); 287 (Altippus); 292, 555 (Archæohippus).  
 1912 G, 247, 249.  
 1918 A, 4, 5, 20, 22, 24, 74 (Parahippus); 15, 22 (Archæohippus).  
 Palacký, J. 1903 B, 312 (Desmatippus).  
 Palmer, T. S. 1904 A, 513, 937 (Parahippus); 101, 937 (Anchippus); 223, 937 (Desmatippus).  
 Pavlow, M. 1903 A, 181 (Desmotippus).  
 1915 A, 35 (Desmotippus).  
 1925 A, 317.  
 Peterson, O. A. 1906 C, 35.  
 Scott, W. B. 1913 A, 290 (Desmatippus); 297 (Parahippus).  
 Sefve, I. 1927 A, 81.  
 Sellards, E. H. 1916 B, 84, 91 (Parahippus); 86 (Archæohippus).  
 Thorpe, M. R. 1927 A, 168.  
 Wallace, A. R. 1876 A, 1, 135 (Anchippus); 136 (Parahippus).  
 Wanless, H. R. 1923 A, 232.  
 Weber, M. 1904 A, 621 (Desmatippus).  
 Weber and Abel 1928 A, xxii, 679, 680.  
 Zittel and Schlosser 1911 A, 461 (Parahippus, Altippus).  
 1923 A, 546, 550, 673 (Parahippus); 546 (Archæohippus).
- Parahippus agrestis (Leidy).**  
 Hay, O. P. 1902 A, 613 (Miohippus).  
 Dall and Harris 1892 A, 287 (Anchitherium).  
 Osborn, H. F. 1904 B, 168 (Parahippus?).  
 1918 A, 15, 75, 86, text-fig. 63.  
 Sellards, E. H. 1916 B, 86 (Archæohippus).  
 Miocene? (Red Rock Creek); Montana.
- Parahippus australis (Leidy).**  
 Hay, O. P. 1902 A, 613 (Miohippus).  
 Osborn, H. F. 1904 B, 168 (Hypohippus).  
 1918 A, 13, 75, 85, text-fig. 60.  
 Upper Miocene; Texas.
- Parahippus avus (Marsh).**  
 Hay, O. P. 1902 A, 616 (Merychippus).  
 Gidley, J. W. 1907 A, 873, 895 (Parahippus?).  
 Loomis, F. B. 1926 A, 123.  
 Matthew, W. D. 1909 C, 115.  
 Merriam, J. C. 1911 B, 205, 214, 261, fig. 29 (This species?).  
 Merriam and Sinclair 1907 A, 195 (Protohippus).  
 Osborn, H. F. 1918 A, 16, 22, 74, 75, 87, pl. vi, fig. 7; pl. viii, figs. 6, 9, 10; pl. ix, fig. 4; text-figs. 64, 65.  
 Trouessart, E. L. 1905 A, 638 (Merychippus).  
 Middle Miocene (Mascall); Oregon: (Virgin Valley); Nevada.
- Parahippus brevidens (Marsh).**  
 Hay, O. P. 1902 A, 615 (Anchippus).  
 Abel, O. 1928 B, 36, fig. 19.
- Gidley, J. W. 1906 D, 388.  
 1907 A, 873, 896 (Anchippus).  
 Lull, R. S. 1913 A, 7.  
 Marsh, O. C. 1874 E, 291 (Anchippus).  
 Matthew, W. D. 1909 C, 115.  
 1924 C, 157 (Parahippus); 159 (Merychippus).  
 Merriam and Sinclair 1907 A, 195, 196.  
 Osborn, H. F. 1918 A, 6, 15, 16, 75, 89, pl. viii, fig. 11; text-fig. 66.  
 Palacký, J. 1903 B, 317 (Anchippus).  
 Sellards, E. H. 1916 B, 85.  
 Trouessart, E. L. 1905 A, 618 (Anchippus).  
 Upper Miocene (Mascall?); Oregon.
- Parahippus cognatus Leidy.**  
 Hay, O. P. 1902 A, 617 (Merychippus perditus, in part).  
 Abel, O. 1928 B, 41.  
 Ameghino, F. 1904 A, 265.  
 Cook, H. J. 1912 D, 44 (This species?).  
 Gidley, J. W. 1906 D, 388.  
 1907 A, 872, 881.  
 1908 B, 237.  
 Loomis, F. B. 1926 A, 123.  
 Marsh, O. C. 1874 E, 291.  
 Matthew, W. D. 1909 C, 117.  
 1918 A, 186.  
 1924 C, 155, 159, figs. 44-46 (This species?).  
 Matthew and Cook 1909 A, 386.  
 Merriam, J. C. 1917 A, 436 (This species?).  
 Merrill, G. P. 1907 A, 22 (Anchitherium); 54 (Parahippus).  
 O'Harra, C. C. 1920 A, 154.  
 Osborn, H. F. 1918 A, 5, 25, 28, 74, 75, 94, pl. viii, fig. 8; pl. ix, fig. 5; pl. xxv, fig. 2; text-fig. 71.  
 Palacký, J. 1903 B, 317.  
 Sinclair, W. J. 1915 A, 76 (This species?).  
 Trouessart, E. L. 1905 A, 618.  
 Upper Miocene (Niobrara River); Nebraska.
- Parahippus coloradensis Gidley.**  
 Gidley, J. W. 1907 A, 876, 932.  
 Matthew, W. D. 1909 C, 115.  
 1924 C, 155.  
 Osborn, H. F. 1918 A, 19, 74, 75, 93, pl. viii, figs. 7, 12; text-fig. 70.  
 Sellards, E. H. 1916 B, 85.  
 Lower Pliocene (Pawnee Creek); Colorado.
- Parahippus coloradensis præcurrens Osborn.**  
 Osborn, H. F. 1918 A, 13, 74, 75, 83, pl. viii, fig. 1; pl. ix, fig. 1; pl. xxxvi, figs. 2, 3; text-fig. 58.  
 Abel, O. 1928 B, 42 (P. præcurrens).  
 Loomis, F. B. 1926 A, 124 (P. præcurrens).  
 Lower Miocene (Rosebud); Nebraska.
- Parahippus crenidens (Scott).**  
 Hay, O. P. 1902 A, 615 (Desmatippus).  
 Abel, O. 1928 B, 42.  
 Cook, H. J. 1912 D, 41 (Parahippus).  
 Gidley, J. W. 1907 A, 875, 921 (Parahippus).  
 Loomis, F. B. 1926 A, 123.  
 Matthew, W. D. 1909 C, 115 (Parahippus); 113 (Parahippus. This species?).  
 Merriam and Sinclair 1903 A, 96 (Desmatippus).

- Osborn, H. F. 1918 A, 5, 16, 74, 75, 90, pl. viii, fig. 4; pl. ix, fig. 2; text-fig. 67.  
 Sellards, E. H. 1916 B, 85 (Parahippus).  
 Trouessart, E. L. 1905 A, 617 (Desmathippus).  
 Miocene (Deep River); Montana: Miocene (Sheep Creek); Nebraska.
- Parahippus integer** Matthew.  
 Matthew, W. D. 1924 C, 66, 71, 154.  
 Upper Miocene (Lower Snake Creek); Nebraska.
- Parahippus leonensis** Sellards.  
 Sellards, E. H. 1916 B, 83, pl. ii, figs. 3, 6-9, 12.  
 Osborn, H. F. 1918 A, 16, 75, 95, text-fig. 72.  
 Miocene (Alum Bluff); Florida.
- Parahippus minimus** (Douglass).  
 Hay, O. P. 1902 A, 620 (Hipparion); 795 (Anchitherium).  
 1924 A, 7.  
 Osborn, H. F. 1918 A, 27, 75, 96, text-fig. 72a.  
 Trouessart, E. L. 1905 A, 617 (Anchitherium); 640 (Neohipparion).  
 Lower Pliocene (Madison Valley); Montana.
- Parahippus minutalis** Hay.  
 Hay, O. P. 1924 A, 6, pl. i, figs. 14-17.  
 Upper Miocene (Fleming); Texas.
- Parahippus mourningi** (Merriam).  
 Merriam, J. C. 1913 G, 427, figs. 3-5 (Parahippus?).  
 Loomis, F. B. 1926 A, 120 (Archæohippus).  
 Matthew, W. D. 1924 C, 158, 159 (Parahippus).  
 Merriam, J. C. 1919 A, 450, 475, 527, figs. 33, 34 (Parahippus?).  
 Osborn, H. F. 1918 A, 20, 204, 213, text-fig. 173 (Archæohippus).  
 Upper Miocene (Barstow); California.
- Parahippus nebrascensis** Peterson.  
 Peterson, O. A. 1906 C, 57, pl. xix.  
 Abel, O. 1928 B, 42.  
 Cook, H. J. 1912 D, 42.  
 Loomis, F. B. 1908 B, 163.  
 1926 A, 123 (P. nebrascensis).  
 Matthew, W. D. 1909 C, 113.  
 O'Harra, C. C. 1920 A, 106, 157, fig. 45.  
 Osborn, H. F. 1918 A, 13, 74, 75, 79, text-fig. 55.  
 Zittel and Schlosser 1911 A, 461, fig. 643.  
 1923 A, 546, fig. 632.  
 Lower Miocene (Upper Harrison); Montana: (Laramie Peak); Wyoming.
- Parahippus nebrascensis primus** Osborn.  
 Osborn, H. F. 1918 A, 13, 75, 80, 82, pl. vi, figs. 6, 7; pl. viii, fig. 2; pl. ix, fig. 9; text-fig. 57.  
 Abel, O. 1928 B, 42 (P. primus).  
 Gregory, W. K. 1920 B, pl. xviii.  
 Loomis, F. B. 1926 A, 124 (P. primus).  
 O'Harra, C. C. 1920 A, 156.  
 Lower Miocene (Harrison); Nebraska.
- Parahippus pawniensis** Gidley.  
 Gidley, J. W. 1907 A, 876, 932.  
 Abel, O. 1928 B, 42.
- Loomis, F. B. 1926 A, 123.  
 Matthew, W. D. 1909 C, 115.  
 1926 C, 156, fig. 14.  
 Osborn, H. F. 1918 A, 74, 75, 92, pl. viii, fig. 5; pl. ix, fig. 3; text-figs. 68, 69.  
 Sellards, E. H. 1916 B, 85.  
 Middle Miocene (Pawnee Creek); Colorado.
- Parahippus pawniensis atavus** Osborn.  
 Osborn, H. F. 1918 A, 13, 19, 74, 75, 79, pl. xxxviii; pl. xxxix, figs. 9, 13; text-fig. 56.  
 Abel, O. 1926 B, 400, fig. 225 (P. atavus).  
 1928 B, 35, fig. 15 (P. atavus).  
 Matthew, W. D. 1926 C, 157, fig. 15.  
 O'Harra, C. C. 1920 A, 156.  
 Weber and Abel 1928 A, 678, fig. 465 (P. atavus).  
 Lower Miocene (Harrison); Nebraska.
- Parahippus penultimus** (Matthew).  
 Matthew, W. D. 1924 C, 66, 158, 159 (Archæohippus).  
 Abel, O. 1926 B, 436 (Archæohippus).  
 Middle Miocene (Sheep Creek); Nebraska.
- Parahippus pristinus** Osborn.  
 Osborn, H. F. 1918 A, 13, 74, 75, 76, pl. vi, fig. 5; pl. ix, fig. 7; pl. xxv, fig. 1; pl. xxxvi, fig. 1; text-fig. 52.  
 Abel, O. 1928 B, 40, 41, 42, fig. 13.  
 Loomis, F. B. 1926 A, 123, fig. 23.  
 Matthew, W. D. 1924 C, 155.  
 1926 C, 157, fig. 15.  
 O'Harra, C. C. 1920 A, 156.  
 Lower Miocene (Rosebud); South Dakota.
- Parahippus taxus** (Douglass).  
 Douglass, E. 1908 B, 271, pl. lxvii, figs. 3, 4; pl. lxviii, figs. 6-8 (Altippus).  
 Abel, O. 1928 B, 42.  
 Osborn, H. F. 1918 A, 15, 75, 85, text-fig. 62.  
 Richards and Pardee 1925 A, 15 (Altippus).  
 Upper Oligocene or Lower Miocene (Divide Creek); Montana.
- Parahippus texanus** Leidy.  
 Hay, O. P. 1902 A, 615 (Anchippus).  
 Abel, O. 1928 B, 39, fig. 19.  
 Gidley, J. W. 1907 A, 872, 885.  
 Loomis, F. B. 1926 A, 123.  
 Marsh, O. C. 1874 E, 291 (Anchippus).  
 Matthew, W. D. 1901 B, 357, 358, 373 (Anchippus).  
 Osborn, H. F. 1918 A, 6, 13, 74, 75, 84, pl. viii, fig. 3; pl. ix, fig. 10; text-fig. 59.  
 Palacký, J. 1903 B, 312 (Anchippus).  
 Peterson, O. A. 1906 C, 57.  
 Sellards, E. H. 1916 B, 85.  
 Trouessart, E. L. 1905 A, 617 (Anchippus).  
 Middle Miocene?; Texas.
- Parahippus tyleri** Loomis.  
 Loomis, F. B. 1908 B, 163, fig. 1.  
 Abel, O. 1928 B, 42.  
 Cook, H. J. 1912 D, 42 (P. nebrascensis tyleri).  
 Loomis, F. B. 1926 A, 117, 123.  
 O'Harra, C. C. 1920 A, 157.

- Osborn, H. F. 1918 A, 13, 74, 75, 77, pl. ix, figs. 6, 8; pl. xxxix, figs. 10, 12; text-figs. 53, 54, 56.  
 Sellards, E. H. 1916 B, 86.  
 Lower Miocene (Harrison); Nebraska.

**Parahippus ultimus (Cope).**

- Hay, O. P. 1902 A, 614 (Miohippus).  
 Dall and Harris 1892 A, 232 (Anchitherium).  
 Gidley, J. W. 1906 D, 385, fig. 1 (Archæohippus).  
 1907 A, 874, 903 (Archæohippus).  
 Gregory, W. K. 1920 B, 270, pl. xviii (Archæohippus).  
 Loomis, F. B. 1926 A, 120 (Archæohippus).  
 Matthew, W. D. 1909 C, 115 (Archæohippus).  
 1924 C, 159 (Archæohippus).  
 Merriam, J. C. 1913 G, 429, fig. 4 (Archæohippus).  
 Merriam and Sinclair 1907 A, 195, 196 (Archæohippus).  
 Osborn, H. F. 1904 B, 168 (Miohippus).  
 1918 A, 16, 22, 204, 211, pl. vi, fig. 2; text-fig. 172 (Archæohippus).  
 Sellards, E. H. 1916 B, 86 (Archæohippus).  
 Middle Miocene (Mascall); Oregon.
- Parahippus sp. indet.**
- Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.  
 Gidley, J. W. 1906 D, 387 (Archæohippus).

**MERYCHIPPUS Leidy. Type *M. insignis* Leidy.**

- Hay, O. P. 1902 A, 616.  
 Abel, O. 1909 E, (247).  
 1912 F, 629.  
 1913 B, 754, fig. 105 (Meryhippus).  
 1914 A, 247.  
 1926 B, 360, 396, 415, 423, 429, 451.  
 1926 H, (160).  
 1928 B, 21, 34, 44, figs. 3, 4, 14, 21.  
 Ameghino, F. 1904 A, 533.  
 Antonius, O. 1919 A, 285, 291.  
 Arldt, T. 1907 D, 257.  
 Boas, J. E. V. 1914 B, 597.  
 Case, E. C. 1899 B, 165.  
 Depéret, C. 1912 A, 710.  
 Douglass, E. 1909 A, 477.  
 Floderus, M. 1910 A, 98, fig. 1.  
 Flower, W. H. 1873 B, 101.  
 1892 A, 72.  
 Frick, C. 1926 A, 20.  
 Fürbringer, M. 1902 A, 203 (Protohippus).  
 Furlong, E. L. 1927 A, 159.  
 Gidley, J. W. 1904 B, 191, 194.  
 1906 D, 388.  
 1907 A, 868.  
 Gregory, W. K. 1920 B, 266, pl. xviii.  
 Haug, E. 1911 A, 1705, 1706.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1910 C, 293.  
 1926 A, 60, 64, 121, figs. 7-9, 11, 12, 24.  
 Lull, R. S. 1904 C, 6.  
 1907 A, 177.  
 1917 B, 225, 611, figs. 220, 221.  
 Lydekker, R. 1907 A, 5, figs. 1d, 2c.  
 1912 A, 254.  
 1912 B, 221.

- Gidley, J. W. 1908 B, 240, figs. 6, 7 (This genus?). Miocene (Virgin Valley); Nevada.  
 Hay, O. P. 1916 A, 387. Late Tertiary; South Carolina.  
 1916 C, 42, pl. viii, figs. 1, 2. Pleistocene?; Florida.  
 1923 A, 493. Pleistocene?; Florida.  
 Loomis, F. B. 1923 A, 222. Miocene (Lower Harrison); Nebraska.  
 Matthew, W. D. 1901 B, 358 (Anchitherium); 359 (Parahippus).  
 1909 C, 113 (Parahippus). Lower Miocene (Lower Rosebud); South Dakota; 113 (Anchitherium); 115 (Archæohippus). Miocene (Middle); Oregon.  
 1918 A, 186 (Archæohippus?). Pliocene (Snake Creek); Nebraska.  
 1924 C, 72. Miocene (Pawnee Creek); Colorado.  
 Merriam, J. C. 1917 A, 439. Upper Pliocene (Dunnellon); Florida; 436. Pliocene (Snake Creek); Nebraska.  
 Merriam and Sinclair 1907 A, 198 (Archæohippus). Miocene (Mascall); Oregon.  
 Peterson, O. A. 1906 C, 35, 46. Lower Miocene (Harrison and Agate Spring); Nebraska.  
 Sinclair, W. J. 1915 A, 76, 86 (Archæohippus). Pliocene (Snake Creek); Nebraska.  
 Stock, C. 1924 B, 54 (This genus?). Upper Miocene (Mint Canyon); California.

- Major, C. J. F. 1877 A.  
 Matthew, W. D. 1903 A, 19 (Parahippus, Merychippus).  
 1907 A, 175.  
 1909 C, 119.  
 1913 F, 20, 25, figs. 2, 3, 11, 16, 21.  
 1914 G, 234.  
 1915 A, 196, 236, 313.  
 1915 K, 413, 456.  
 1916 J, 7, 11, figs. 2, 3.  
 1917 A, 574.  
 1918 A, 211, 212.  
 1920 C, 475.  
 1924 B, 630.  
 1924 C, 69, 153, 159, 164.  
 1924 D, 1.  
 1924 G, 630.  
 1926 B, 5.  
 1926 C, 141, 158, 160, 167, figs. 1-6, f. 27.  
 1928 B, 979, fig. 15.  
 Matthew and Cook 1909 A, 386.  
 Merriam, J. C. 1907 A, 381.  
 1911 B, 208, 215, 217, 221.  
 1914 C, 644.  
 1915 A, 7.  
 1915 E, 193, 212.  
 1915 F, 255, 259.  
 1915 G, 99, 100.  
 1916 D, 132.  
 1917 A.  
 1919 A, 450-455, 472, 479, 528.  
 Osborn, H. F. 1902 D, 267, fig. 1.  
 1907 G, 75, figs. 135, 162, 215.  
 1909 D, 78-80.  
 1910 B.

Osborn, H. F. 1912 G, 248.

1915 B, 220.

1918 A, 4, 5, 17, 24, 27, 29, 98.

Palmer, T. S. 1904 A, 411, 937.

Pavlov, M. 1915 A, 35.

1925 A, 316, seq.

Schlosser, M. 1924 A, 67.

Schuchert and Levene 1927 A, 347, fig.

Scott, W. B. 1913 A, 297.

Sefve, I. 1927 A, 80.

Sellards, E. H. 1916 B, 91.

Steinmann, G. 1907 A, 491.

Taylor, W. P. 1917 A, 272.

Terra, P. 1911 A, 312, fig. 129.

Thorpe, M. R. 1927 A, 168.

Trouessart, E. L. 1905 A, 637.

Troxell, E. L. 1916 A, 339.

Veith, A. 1912 A, 6, 13.

Wallace, A. R. 1876 A, i, 135.

Weber, M. 1904 A, 621.

Weber and Abel 1928 A, xxii, 417, 679, figs. 260, 467.

Zittel and Schlosser 1911 A, 461.

1923 A, 547, 550, 673, 679, fig. 633.

### ***Merychippus calamarius* (Cope).**

Hay, O. P. 1902 A, 619 (Hipparion).

Abel, O. 1926 B, 423, fig. 269.

1928 B, 43, fig. 20.

Ameghino, F. 1904 A, 260, 261, fig. 352 (Hipparion).

Barbour and Cook 1917 B, 180.

Gidley, J. W. 1907 A, 873, 896.

Matthew, W. D. 1909 C, 117 (Neohipparion).

1918 A, 186, 211.

1924 C, 159.

Merriam, J. C. 1911 E, 168, pl. xxix, figs. 2-3 (This species?).

1915 A, 7.

1915 D, 50.

1915 E, 199, 233.

1917 A, 436 (This species?).

1919 A, 480, 494, 505, 527, fig. 60.

Merriam and Pack 1913 A, 128 (This species?).

Merrill, G. P. 1907 A, 39 (Hippotherium).

Osborn, H. F. 1918 A, 5, 6, 22, 28, 99, 123, pl. xi, fig. 4; pl. xvii, fig. 8; pl. xviii, figs. 2, 6; text-fig. 98.

Pavlov, M. W. 1925 A, 324 (Hippotherium).

Sinclair, W. J. 1915 A, 76 (This species?).

Trouessart, E. L. 1905 A, 640 [Neohipparion (Stylonus)].

Lower Pliocene (Santa Fe); New Mexico: (Snake Creek, Valentine); Nebraska: (Barstow); California.

### ***Merychippus calamarius?* propinquus Osborn.**

Osborn, H. F. 1918 A, 28.

Pliocene (Snake Creek); Nebraska.

### ***Merychippus calamarius stylodontus* Merriam, J. C.**

Merriam, J. C. 1919 A, 450, 453, 482, 505, 527, figs. 43-47, 50-53, 61, 63.

Miocene (Barstow); California.

### ***Merychippus californicus* Merriam.**

Merriam, J. C. 1915 A, 194, 197, figs. 3-14.

Clark, B. L. 1921 A, table (M. coalingensis).

Osborn, H. F. 1918 A, 22, 23, 99, 121, text-fig. 96.

Miocene (Tembler); California.

### ***Merychippus campestris* Gidley.**

Gidley, J. W. 1907 A, 876, 928.

Antonius, O. 1919 A, 291.

Matthew, W. D. 1909 C, 115.

1924 C, 67.

Moodie, R. L. 1917 B, 384, fig. 8.

1918 C, 279.

1918 D, 507, fig. 41.

1923 B, 223, 249, pl. xiv.

Osborn, H. F. 1918 A, 19, 20, 99, 114, pl. xv, figs. 4, 5; pl. xix, figs. 3, 4; pl. xxvi, fig. 1; pl. xlv, fig. 1; pl. xlix, fig. 1; pl. l, figs. 3, 7; text-figs. 88, 89.

Pavlov, M. W. 1925 A, 322, 328.

Upper Miocene (Pawnee Creek); Colorado: (Lower Snake Creek); Nebraska.

### ***Merychippus eohipparion* Osborn.**

Osborn, H. F. 1918 A, 19, 20, 99, 117, pl. xx, fig. 2; pl. xlv, fig. 3; pl. xlix, fig. 3; pl. l, figs. 4, 8; pl. liv, fig. 3; text-fig. 92.

Abel, O. 1926 B, 35, fig. 15.

Matthew, W. D. 1924 C, 67, 72, 159.

1926 C, 159, fig. 17.

Schlosser, M. 1924 A, 67.

Weber and Abel 1928 A, 678, fig. 465.

Upper Miocene (Pawnee Creek); Colorado: (Lower Snake Creek); Nebraska.

### ***Merychippus eoplacidus* Osborn.**

Osborn, H. F. 1918 A, 19, 20, 99, 114, pl. xx, fig. 1; pl. xxxix, fig. 6; pl. xlv, fig. 2; pl. xlviii, fig. 1; pl. xlix, fig. 2; pl. liv, fig. 2; text-fig. 90.

Abel, O. 1926 B, 401, fig. 255.

Upper Miocene (Pawnee Creek); Colorado: (Lower Snake Creek); Nebraska.

### ***Merychippus francisi* Hay.**

Hay, O. P. 1924 A, 9, pl. i, figs. 28, 29; pl. ii, figs. 1-4.

Upper Miocene (Fleming); Texas.

### ***Merychippus insignis* Leidy.**

Hay, O. P. 1902 A, 616.

Barbour and Cook 1917 B, 180.

Dall and Harris 1892 A, 292.

Deussen, A. 1924 A, 21, 97, 99 (Protohippus medius).

Deussen and Dole 1916 A, 149 (Protohippus medius).

Douglass, E. 1908 B, 275, pl. lxvii, figs. 1, 2; pl. lxviii, figs. 3-5.

Dumble, E. T. 1894 A, 558 (Protohippus medius).

1903 A, 957 (Protohippus medius).

1915 A, 473 (Protohippus medius).

1920 A, 238 (Protohippus medius).

Gidley, J. W. 1907 A, 872, 878.

1908 B, 239.

Leidy, J. 1880 B, 258 (This species?).

Lull, R. S. 1907 A, 179, fig. 12.

- Matthew, W. D. 1909 C, 117.  
1918 A, 186, 212.  
1920 E, 238 (Protohippus medius).
- Matthew and Cook 1909 A, 388, fig. 11.
- Merriam, J. C. 1917 A, 436 (This species?).
- Merriam and Sinclair 1907 A, 195 (Protohippus medius).
- Merrill, G. P. 1907 A, 46.
- Osborn, H. F. 1918 A, 23, 28, 99, 122, pl. xvii, fig. 5; pl. xxv, fig. 3; text-fig. 97.
- Pavlov, M. W. 1925 A, 316, 321, seq., fig. 3.
- Sellards, E. H. 1916 B, 86.
- Sinclair, W. J. 1915 A, 76 (This species?).
- Trouessart, E. L. 1905 A, 637.
- Veith, A. 1912 A, 13.
- Yates, L. G. 1903 A, 91 (Protohippus).
- Upper Miocene or Lower Pliocene (Bijou Hills); South Dakota. Miocene (Oakville); Texas: (Mascall); Oregon: Pliocene (Snake Creek?, Valentine); Nebraska, California, Montana.
- Merychippus insignis primus** (Osborn).  
*Osborn, H. F.* 1918 A, 5, 6, 16, 17, 99, 102, pl. xiii, fig. 3; pl. xiv, figs. 2, 4; pl. xxv, fig. 4; pl. xxxix, fig. 2; text-fig. 78 (M. isonesus primus).  
*Abel, O.* 1926 A, 243 (M. primus).  
1926 B, 362 (M. isonesus primus); 362-364, 401, 414, 451, figs. 255-257, 266-269 (M. primus).  
1926 H, (164) (M. primus).  
1928 B, 32, 35, 50, 74, figs. 12, 15, 19, 22, 27, 44 (M. primus).
- Hay, O. P.* 1924 A, 9 (M. isonesus primus).
- Matthew, W. D. 1923 E, 131 (M. primus).  
1924 C, 67 (M. primus); 162, figs. 49, 55 (M. insignis primus).
- Middle Miocene (Sheep Creek); Nebraska.
- Merychippus intermentanus Merriam.**  
*Merriam, J. C.* 1915 D, 50, figs. 2, 3.  
1919 A, 450, 480, 505, 527, figs. 36-40, 48, 49, 54-56.
- Osborn, H. F.* 1918 A, 20, 22, 99, 121, text-fig. 95.  
Upper Miocene (Barstow); California.
- Merychippus isonesus** (Cope).  
*Hay, O. P.* 1902 A, 620 (Hipparion).  
*Abel, O.* 1926 B, 362.  
1928 B, 76, fig. 44.
- Ameghino, F.* 1904 A, 238, fig. 350 (Hipparion).
- Antonius, O.* 1919 A, 291.
- Clark, B. L.* 1921 A, table.
- Condon, T.* 1902 A, 123, pl. xxv ("Hipparion").  
1910 A, 112, pl. xxv ("Hipparion").
- Cook, H. J.* 1912 D, 43 (This species?).
- Cope and Matthew* 1915 A, pl. cxlvii; pl. cxlviii, figs. 1-8 (Hippotherium severum; Merychippus isonesus); pl. cxlviii, fig. 8; pl. cxlix, figs. 1-4 (Protohippus sejunctus, Merychippus isonesus).
- Douglass, E.* 1903 A, 154 (Hippotherium).  
1907 A, 810 (Neohipparion. This species?).
- Gidley, J. W.* 1907 A, 874, 909.  
1908 B, 238.
- Lull, R. S.* 1907 A, 179 (Neohipparion).
- Matthew, W. D. 1901 B, 374 (Hipparion).  
1909 C, 115.
- Matthew, W. D. 1924 C, 162.
- Maxson, J. H.* 1928 A, 23.  
1928 B, 57, fig. 1.
- Merriam, J. C.* 1911 B, 205, 209, 214, 262, figs. 30, 34 (This species?).  
1914 C, 644.  
1915 E, 198, 233.  
1919 A, 492, figs. 58, 59.
- Merriam and Sinclair* 1907 A, 195, 196.
- Moodie, R. L.* 1922 C, 367.
- Osborn, H. F.* 1918 A, 16, 17, 99, 101, pl. vi, fig. 8; pl. x, fig. 4; pl. xiii, figs. 1, 2; pl. xvii, figs. 3, 4; pl. xlii, figs. 1, 2; text-figs. 75, 77.
- Pavlov, M. W.* 1925 A, 322.
- Schlosser, M.* 1924 A, 67.
- Turner, H. W.* 1895 A, 373 (Hippotherium isonesum).
- Trouessart, E. L.* 1905 A, 640 [Neohipparion (Stylonus)].  
Middle Miocene (Mascall); Oregon: (Virgin Valley); California.
- Merychippus isonesus quartus** Osborn.  
*Osborn, H. F.* 1918 A, 17, 99, 107, pl. xli, fig. 3; pl. xlv, fig. 4; pl. xlvii, fig. 3; pl. lii, fig. 3.  
*Abel, O.* 1928 B, 46 (M. quartus).  
Middle Miocene (Sheep Creek); Nebraska.
- Merychippus isonesus quintus** Osborn.  
*Osborn, H. F.* 1918 A, 16, 17, 99, 107, pl. xliii, fig. 7; pl. xiv, fig. 1; pl. xli, fig. 4; pl. xlv, figs. 2, 5; pl. xlvii, fig. 4; text-fig. 81.  
*Abel, O.* 1928 B, 46 (M. quintus).  
Middle Miocene (Sheep Creek); Nebraska.
- Merychippus isonesus secundus** Osborn.  
*Osborn, H. F.* 1918 A, 5, 17, 99, 105, pl. xlii, fig. 4; pl. xli, fig. 1; pl. xlv, figs. 1, 3; pl. xlvii, fig. 1; pl. lii, fig. 1; text-fig. 79.  
*Abel, O.* 1928 B, 46 (M. secundus).  
Middle Miocene (Sheep Creek); Nebraska.
- Merychippus isonesus tertius** Osborn.  
*Osborn, H. F.* 1918 A, 6, 17, 99, 105, pl. xlii, figs. 5, 6; pl. xiv, fig. 3; pl. xli, fig. 2; pl. xlvii, fig. 2; pl. lii, fig. 2; text-fig. 80.  
*Abel, O.* 1928 B, 41, figs. 19, 45 (M. tertius).  
Middle Miocene (Sheep Creek); Nebraska.
- Merychippus labrosus** (Cope).  
*Hay, O. P.* 1902 A, 617.  
*Cope and Matthew* 1915 A, pl. cxlviii, figs. 5-7 (Protohippus insignis; Merychippus lab.).  
*Gidley, J. W.* 1907 A, 873, 891.  
*Matthew, W. D.* 1909 C, 115.
- Osborn, H. F.* 1918 A, 19, 20, 99, 109, text-fig. 84.
- Trouessart, E. L.* 1905 A, 638.  
Middle Miocene (Pawnee Creek); Colorado.
- Merychippus missouriensis** Douglass.  
*Douglass, E.* 1908 B, 274, pl. lxvi; pl. lxvii, fig. 5; pl. lxviii, figs. 1, 2 (This genus?).  
*Osborn, H. F.* 1918 A, 99, 119, text-fig. 93.  
Miocene (Loup Fork); Montana.
- Merychippus paniensis** (Cope).  
*Hay, O. P.* 1902 A, 620 (Hipparion).  
*Abel, O.* 1926 B, 362, 364, 419, figs. 256, 257, 269.

- Abel, O. 1928 B, 32, 43, 76, figs. 12, 20, 23, 44, 45.  
 Cook, H. J. 1912 D, 43 (This species?).  
 Gidley, J. W. 1907 A, 873, 890.  
 Matthew, W. D. 1909 C, 115.  
 1923 E, 131.  
 1924 C, 66, 72, 159, figs. 47, 48.  
 1926 C, 158, fig. 16.
- Osborn, H. F. 1918 A, 5, 6, 19, 20, 99, 109, pl. xi, fig. 2; pl. xvi, figs. 4-6; pl. xviii, figs. 1, 5; pl. xxv, fig. 5; pl. xxxiv, figs. 1, 2; pl. xlii, fig. 2; pl. xlviii, fig. 2; pl. l, figs. 2, 6; pl. lii, fig. 2; text-fig. 83.  
 Middle Miocene (Pawnee Creek); Colorado:  
 Upper Miocene (Snake Creek); Nebraska.
- Merychippus patruus Osborn.**  
 Osborn, H. F. 1918 in Matthew, W. D. 1918 A, 213.  
 Abel, O. 1926 B, 402, figs. 256, 269.  
 Osborn, H. F. 1918 A, 28, 99, 126, pl. xvii, fig. 6; text-fig. 100.  
 Pliocene (Snake Creek); Nebraska.
- Merychippus patruus obliquus Matthew.**  
 Matthew, W. D. 1918 A, 212.  
 Osborn, H. F. 1918 A, 28 (M. insignis? obliquus).  
 Pliocene (Snake Creek); Nebraska.
- Merychippus proparvulus Osborn.**  
 Osborn, H. F. 1918 A, 19, 20, 99, 117, pl. xi, fig. 3; pl. xv, figs. 6, 7; pl. xx, fig. 3; pl. liv, fig. 1; text-fig. 91.  
 Abel, O. 1926 B, 420.  
 Matthew, W. D. 1924 C, 67, 72, 159.  
 Upper Miocene (Pawnee Creek); Colorado:  
 (Lower Snake Creek); Nebraska.
- Merychippus relictus (Cope).**  
 Hay, O. P. 1902 A, 620 (Hipparion).  
 Dall and Harris 1892 A, 283 (Hippotherium).  
 Gidley, J. W. 1907 A, 874, 906.  
 Hay, O. P. 1927 D, 101 (Hippotherium).  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 Merriam and Sinclair 1907 A, 196.  
 Osborn, H. F. 1918 A, 16, 99, 100, pl. xiii, fig. 9; pl. xvii, fig. 2; text-fig. 73.  
 Trouessart, E. L. 1905 A, 640 [Neohipparion (Stylonus)].  
 Lower or Middle Miocene; Oregon.
- Merychippus republicanus Osborn.**  
 Osborn, H. F. 1918 A, 5, 6, 28, 99, pl. x, fig. 1; pl. xvii, fig. 7; text-fig. 99.  
 Abel, O. 1928 B, 43, fig. 20.  
 Matthew, W. D. 1924 C, 162.  
 Schlosser, M. 1924 A, 67.  
 Lower Pliocene (Republican River); Nebraska.
- Merychippus sejunctus (Cope).**  
 Hay, O. P. 1902 A, 618.  
 Abel, O. 1926 B, 421.  
 1928 B, 51, fig. 28.  
 Boule and Thevenin 1920 A, 117.  
 Cook, H. J. 1912 D, 43 (This species?).  
 Cope, E. D. 1885 FF, 793, fig. 3 (Protohippus).
- Cope and Matthew 1915 A, pl. cxlviii, fig. 3 (Protohippus perditus, Merychippus sejunctus); pl. cl (Protohippus, Merychippus); pl. cli (Merychippus).  
 Dall and Harris 1892 A, 288 (Protohippus).  
 Gidley, J. W. 1907 A, 873, 891.  
 1927 D, 267, fig.  
 Gregory, W. K. 1920 B, pl. xviii.  
 Loomis, F. B. 1926 A, 125, fig. 25.  
 Matthew, W. D. 1901 B, 358, 374 (Protohippus).  
 1909 C, 115.  
 1924 C, 67, 72, 159.  
 Merriam, J. C. 1919 A, 498 (Protohippus).  
 Osborn, H. F. 1904 F, 13, 14.  
 1918 A, 19, 20, 99, 110, pl. xi, fig. 1; pl. xvi, figs. 1-3; pl. xix, figs. 1, 2, 20; pl. xliii, fig. 3; pl. xlviii, fig. 1; pl. l, figs. 1, 5; pl. liii, fig. 3; text-figs. 85, 86.  
 Sefve, I. 1927 A, 81.  
 Trouessart, E. L. 1905 A, 638.  
 Middle Miocene (Pawnee Creek); Colorado:  
 Upper Miocene (Snake Creek); Nebraska.
- Merychippus severus (Cope).**  
 Hay, O. P. 1902 A, 621 (Hipparion).  
 Cook, H. J. 1912 D, 43 (M. severus. This species?).  
 Dall and Harris 1892 A, 282 (Hippotherium).  
 Dumble, E. T. 1920 A, 232 (This species?).  
 Gidley, J. W. 1907 A, 872, 897.  
 Matthew, W. D. 1909 C, 115.  
 1915 L, 471, 472 (This species?).  
 1920 E, 232 (This species?).  
 1924 C, 159.
- Merriam, J. C. 1911 B, 209, 264 (This species?).  
 1915 E, 199.  
 Osborn, H. F. 1918 A, 16, 99, 101, pl. xiii, fig. 8; pl. xvii, fig. 1; text-fig. 74.  
 Trouessart, E. L. 1905 A, 640 [Neohipparion (Stylonus)].  
 Middle Miocene (Mascall); Oregon: Miocene (Snake Creek?); Nebraska: (Virgin Valley); Nevada: Upper Miocene (Fleming); Texas?
- Merychippus socius Hay.**  
 Hay, O. P. 1924 A, 9, pl. i, figs. 25-27.  
 Upper Miocene (Fleming); Texas.
- Merychippus sphenodus Cope.**  
 Hay, O. P. 1902 A, 621 (Hipparion).  
 Abel, O. 1928 B, 43, fig. 20 (This genus?).  
 Cope and Matthew 1915 A, pl. cxlviii, figs. 9, 10; pl. cxlviii, fig. 1 (Hippotherium, Merychippus).  
 Gidley, J. W. 1907 A, 874, 908.  
 Matthew, W. D. 1909 C, 115.  
 Osborn, H. F. 1918 A, 6, 19, 20, 99, 112, pl. x, figs. 2, 12; pl. xv, figs. 1-3; pl. xviii, fig. 4; pl. xliii, fig. 1; pl. xlvii, fig. 2; pl. xlviii, fig. 3; pl. liii; text-fig. 87.  
 Trouessart, E. L. 1905 A, 640 (Neohipparion).  
 Middle Miocene (Pawnee Creek); Colorado.
- Merychippus sumani Merriam.**  
 Merriam, J. C. 1915 D, 49, fig. 1.  
 1911 E, 168, pl. xxix, figs. 1a-1c (M. "near calamarius").  
 1915 E, 199 (M. calamarius sumani).  
 1919 A, 450, 480, figs. 41, 42, 57.

Osborn, H. F. 1918 A, 20, 22, 99, 120, text-fig. 94.

Upper Miocene (Barstow); California.

### **Merychippus vellicans** Hay.

Hay, O. P. 1924 9, 7, pl. i, figs. 18-24.

Upper Miocene (Fleming); Texas.

### **Merychippus** sp. indet.

Hay, O. P. 1902 A, 618.

Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.

Buwalda, J. P. 1916 A, 77, 80. Miocene (Tehachapi); California.

1916 B, 170. Miocene (Tehachapi); California.

Clark, B. L. 1921 A, table. Miocene (Monterey); California.

Cook, H. J. 1912 D, 44. Pliocene (Snake Creek); Nebraska.

Deussen, A. 1924 A, 97. Miocene (Oakville); Texas.

Dumble, E. T. 1920 A, 231, 237. Neocene (Fleming); Texas.

Frick, C. 1926 A, 106. Miocene (Pawnee Creek); Colorado.

Gidley, J. W. 1908 B, 238, 239, figs. 2, 3 (3 species); Virgin Valley, Nevada.

1915 D, 21 ("Merychippus"). Florida.

1918 C, 180. Later Tertiary (Flaxville); Montana.

Hay, O. P. 1924 D, 169, 312. Pliocene?; Montana.

Louderback, G. D. 1924 A, 9. Miocene (Cedar Mountain); California.

Matthew, W. D. 1915 L, 471. Miocene (Fleming); Texas.

1920 E, 231, 237. Upper Miocene (Fleming); Texas.

Merriam, J. C. 1911 B, 263, fig. 33. Miocene; Nevada.

1911 E, 168, pl. xxix, fig. 4. Miocene (Upper); California.

1913 E, 375, fig. 2 (Neohipparion or Merychippus).

1914 A, 279, figs. 1, 2. Miocene; Nevada.

1914 C, 644. Tertiary (Temblor); California.

1915 B, 286, figs. 1, 2. Miocene?; California.

1916 A, 186, figs. 21, 22, 26, 27. Miocene (Cedar Mountain); California.

1916 C, 123, figs. 11-13 (Merychippus or Neohipparion); 125, fig. 15 (This genus?).

1916 E, 170. Miocene (Tehachapi); California.

1916 G, 88. Miocene (Alum Bluff); Florida.

1919 A, 497, figs. 62, 64-79. Miocene (Barstow); California.

Merriam, Stock, Moody 1925 A, 57. Pliocene (Mascall); Oregon.

Merrill, G. P. 1907 A, 47. Middle Miocene; New Mexico.

Osborn, H. F. 1918 A, 108, fig. 82. Miocene (Alum Bluff); Florida.

Sellards, E. H. 1916 B, 87, pl. ii, fig. 1. Miocene (Alum Bluff); Florida.

Stock, C. 1921 A, 260, fig. 10 (This genus?). Pliocene? (Muddy Valley); Nevada.

1924 B, 54 (Protohippus?). Upper Miocene (Mint Canyon); California.

### **HIPPODON** Leidy. Type *H. speciosus* Leidy.

Leidy, J. 1854 C, 90.

Hay, O. P. 1902 A, 619 (Hipparion, in part).

Matthew, W. D. 1913 E, 791.

Osborn, H. F. 1918 A, 128.

### **Hippodon speciosus** Leidy.

Hay, O. P. 1902 A, 621 (Hipparion).

Cope and Matthew 1915 A, pl. cxlv (Hippotherium, Merychippus).

Dall and Harris 1892 A, 292 (Hipparion).

Gidley, J. W. 1907 A, 872, 877 (Hippodon); 879 (Hipparion).

Hay, O. P. 1914 A, 148, pl. viii, fig. 3 (Neohipparion).

Marsh, O. C. 1874 E, 291 (Hipparion).

Matthew, W. D. 1909 C, 117 (Neohipparion).

1913 E, 791.

1924 C, 71.

Merriam, J. C. 1914 D, 13 (Hipparion).

Merrill, G. P. 1907 A, 38 (Hipparion); 41 (Hippotherium).

Osborn, H. F. 1918 A, 128, 129, text-fig. 101 ("nomen nudum").

Pavlov, M. 1925 A, 323, 324 (Hippotherium).

Turner, H. W. 1895 A, 373 (Hippotherium).

Miocene? (Arikaree?); South Dakota.

### **PROTOHIPPIUS** Leidy. Type *P. perditus* Leidy.

Hay, O. P. 1902 A, 616 (Syn. of Merychippus).

Abel, O. 1909 E, (247).

1912 F, 629.

1914 A, 247.

1914 B, 596, fig. 43.

1926 B, 382, 456.

1926 H, (160).

1928 B, 28, 44, 72, fig. 10.

Ameghino, F. 1904 A, 536.

Antonius, O. 1913 A, 245.

1919 A, 287.

Arlt, T. 1907 D, 257.

Arlt, T. 1909 C, 458.

Beasley, W. D. 1903 A, 451.

Berry, E. W. 1922 A, 111.

Berthoud, E. L. 1879 A, 154.

Boas, J. E. V. 1914 B, 497.

Boule and Thevenin 1920 A, 117.

Case, E. C. 1899 B, 165.

Condon, T. 1902 A, 136.

1910 A, 113.

Cope, E. D. 1880 U, 157.

Cummins, W. F. 1893 A, 203.

Depéret, C. 1912 A, 710.



- Douglass, E. 1909 A, 477.  
 Farchild, H. L. 1894 A, 209.  
 Fejérváry, G. J. de 1921 B, 183.  
 Floderus, M. 1910 A, 99, fig. 1.  
 Freudenberg, W. 1922 A, 10.  
 Gaudry, A. 1896 A, 187.  
 Gidley, J. W. 1904 B, 192, 194.  
     1906 C, 137.  
     1907 A, 868.  
 Giebel, C. G. 1883 A, 145.  
 Haug, E. 1911 A, 1705, 1706.  
 Hescheler, K. 1906 A, 31.  
 Huxley, T. H. 1876 F, 185.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1910 C, 293.  
     1926 A, 121, fig. 24.  
 Lull, R. S. 1907 A, 178.  
     1913 A, 12.  
 Lydekker, R. S. 1904 A, 18.  
     1907 A, 5, fig. 2c.  
     1912 A, 247.  
 Major, C. J. F. 1877 A, 12.  
 Marsh, O. C. 1874 E, 290.  
 Matthew, W. D. 1903 A, 20.  
     1909 C, 119.  
     1910 G, 155.  
     1913 F, 20, 25, fig. 16.  
     1915 A, 236, 314.  
     1915 K, 456.  
     1916 J, 9, 11.  
     1924 E, 748.  
     1926 C, 160, 167.  
 Matthew and Cook 1909 A, 389.  
 Merriam, J. C. 1911 B, 217.  
     1915 F, 255.  
     1916 D, 132.  
     1917 A, 437, 443.  
     1919 A, 455, 472.  
 O'Harra, C. C. 1910 A, 96, 133.  
 Osborn, H. F. 1901 F, 499.  
     1902 H, 715.  
     1904 O, 157.  
     1905 H, 206.  
     1905 I, 92.  
     1905 K, 608.  
     1905 L, 564.  
     1909 D, 65, 134.  
     1910 B, 629.  
     1912 G, 248.  
     1918 A, 4, 20, 22, 27, 28, 29, 127, 146.  
 Palacký, J. 1903 B, 310.  
 Palmer, T. S. 1904 A, 582, 938.  
 Pavlow, M. 1903 A, 173.  
     1907 A, 143.  
     1915 A, 35.  
     1925 A, 314, seq.  
 Sauvage, H. E. 1882 A, 107 ("protohippe").  
 Schmidt, O. 1886 A, 213, fig. 38.  
 Scott, W. B. 1913 A, 305, 306, figs. 154, 156.  
     1917 A, 102, 105.  
 Schuchert, C. 1910 A, 599.  
 Shufeldt, R. W. 1889 D, 11.  
 Thorpe, M. R. 1927 A, 168.  
 Trouessart, E. L. 1892 A, 188.  
     1905 A, 637 (Merychippus, in part); 639  
     (Pseudhipparion; type *Hippotherium*  
     *retrosum* Cope).  
 Troxell, E. L. 1916 A, 338.  
 Underhill, B. M. 1907 A, 117, 120, fig. 1.  
 Veith, A. 1912 A, 6.  
 Wallace, A. R. 1876 A, 1, 135.  
 Weber, M. 1904 A, 600, 621.  
 Winge, H. 1906 A, 150 (Prothippus).  
 Woodward, A. S. 1898 B, 337.  
 Wright, R. R. 1883 A, 251.  
 Zittel and Schlosser 1911 A, 461.  
     1923 A, 547, 550, 673, 679, 680, fig. 684.
- Protohippus castilli** Cope.  
 Hay, O. P. 1902 A, 616 (Merychippus).  
 Felix and Lenk 1891 A, 126 (P. castilloi).  
 Freudenberg, W. 1921 A, 131 (P. castilloi).  
     1922 A, 4 (P. castelli).  
 Gidley, J. W. 1907 A, 874 (Prothippus); 901  
 (Merychippus).  
 Matthew, W. D. 1909 C, 117.  
 Osborn, H. F. 1905 E, 931 (P. castillei).  
     1918 A, 127, 128, 141, text-fig. 113.  
     Lower Pliocene?; Mexico.
- Protohippus niobrarensis** (Gidley).  
 Gidley, J. W. 1906 C, 181, figs. 18-20 (Neohipparion?).  
     1907 A, 876, 927 (Neohipparion).  
     1918 C, 180 (This species?).  
 Gregory, W. K. 1920 B, 269, pl. xviii.  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 Osborn, H. F. 1918 A, 25, 26, 128, 136, pl.  
     xxi, fig. 2; text-fig. 108.  
 Pavlow, M. 1925 A, 324 (Neohipparion).  
     Upper Miocene or Lower Pliocene (Niobrara  
     River); Nebraska, Montana?.
- Protohippus pachyops** Cope.  
 Hay, O. P. 1902 A, 617 (Merychippus).  
 Ameghino, F. 1904 A, 264, fig. 359 (Anchippus);  
     264 (Protohippus).  
 Dumble, E. T. 1894 A, 558.  
 Gidley, J. W. 1907 A, 875, 912 (= ? Hypohippus).  
 Matthew, W. D. 1909 C, 117.  
 Montgomery, T. H. 1904 A, 57.  
 Osborn, H. F. 1918 A, 26, 127, 128, 138, pl.  
     xxiii, figs. 1, 2; pl. xxiv, fig. 2; text-fig. 110.  
 Trouessart, E. L. 1905 A, 618, 638 (Anchippus).  
     Upper Miocene or Lower Pliocene (Clarendon); Texas.
- Protohippus parvulus** (Marsh).  
 Hay, O. P. 1902 A, 617 (Merychippus).  
 Abel, O. 1926 B, 403.  
 Gidley, J. W. 1903 C, 634.  
     1907 A, 872, 885 (Parahippus).  
 Lull, R. S. 1913 A, 1, 2.  
     1926 A, 455.  
 Marsh, O. C. 1874 E, 291.  
 Matthew, W. D. 1909 C, 117 (This genus?).  
 Osborn, H. F. 1918 A, 127, 128, 130, text-figs.  
     104, 105.  
 Trouessart, E. L. 1905 A, 638 (Merychippus).  
     Upper Miocene or Lower Pliocene; Nebraska.
- Protohippus perditus** Leidy.  
 Hay, O. P. 1902 A, 617 (Merychippus).  
 Abel, O. 1926 B, 423, fig. 269.  
 Barbour and Cook 1917 B, 180.

- Cope and Matthew 1915 A, pl. cxlviii a, fig. 4; pl. cxlix, figs. 5, 6 (This species?).
- Cummins, W. T. 1893 A, 203 (This species?).
- Dall and Harris 1892 A, 316.
- Deussen, A. 1924 A, 21, 97, 99.
- Deussen and Dole 1916 A, 149.
- Dumble, E. T. 1894 A, 558.
- 1903 A, 957.
- 1915 A, 473.
- 1920 A, 238.
- Gidley, J. W. 1903 C, 634.
- 1904 A, 245 (This species?).
- 1906 C, 136, figs. 3-5.
- 1907 A, 872, 882.
- Loomis, F. B. 1926 A, 129, fig. 26.
- Major, C. J. F. 1877 A, 10.
- Marsh, O. C. 1874 E, 291.
- Matthew, W. D. 1901 B, 358.
- 1909 C, 117.
- 1918 A, 186, 213.
- 1920 E, 238.
- 1923 A, 12 (This species?).
- 1924 C, 67, 153, 175.
- Merriam, J. C. 1917 A, 436 (This species?).
- Merrill, G. P. 1907 A, 36 (Equus); 57 (Protohippus).
- O'Harra, C. C. 1920 A, 158.
- Osborn, H. F. 1918 A, 25, 28, 127, 129, pl. xxi, fig. 3; pl. xxv, fig. 8; text-figs. 102, 103; 116 a.
- Sinclair, W. J. 1915 A, 77 (This species?).
- Trouessart, E. L. 1905 A, 638 (Merychippus).
- Lower Pliocene (Upper Snake Creek, Valentine); Nebraska, South Dakota: Miocene (Oakville); Texas.
- Protohippus perditus secundus** Osborn.
- Osborn, H. F. 1918 A, 128, 144, pl. xxii, fig. 1; text-figs. 116, 116a.
- Abel, O. 1928 B, 47, fig. 24 (P. secundus).
- Loomis, F. B. 1926 A, 129, fig. 25 (P. secundus).
- Upper Miocene or Lower Pliocene (Republican River); Nebraska.
- Protohippus placidus** Leidy.
- Hay, O. P. 1902 A, 617 (Merychippus).
- Barbour and Cook 1917 B, 180 (This species?).
- Deussen, A. 1924 A, 21, 97, 99.
- Deussen and Dole 1916 A, 149.
- Dumble, E. T. 1894 A, 558.
- 1903 A, 957.
- 1915 A, 473.
- 1920 A, 238.
- Gidley, J. W. 1903 C, 634.
- 1906 C, 140, figs. 6, 7.
- 1907 A, 869, 873, 887 (Merychippus).
- Heilmann, G. 1916 A, 121, fig. 209.
- Matthew, W. D. 1909 C, 117.
- 1918 A, 118, 213.
- 1920 E, 238.
- 1923 A, 12.
- 1924 C, 67, 153, 175.
- Merriam, J. C. 1917 A, 436 (This species?).
- Merrill, G. P. 1907 A, 57.
- O'Harra, C. C. 1920 A, 158.
- Osborn, H. F. 1918 A, 25, 127, 128, 133, pl. xxxiv, fig. 4; text-figs. 106, 107, 116a.
- Sinclair, W. J. 1915 A, 77 (This species?).
- Trouessart, E. L. 1905 A, 638 (Merychippus).
- Troxell, E. L. 1916 A, 347.
- Veith, A. 1912 A, 13.
- Miocene (Oakville beds); Texas: Lower Pliocene (Upper Snake Creek and Valentine?); Nebraska.
- Protohippus profectus** Cope.
- Hay, O. P. 1902 A, 617 (Syn. of Merychippus perditus).
- Gidley, J. W. 1907 A, 874, 907.
- Loomis, F. B. 1926 A, 129.
- Matthew, W. D. 1909 C, 117.
- Merriam, J. C. 1917 A, 438.
- Osborn, H. F. 1918 A, 28, 127, 128, 143, pl. xxii, fig. 3; text-fig. 115.
- Lower Pliocene (Republican River); Nebraska.
- Protohippus proplacidus** Osborn.
- Osborn, H. F. 1918 A, 19, 27, 127, 128, 139, pl. xxv, fig. 7; pl. xxxiv, fig. 3; text-fig. 112.
- Upper Miocene or Lower Pliocene (Pawnee Creek); Colorado.
- Protohippus retrusus** (Cope).
- Hay, O. P. 1902 A, 620 (Hipparion).
- Ameghino, F. 1904 A, 262 (Hipparion).
- Gidley, J. W. 1907 A, 874, 906 (Hippotherium).
- Matthew, W. D. 1909 C, 117 (Neohipparion).
- Merriam, J. C. 1917 A, 438 (Neohipparion).
- Osborn, H. F. 1918 A, 127, 128, 142, text-fig. 114.
- Trouessart, E. L. 1905 A, 639 (Pseudohipparion).
- Lower Pliocene (Republican River); Nebraska.
- Protohippus sinus** Gidley.
- Gidley, J. W. 1906 C, 139.
- Frick, C. 1921 A, 333 (P. sinus).
- Gidley, J. W. 1907 A, 876, 925.
- Loomis, F. B. 1926 A, 129.
- Matthew, W. D. 1909 C, 117.
- O'Harra, C. C. 1920 A, 159.
- Osborn, H. F. 1918 A, 25, 26, 127, 128, 136, pl. xxi, fig. 1; pl. xxii, fig. 2; text-fig. 109.
- Upper Miocene or Lower Pliocene (Little White River); South Dakota.
- Protohippus tehonensis** Merriam.
- Merriam, J. C. 1915 D, 52, fig. 4.
- 1916 C, 125, fig. 14.
- 1917 A, 426.
- Nomland, J. O. 1917 B, 302.
- Osborn, H. F. 1918 A, 25, 128, 133, text-fig. 111.
- Upper Miocene or Lower Pliocene (Chanac); California.
- Protohippus** sp. indet.
- Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.
- Cook, H. J. 1912 D, 44. Pliocene (Snake Creek); Nebraska.
- 1922 B, 10, 17, 6 figs. Pliocene (Snake Creek); Colorado.
- Cope, E. D. 1885 M, 494. Miocene; Mexico.
- Dumble, E. T. 1920 A, 225 (May be Merychippus). Miocene (Fleming); Texas.

- Gidley, J. W. 1903 C, 634. Miocene (Clarendon); Texas.  
 1904 C, 72. Pliocene; California.  
 1918 C, 180. Late Tertiary (Flaxville); Montana.  
 1926 A, 83. Upper Pliocene or Lower Pleistocene; Arizona.  
 Hay, O. P. 1923 A, 8. Lower Pleistocene? (Idaho); Idaho.  
 1924 D, 169, 312. Pliocene?; Montana.  
 1927 D, 311 (This genus?). Pleistocene?; California, Idaho.  
 Lindgren, W. 1900 A, 99. Pleistocene? (Idaho); Idaho.  
 Lucas, F. A. 1900 H, 99. Pliocene?; Idaho.  
 Matthew, W. D. 1901 B, 358, 359.  
 1920 E, 225 (May be Merychippus). Miocene (Fleming); Texas.  
 Merriam, J. C. 1916 C, 125, fig. 15 (This genus?).  
 1917 A, 425 (This genus?). Pliocene (Ettehogon); California; 432 (This genus?). Pliocene (Idaho); Idaho.  
 Merrill, G. P. 1907 A, 57, 58. Miocene; Nebraska, New Mexico.  
 Osmond, V. C. 1904 A, 74. Pliocene; California.

## HIPPARION Christol. Type not fixed.

- Hay, O. P. 1902 A, 619.  
 Abel, O. 1902 A, 170.  
 1909 E, (246) (Hipparion); (247) (Neohipparion).  
 1911 A, 178.  
 1912 C, (62), fig. 1.  
 1912 F, 235, 677, fig. 164.  
 1914 A, 247, fig. 223 (Hipparion); 247 (Neohipparion).  
 1919 A, 796, fig. 600.  
 1920 A, 452, fig. 690.  
 1921 A, 184.  
 1922 C, 115, fig. 105.  
 \* 1926 B, 362, 419, 428, 447 (Hipparion); 362, 396, 428, 433, 452 (Neohipparion).  
 1926 H, (160) (Neohipparion, Hipparion).  
 1928 B, 48, 63, 72, 93 (Hipparion, Neohipparion).  
 Ameghino, F. 1885 A, 204.  
 1889 A, 521, 969, 974, 979.  
 1904 A, 531 (Hipparion); 533 (Neohipparion).  
 Anonymous 1908 B, 122 (Neohipparion).  
 Antonius, O. 1913 A, 244.  
 1919 A, 274, 281, 288, 292.  
 1923 A, (32).  
 Arldt, T. 1907 D, 658.  
 1909 C, 458.  
 Barbour, E. H. 1914 C, 222 (Hipparion, Neohipparion).  
 Beasley, W. L. 1903 A, 451.  
 Beddard, F. E. 1902 A, 246.  
 Boas, J. E. V. 1914 B, 597, fig. 44.  
 Boule, M. 1902 B, 912.  
 1905 A, 1664.  
 Branca, W. 1915 A, 52.  
 Bronn, H. G. 1843 A, 583.  
 1849 A, 707 (Hippotherium).  
 Cardoso, A. 1912 A, 400.  
 Case, E. C. 1899 B, 165.  
 Condon, T. 1902 A, 133, pls. xxiv, xxv.  
 1910 A, 111, pl. xxiv.  
 Dall and Harris 1892 A, 296 (Hippotherium).  
 Dean, B. 1906 A, 377.  
 Delafontaine, M. 1875 A, 175.  
 Depéret, C. 1905 A, 1518.  
 1905 B, 23.  
 1907 B.  
 1912 A, 708.  
 Dollo, L. 1896 A, 88.  
 Fairchild, H. L. 1894 A, 209.  
 Fejérváry, G. J. de 1921 B, 183 (Hipparion, Neohipparion).  
 Floderus, M. 1910 A, 99, fig. 1.  
 Flower, W. H. 1873 B, 101.  
 1892 A, 38, fig. 5.  
 Freudenberg, W. 1922 A, 10 (Neohipparion).  
 Gaudry, A. 1887 A, 218, pls. xxxiv-xxxvi.  
 1891 C, 43, figs. 5, 6, 14, 15, 29, 40.  
 1896 A, 87.  
 1906 A, 11.  
 Gervais, P. 1852 A, 65, explan. pl. xix.  
 1853 B, 36.  
 1859 A, 80.  
 Gidley, J. W. 1903 B, 465 (Hipparion); 466 (Neohipparion; type *N. whitneyi* Gidley).  
 1904 B, 191 (Hipparion); 194 (Neohipparion).  
 1907 A, 869 (Hipparion); 869, 924 (Neohipparion).  
 Giebel, C. G. 1855 A, 64, pl. xxvi, fig. 7.  
 1883 A, 145.  
 Gregory, W. K. 1912 F, 280, figs. 3, 5 (Neohipparion).  
 1917 D, 623.  
 Haug, E. 1911 A, 1705, 1706, 1886 (Neohipparion).  
 Hay, O. P. 1914 A, 147 (Neohipparion).  
 1918 B, 9, 10.  
 1919 A, 311.  
 1919 D, 373.  
 1923 A, 486.  
 1925 D, 240, 242.  
 1925 E, 381.  
 Heilprin, A. 1887 A, 371, 372.  
 Hescheler, K. 1906 A, 31.  
 Hoernes, R. 1886 A, 671.  
 Huxley, T. H. 1870 F, 533, 542.  
 1876 D, 200.  
 1876 F, 185.  
 Jacobi, A. 1921 A, 211.  
 Jaekel, O. 1902 E, 1114.  
 Joleaud, L. 1919 A, 708, fig. 4.  
 1919 B, 177.  
 1919 C, 310.  
 1919 D, 413.  
 Knipe, H. R. 1912 A, 169, fig.  
 Koken, E. 1893 B, 484.  
 Lankester, E. R. 1905 A, 136, fig. 93.  
 Leche, W. 1887 A.  
 1900 A, 1035.  
 1921 A, 69.  
 Loomis, F. B. 1926 A, 126, 131-133, 138-142.

- Lull, R. S. 1907 A, 179 (Neohipparion); 180, fig. 4 (Hipparion).  
 1913 A, 12 (Neohipparion).  
 1917 B, 300, 611, 617, figs. 54, 223-225.
- Lydekker, R. 1903 B, 202.  
 1904 A, 18.  
 1907 A, 5, fig. 2 D.  
 1912 A, 256, fig. (Hipparion); 258 (Neohipparion).
- Major, C. J. F. 1880 A.  
 Marsh, O. C. 1874 E, 290, fig. 75.
- Matthew, W. D. 1903 A, 23, pl. v.  
 1907 A, 176 (Neohipparion).  
 1908 I, 122 (Neohipparion).  
 1909 A, 119 (Neohipparion).  
 1910 G, 155 (Neohipparion).  
 1913 F, 20, 25, figs. 12, 16, 21.  
 1914 G, 234.  
 1915 A, 236, 314.  
 1915 K, 413, 456.  
 1916 J, 9, 11, 12.  
 1924 B, 630.  
 1924 C, 69, 153, 162, 172 (Hipparion); 166 (Neohipparion).  
 1924 E, 748, 752.  
 1924 G, 630.  
 1926 B, 5, 6.  
 1926 C, 160, 164, 167 (Hipparion, Neohipparion); 165, 167 (Nannitheippus as subgenus; type *Merychippus phlegon*).  
 1928 B, 979, fig. 15.
- Matthew and Cook 1909 A, 367, 369 (Hipparion); 366, 388 (Neohipparion).
- Merriam, J. C. 1911 B, 217 (Neohipparion).  
 1914 C, 644 (Neohipparion).  
 1915 A, 1, 7, 8.  
 1915 E, 194, 218 (Neohipparion); 233 (Hipparion).  
 1915 F, 255, 258.  
 1915 G, 99 (Neohipparion).  
 1916 C, 122 (Neohipparion).  
 1916 F, 171.  
 1917 A.  
 1919 A, 451, 528, 530, 556 (Hipparion); 452, 455, 531, 556 (Neohipparion).
- Merriam, Stock, Moody 1925 A, 56, 59.
- Meunier, S. 1903 A, 776 ("hipparions").
- Miller, G. S. 1920 B, 190.
- Moreau, L. 1914 A, 87.
- O'Harra, C. C. 1910 A, 96, 133.
- Osborn, H. F. 1902 H, 715.  
 1905 K, 808 (Neohipparion).  
 1905 L, 564 (Neohipparion).  
 1907 G, 177, fig. 164.  
 1909 D, 79, 80, 83 (Hipparion, Neohipparion).  
 1910 B, 617 (Hipparion); 625 (Neohipparion).  
 1912 G, 248.  
 1915 B, 222.  
 1917 B, 266, 267, fig.  
 1918 A, 4, 22, 24, 27-30, 33, 146, 173.  
 1922 E, 282.
- Owen, R. 1845 B, 578, pl. cxxxvi, fig. 3 (Hippotherium).  
 1868 A, 884.  
 1869 E, 536, fig. 3.  
 1879 C, 581.
- Palacký, J. 1903 B, 312.
- Palmer, T. S. 1904 A, 325, 937.
- Pavlov, M. 1903 A, 181.  
 1907 A, 143.  
 1915 A, 18.  
 1925 A, 313-328, fig. 5 (Hipparion, Hippotherium, Neohipparion).
- Pilgrim, G. E. 1913 A, 267, 295.
- Pocock, R. I. 1905 A, 517.
- Preiswerk, G. 1895 A, 435, fig. 4.
- Regnault, F. 1903 A, 110.
- Reynolds, S. H. 1897 A, 508, 524, fig. 110.
- Rosenberg, A. 1873 A, 135.
- Sauvage, H. E. 1882 A, 105, fig.
- Scharff, R. F. 1911 A, 143.
- Schlesinger, G. 1914 A, 212, figs. 1, 5-7.
- Schlosser, M. 1902 J, 208.  
 1903 I, 78, 84, 181, 211.  
 1924 A, 67.
- Schmidt, O. 1886 A, 202, fig. 35
- Scott, W. B. 1896 D, 53.  
 1913 A, 291.
- Seeley, H. G. 1878 A, 224.
- Sefve, I. 1914 A, 248.  
 1927 A, 1-91, pls. i-vii.
- Sellards, E. H. 1914 A, 162 (Neohipparion).  
 1915 C, 8.
- Shufeldt, R. W. 1889 D, 11.
- Steinmann, G. 1907 A, 492.
- Sternberg, C. 1881 A, 541.
- Stromer, E. 1906 A, 210.
- Thorpe, M. R. 1927 A, 168.
- Tornier, G. 1888 A, 303.
- Trouessart, E. L. 1892 A, 188.  
 1905 A, 639 (Neohipparion); 641 (Hipparion).
- Underhill, B. M. 1907 A, 117.
- Veith, A. 1912 A, 1.
- Villada, M. M. 1903 A, 444.
- Wallace, A. R. 1876 A, i, 495; ii, 211.
- Weber, M. 1904 A, 600, 621.
- Weber and Abel 1928 A, xviii, 636, 677, 679, 682, fig. 466 (Hipparion, Neohipparion).
- Weber and Burlet 1927 A, 250, fig. 187.
- Winge, H. 1906 A, 150.
- Woodward, A. S. 1898 D, 333.
- Wright, R. R. 1883 A, 251.
- Zittel, K. A. 1895 A, 305.  
 1897 A, 126.
- Zittel and Schlosser 1911 A, 461 (Hipparion); 462 (Neohipparion).  
 1923 A, 417, 541, 543, figs. 519, 670, 671, 673, 679, 680, 684 (Hipparion); 548 (Neohipparion).

### Hipparion affine Leidy.

- Hay, O. P. 1902 A, 619.
- Abel, O. 1926 B, 423, 428, 430, fig. 269 (Neohipparion).
- Gidley, J. W. 1903 C, 634 (Hippotherium).  
 1907 A, 873, 887 (Neohipparion).
- Joleaud, L. 1919 C, 310.
- Matthew, W. D. 1909 C, 117 (Neohipparion).  
 1923 A, 12.  
 1923 E, 131.  
 1924 C, 67, 172, 174.
- Matthew and Cook 1909 A, 333 (Neohipparion affine?).

Merriam, J. C. 1915 A, 2 (Neohipparion)  
1917 A, 436 (This species?).

Merriam, Stock, Moody 1925 A, 76.

Merrill, G. P. 1907 A, 37.

Osborn, H. F. 1918 A, 174, 178, text-fig. 141.

Sinclair, W. J. 1915 A, 77 (This species?).

Lower Pliocene (Upper Snake Creek); Nebraska.

### **Hipparion anthonyi Merriam.**

Merriam, J. C. 1916 D, 131, figs. 1, 2.

Buwalda, J. P. 1924 A, 572.

Merriam, J. C. 1917 A, 428 (This species?).

Merriam, Stock, Moody 1925 A, 59.

Osborn, H. F. 1918 A, 179, 190, text-fig. 153.

Stock, C. 1925 A, 18 (This species?).

Pliocene (Rattlesnake?); Oregon.

### **Hipparion coloradense Osborn.**

Osborn, H. F. 1918 A, 6, 174, 175, 183, text-fig. 146.

Abel, O. 1928 B, 43, 77, 80, figs. 20, 45.

Upper Miocene or Lower Pliocene (Pawnee Creek); Colorado.

### **Hipparion condoni Merriam.**

Merriam, J. C. 1915 A, 6, figs. 4, 5.

1916 D, 133.

Osborn, H. F. 1918 A, 22, 27, 174, 175, text-fig. 139.

Miocene (Ellensburg); Washington: (Mas-call); Oregon.

### **Hipparion cragini Hay.**

Hay, O. P. 1917 D, 42, pl. i, figs. 6, 7.

Calvin, S. 1909 A, 138 ("Equus").

1911 A, 211, pl. xix, figs. 5, 7 (H. gratum).

Hay, O. P. 1914 A, 26, 149, 150, pl. ix, figs. 1-4, 7; text-fig. 44 (Neohipparion gratum?).

1924 D, 140, 146, 270 (Hipparion, Neohipparion).

Pleistocene (Aftonian); Kansas, Missouri, Iowa.

The specimens from Missouri and Iowa may belong to undescribed species.

### **Hipparion dolichops Gidley.**

Gidley, J. W. 1906 C, 148, figs. 14-17 (Neohipparion).

Cook, H. J. 1922 B, 10, 16, 6 figs. (This species?).

Gidley, J. W. 1907 A, 876, 926 (Neohipparion).

Matthew, W. D. 1909 C, 117 (Neohipparion).

Osborn, H. F. 1918 A, 25, 26, 174, text-fig. 145.

Pavlov, M. W. 1925 A, 316, 324, fig. 2 (Neohipparion).

Zittel and Schlosser 1911 A, 462, fig. 645 (Neohipparion).

1923 A, 548, fig. 684 (Neohipparion).

Upper Miocene (Arikaree); South Dakota.

### **Hipparion eurystylus (Cope).**

Hay, O. P. 1902 A, 620.

Cummins, W. F. 1893 A, 203 (Equus eurystylus).

Dumble, E. T. 1894 A, 559 (Equus).

Gidley, J. W. 1901 A, 107, 125, 140, figs. 14-16.

1903 C, 630 (Equus).

1907 A, 875, 918.

Matthew, W. D. 1909 C, 117 (Neohipparion).

Merriam, J. C. 1915 A, 3 (Equus).

Montgomery, T. H. 1904 A, 58 (Equus).

Osborn, H. F. 1918 A, 26, 174, 186, pl. xxxiii, figs. 1-4; text-fig. 149 (H. eurystylus).

Trouessart, E. L. 1905 A, 640.

Miocene (Clarendon); Texas, or Pliocene; Nevada?

### **Hipparion gidleyi (Merriam).**

Merriam, J. C. 1915 A, 1, fig. 1 (Neohipparion).

Joleaud, L. 1919 C, 310.

Osborn, H. F. 1918 A, 22, 29, 174, 187, text-fig. 150.

Upper Miocene or Lower Pliocene (San Pablo?); California.

### **Hipparion gratum Leidy.**

Hay, O. P. 1902 A, 620.

Abel, O. 1928 B, 423, fig. 269.

Baker, F. C. 1920 A, 464 (Neohipparion).

Barbour and Cook 1917 B, 180.

Freudenberg, W. 1922 A, 10 (Hippotherium).

Gidley, J. W. 1906 C, 145, figs. 10-13 (Neohipparion).

1907 A, 869, 873, 888 (Neohipparion).

Hay, O. P. 1917 D, 42 (Neohipparion).

1924 D, 140, 146.

Joleaud, L. 1919 A, 708.

1919 B, 177.

1919 C, 311.

Loomis, F. B. 1926 A, 133.

Matthew, W. D. 1909 C, 117 (Neohipparion).

1918 A, 186, 213.

1924 C, 67, 172, 174.

Merriam, J. C. 1916 C, 118 (Neohipparion).

1917 A, 436.

Merriam, Stock, Moody 1925 A, 76.

Merrill, G. P. 1907 A, 38 (Hipparion); 39, 40 (Hippotherium).

Osborn, H. F. 1918 A, 25, 28, 174, 179, pl. xxxii, fig. 3; text-figs. 142, 143.

Pavlov, M. W. 1925 A, 315, 324, fig. 1 (Neohipparion).

Sinclair, W. J. 1915 A, 77.

Trouessart, E. L. 1905 A, 640.

Miocene or Pliocene (Little White River); South Dakota; Lower Pliocene (Upper Snake Creek); Nebraska: Miocene (Valentine); Nebraska.

### **Hipparion gratum tehonense Merriam.**

Merriam, J. C. 1916 C, 118, figs. 1, 2, 4-8 (Neohipparion).

1917 A, 426.

Osborn, H. F. 1918 A, 25, 174, 189, text-fig. 152.

Pliocene (Chanac); California.

### **Hipparion ingenuum (Leidy).**

Leidy, J. 1885 A, 33 (Hippotherium).

Hay, O. P. 1902 A, 620 (H. gratum, in part).

Gidley, J. W. 1907 A, 874, 902, 905.

Hay, O. P. 1923 A, 486.

Matson and Clapp 1909 A, 136 (Hippotherium).

Matthew, W. D. 1909 C, 117 (Neohipparion).

Merriam, J. C. 1917 A, 439.

1919 A, 532, 559.

Merrill, G. P. 1907 A, 40 (Hippotherium).

Osborn, H. F. 1918 A, 28, 174, 191, text-fig. 154.  
 Sellards, E. H. 1916 B, 94, 97.  
 Spencer, J. W. 1895 A, 136, 137.  
 Trouessart, E. L. 1905 A, 640 (Syn. of *H. gratum*).

Pliocene (Alachua and Bone Valley); Florida.

### **Hipparion lenticulare (Cope).**

Hay, O. P. 1902 A, 617 (Merychippus).  
 Abel, O. 1926 B, 428.  
 Cummins, W. F. 1893 A, 203 (Merychippus).  
 Dumble, E. T. 1894 A, 559 (Protohippus).  
 Gidley, J. W. 1903 A, 630 (Protohippus); 634 (Hipparion).

1907 A, 915 (Hipparion); 875 (Protohippus).  
 Loomis, F. B. 1926 A, 133.  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 1918 A, 136, 213.  
 1924 C, 175.

Montgomery, T. H. 1904 A, 57 (Protohippus).  
 Osborn, H. F. 1918 A, 26, 174, 184, pl. xxxii, fig. 2; pl. xxxiii, figs. 6, 7; text-figs. 147-148a.  
 Trouessart, E. L. 1905 A, 638 (Merychippus).  
 Lower Pliocene (Clarendon); Texas.

### **Hipparion leptode (Merriam).**

Merriam, J. C. 1915 A, 3, fig. 3 (Neohipparion).  
 1916 D, 133 (Neohipparion).  
 1917 A, 429 (Neohipparion).

Merriam and Stock 1923 A, 9, pl. i; text-figs. 4-10.

Merriam, Stock, Moody 1925 A, 59 (*H. leptode* or *H. occidentale*).

Osborn, H. F. 1918 A, 22, 30, 174, 197, text-fig. 161.

Pliocene (Thousand Creek); California.

### **Hipparion minus Sellards.**

Sellards, E. H. 1916 B, 96, pl. ii, fig. 10; pl. xii, fig. 8 (*H. minor*).

Abel, O. 1926 B, 428 (*H. minor*).  
 1926 H, (163).

Hay, O. P. 1923 A, 197, 380.

Joleaud, L. 1919 A, 708 (*H. minor*).  
 1919 C, 311 (*H. minor*).

Merriam, J. C. 1917 A, 439 (*H. minor*).

Osborn, H. F. 1918 A, 28, 29, 174, 192, text-fig. 156.

Pliocene (Bone Valley); Florida.

### **Hipparion mohavense Merriam.**

Merriam, J. C. 1913 H, 436, figs. 1-3 (This genus?).

Abel, O. 1926 B, 428.

1928 B, 81, fig. 48.

Clark, B. L. 1921 A, table.

Joleaud, L. 1919 C, 310.

Loomis, F. B. 1926 A, 139, fig. 28.

Matthew, W. D. 1924 C, 173, 175.

Merriam, J. C. 1915 A, 3, 5, 8.

1916 C, 118.

1917 A, 426 (This species?); 430.

1919 A, 525, 527, 530, 549, 559, 560, figs. 163-170b.

Merriam, Stock, Moody 1925 A, 59.

Osborn, H. F. 1918 A, 22, 29, 30, 174, 193, text-fig. 156.

Stock, C. 1921 B, 20, fig. 1 (*H. near mohavense*).  
 Lower Pliocene (Ricardo, Siestan?, Orinda); California.

### **Hipparion mohavense callodonte Merriam.**

Merriam, J. C. 1915 D, 15, figs. 5-7.

1916 D, 132.

1917 A, 430.

1919 A, 525, 527, 560, figs. 171-175.

Osborn, H. F. 1918 A, 29, 174, 194, text-fig. 158.

Stock, C. 1921 B, 20.

Lower Pliocene (Ricardo); California.

### **Hipparion molle Merriam.**

Merriam, J. C. 1915 A, 3, fig. 2 (Neohipparion).

Joleaud, L. 1919 C, 311.

Merriam, J. C. 1915 E, 218, fig. 26 (Neohipparion).

1916 C, 120, figs. 3, 9 (Neohipparion. This species?).

1917 A, 425 (Neohipparion); 426 (Hipparion. This species?).

Merriam, Stock, Moody 1925 A, 76.

Nomland, J. O. 1916 A, 33 (Neohipparion).

1917 B, 297, 298 (Neohipparion).

Osborn, H. F. 1918 A, 22, 29, 174, 196, text-fig. 160.

Pliocene (Etchegoin, Chanac); California.

### **Hipparion montezumae (Leidy).**

Hay, O. P. 1902 A, 620.

Freudenberg, W. 1922 A, 4 (Hippotherium montezumae).

Gidley, J. W. 1907 A, 874, 899, 900 (Neohipparion).

Joleaud, L. 1919 C, 311 (*H. montezumae*).

Matthew, W. D. 1909 C, 117 (Neohipparion).

Merriam, J. C. 1915 A, 3 (Neohipparion).

Merriam, Stock, Moody 1925 A, 76.

Merrill, G. P. 1907 A, 40 (Hippotherium).

Osborn, H. F. 1904 R, 12 (Equus).

1905 I, 110 (Equus).

1918 A, 31, 174, 197, text-fig. 161.

Trouessart, E. L. 1905 A, 640 (Neohipparion montezumae).

Miocene?; Mexico.

### **Hipparion occidentale Leidy.**

Hay, O. P. 1902 A, 620.

Abel, O. 1926 B, 77, fig. 45.

Cook, H. J. 1922 B, 10.

Dall and Harris 1892 A, 282, 292 (Hippotherium).

Gidley, J. W. 1903 C, 634 (Hippotherium).

1904 A, 245 (Neohipparion).

1906 C, 145 (Neohipparion).

1907 A, 872, 877 (Neohipparion).

Joleaud, L. 1919 A, 708.

1919 B, 177.

1919 C, 310.

Loomis, F. B. 1926 A, 132.

Marsh, O. C. 1874 E, 291.

Matson and Clapp 1909 A, 137 (Hippotherium).

Matthew, W. D. 1909 C, 117 (Neohipparion).

1924 C, 67, 172.

Merriam, J. C. 1911 B, 230 (Neohipparion).

1917 A, 428, 429, 436 (This species?).

- Merriam, J. C. 1918 A, 186, 213.  
 Merriam and Sinclair 1907 A, 195, 198 (Neohipparion).  
 Merriam and Stock 1927 A, 41 (This species?).  
 1928 A, 17, text-fig. 10 (This species?) [H. (Neohipparion)].  
 Merriam, Stock, Moody 1925 A, 59, 78, fig. 33; fig. 34?.  
 O'Harra, C. C. 1920 A, 159.  
 Osborn, H. F. 1918 A, 25, 28, 174, 176, pl. xxv, fig. 9; pl. xxxiv, fig. 5; text-fig. 140.  
 Sinclair, W. J. 1915 A, 76 (This species?).  
 Stock, C. 1925 A, 18 (This species?).  
 Trouessart, E. L. 1905 A, 639 (Neohipparion).  
 Miocene? (Little White River); South Dakota: Lower Pliocene (Snake Creek); Nebraska: (Rattlesnake); Oregon: (Thousand Creek); Nevada.
- Hipparion peninsulatum** (Cope).  
 Hay, O. P. 1902 A, 620.  
 Felix and Lenk 1891 A, 126.  
 Freudenberg, W. 1921 A, 131 (Hippotherium).  
 1922 A, 4 (Hippotherium).  
 Gidley, J. W. 1907 A, 874, 900 (Syn. of Neohipparion montezumae).  
 Joleaud, L. 1919 C, 311.  
 Loomis, F. B. 1926 A, 139, fig. 28.  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 Osborn, H. F. 1918 A, 31, 174, 198, text-fig. 163. Pliocene; Mexico.
- Hipparion phlegon** (Hay).  
 Hay, O. P. 1902 A, 617 (Merychippus).  
 Boule and Thevenin 1920 A, 141 (Equus minutus).  
 Dumble, E. T. 1894 A, 559 (Equus minutus).  
 Gidley, J. W. 1901 A, 107, 127, 140, text-fig. 18 (Protohippus).  
 1903 C, 627 ("Equus minutus=Protohippus sp?").  
 1907 A, 875, 920 (Protohippus).  
 Matthew, W. D. 1909 C, 120 (Protohippus minutus).  
 1925 B, 222 (Hipparion).  
 1926 C, 165, 167 (Nannipus).  
 Merriam, J. C. 1917 A, 435 (Protohippus? minutus).  
 Montgomery, T. H. 1904 A, 58 (Equus minutus).  
 Osborn, H. F. 1918 A, 30, 147, 169, pl. xxxiii, fig. 8; text-fig. 136 (Pliohippus minutus, Equus phlegon).  
 Trouessart, E. L. 1905 A, 638 (Merychippus).  
 Pliocene (Blanco); Texas.
- Hipparion platystyle** Merriam.  
 Merriam, J. C. 1915 A, 5.  
 1917 A, 426.  
 1919 A, 530.  
 Osborn, H. F. 1918 A, 22, 26, 174, 188, text-fig. 151.  
 Pliocene (Orinda); California.
- Hipparion plicatile** (Leidy).  
 Hay, O. P. 1902 A, 620.  
 Freudenberg, W. 1922 A, 10 (Hippotherium).  
 Gidley, J. W. 1907 A, 874, 905.
- Gidley, J. W. 1915 D, 68.  
 Hay, O. P. 1916 C, 41, pl. ii, fig. 8.  
 1923 A, 486.  
 Joleaud, L. 1919 A, 708.  
 1919 B, 177.  
 Loomis, F. B. 1926 A, 139, fig. 28.  
 Matson, G. C. 1915 A, pl. xii, figs. c, d ("horse").  
 Matson and Clapp 1909 A, 136 (Hippotherium).  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 1924 C, 175.  
 Merriam, J. C. 1913 H, 438 (Neohipparion).  
 1916 C, 118.  
 1917 A, 439.  
 1919 A, 532, 559.  
 Merrill, G. P. 1907 A, 40, 41 (Hippotherium).  
 Osborn, H. F. 1918 A, 28, 174, 192, text-figs. 155, 155a.  
 Sellards, E. H. 1913 A, pl. v, fig. 2 ("horse").  
 1916 B, 94.  
 Spencer, J. W. 1895 A, 136.  
 Trouessart, E. L. 1904 A, 640 (Neohipparion).  
 Pliocene (Alachua, Bone Valley); Florida.
- Hipparion rectidens** (Cope).  
 Hay, O. P. 1902 A, 620.  
 Freudenberg, W. 1921 A, 131 (Hippotherium).  
 Gidley, J. W. 1907 A, 874, 904.  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
 Osborn, H. F. 1918 A, 31, 174, 199, text-fig. 164.  
 Trouessart, E. L. 1905 A, 640 (Neohipparion).  
 Pliocene; Mexico.
- Hipparion sinclairi** (Wortman).  
 Hay, O. P. 1902 A, 621 (H. sinclairii).  
 Ameghino, F. 1904 A, 43, 257, figs. 30, 349.  
 Dall and Harris 1892 A, 282 (Hippotherium).  
 Gidley, J. W. 1907 A, 874 (Hippotherium sinclairii); 900 (Neohipparion sinclairii).  
 Joleaud, L. 1919 C, 311 (H. sinclairi).  
 Loomis, F. B. 1926 A, 139, fig. 28.  
 Matthew, W. D. 1909 C, 117 (Neohipparion sinclairii).  
 1924 C, 172.  
 Merriam, J. C. 1911 B, 230 (Neohipparion).  
 1915 A, 3 (Neohipparion sinclairii).  
 1917 A, 428 (H. sinclairii).  
 Merriam and Sinclair 1907 A, 195, 198 (Neohipparion).  
 Merriam and Stock 1927 A, 41 (This species?).  
 Merriam, Stock, Moody 1925 A, 59, 76, fig. 32.  
 Osborn, H. F. 1918 A, 30, 174, 195, text-fig. 159.  
 Stock, C. 1925 A, 18 (H. sinclairii).  
 Trouessart, E. L. 1905 A, 640 (Neohipparion).  
 Pliocene (Rattlesnake); Oregon.
- Hipparion venustum** Leidy.  
 Hay, O. P. 1902 A, 621.  
 Abel, O. 1926 B, 428.  
 Calvin, S. 1911 A, 211.  
 Gidley, J. W. 1907 A, 872, 884, 905.  
 Hay, O. P. 1923 A, 363.  
 Holmes, F. S. 1859 A, 184 ("hipparion").  
 1860 A, vi ("hipparion").  
 Joleaud, L. 1919 A, 708.  
 1919 B, 177.  
 Leidy, J. 1859 J, 181 (Hippotherium).  
 Matthew, W. D. 1924 C, 175.

- Merriam, J. C. 1917 A, 441.  
1919 A, 532.
- Osborn, H. F. 1918 A, 31, 174, 200, text-fig. 165.
- Trouessart, E. L. 1905 A, 640 (Neohipparion).  
Pleistocene? (Ashley River); South Carolina.
- Hipparion whitneyi** Gidley.
- Unless otherwise indicated the authors, as quoted, use for this species the generic name *Neohipparion*.
- Gidley, J. W. 1903 B, 467, 474, 476.
- Abel, O. 1912 F, 234, fig. 162.
- 1913 B, 754, fig. 102 (Hipparion).  
1914 A, 136, fig. 94.  
1914 D, 26, fig. 1.  
1920 A, 449, fig. 686.  
1922 C, 274, fig. 231.  
1924 B, 19.  
1926 B, 427, fig. 272.  
1926 H, (163).  
1928 B, 49, fig. 26.
- Gidley, J. W. 1904 A, 245.  
1906 C, 138, 148.  
1907 A, 876, 924.  
1927 D, 267, fig.
- Joleaud, L. 1919 C, 310.
- Loomis, F. B. 1926 A, 133, pl. x, fig. 26.
- Lull, R. S. 1907 A, 180, fig. 14.  
1917 B, 617 (Hipparion).
- Matthew, W. D. 1909 C, 117.  
1913 F, 21, fig. 9 (Hipparion).  
1915 K, 452, fig. 28 (Hipparion).  
1917 A, 575 (Hipparion).  
1924 C, 172.  
1926 C, 165, fig. 23.
- Matthew and Cook 1909 A, 388 (This species?).
- O'Hara, C. C. 1910 A, 98.  
1920 A, 102, 159, pls. xxiv, xxxiv; text-fig. 41 (Neohipparion).
- Osborn, H. F. 1904 F, 13 (Hipparion).  
1904 O, 156.  
1904 R, 11, fig. 7 (Hipparion).  
1904 S, 366.  
1905 I, pl. xi.  
1905 L, 565, fig. 3.  
1910 B, 243, fig. 123.  
1911 C, pl. iv ("Neohipparion").  
1918 A, 25, 26, 174, pl. xxxi, figs. 1, 2; pl. xxxii, fig. 1; pl. xxxix, figs. 1, 4; pl. li, figs. 3, 6; text-figs. 51, 144 (Hipparion).
- Pawlow, M. W. 1925 A, 324 (Neohipparion).
- Scott, W. B. 1913 A, 298, 299, figs. 150, 151.
- Trouessart, E. L. 1905 A, 639 (Neohipparion).  
Upper Miocene (Arikaree); South Dakota.
- Hipparion** sp. indet.
- Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.
- Buwalda, J. P. 1924 A, 572. Middle Neocene (Payette); Idaho.
- Calvin, S. 1909 A, 138 ("Equus").  
1911 A, 211, pl. xix, figs. 5, 7 (H. gratum?). Pleistocene (Aftonian); Missouri.
- Chaney, R. 1925 A, 33. Tuolumne Table Mountain; California.
- Cook, H. J. 1912 D, 44 (Neohipparion). Pliocene (Snake Creek); Nebraska.
- Cope, E. D. 1885 M, 494 (Hippotherium). Miocene; Mexico.
- Gidley, J. W. 1904 C, 57, 75 (Neohipparion).  
Pliocene (Orindan); California.  
1915 D, 21 (Neohipparion). Phosphate beds, Florida.  
1918 C, 180 (Neohipparion). Late Tertiary (Flaxville); Montana.  
1922 B, 120, 121. Pliocene? (San Pedro Valley); Arizona.  
1926 A, 83 ("Neohipparion"). Upper Pliocene or Lower Pleistocene; Arizona.
- Hay, O. P. 1923 A, 486.  
1924 D, 378. Pleistocene; Iowa, Missouri, Montana?, Nebraska?  
1927 D, 302, 306. Pleistocene; California, Arizona.  
1928 C, 423.
- Matson, G. C. 1915 A, 37, pl. xii, figs. C, D ("horse"). Pliocene; Florida.
- Matthew, W. D. 1901 B, 358, 359.  
1909 C, 120 (Neohipparion). Pliocene (Blanco); Texas.  
1924 B, 630. Pliocene (Blanco); Texas.  
1924 G, 630. Pliocene; Florida.
- Merriam, J. C. 1913 E, 375, 376, fig. 3 ("Hipparion? or Neohipparion"). Pliocene (Orindan?); California.  
1913 H, 440 (This genus?) ("Hipparion or Neohipparion"). Pliocene (Orindan); California.  
1915 B, 286, fig. 3 (Hipparion or Merychippus sp.). Miocene?; California.  
1915 E, 217, fig. 27 (Neohipparion).  
1917 A, 425; 435 (Neohipparion); 439 (Hipparion). Pliocene (Rattlesnake); Oregon; (Dunnellon); Florida.  
1919 A, 525, 527, 554, figs. 176, 177. Upper Miocene (Barstow); Lower Pliocene (Ricardo); California.  
1923 A, 400 ("horses"). Table Mountain, California.
- Merriam and Buwalda 1917 A, 255. Miocene or Pliocene (Ellensburg); Washington.
- Merriam and Sinclair 1907 A, 196 (Neohipparion). (Mascall); Oregon.
- Merrill, G. P. 1907 A, 39 (Hipparion); 49 (Neohipparion). "Loup Fork"; Nebraska.
- Moodie, R. L. 1923 A, 335, fig. 1. Pliocene (Snake Creek); Nebraska (This genus?).
- Osborn, H. F. 1918 A, 19. Middle Miocene (Pawnee Creek); Colorado.
- Osmont, V. C. 1904 A, 75. Pliocene (Orindan); California.
- Sellards, E. H. 1915 D, 73, 76, 77, 81. Tertiary; Florida.
- Smith, G. O. 1903 A, 2. Miocene (Ellensburg); Washington.  
1904 A, 8. Miocene (Ellensburg); Washington.
- Whittlesey, C. 1866 A, 16 (Hippotherion. This genus? Probably Equus). Pleistocene; Ohio.
- Young and Cooper 1927 A, 5, fig.



PLIOHIPPIUS Marsh. Type *P. pernix* Marsh.

- Hay, O. P. 1902 A, 618 (Pliohippus, Hippidion).  
 Abel, O. 1909 E, (247).  
     1912 F, 629.  
     1913 B, 754a.  
     1926 B, 362, 396, 419, 433, 455  
     1926 H, (161).  
     1928 B, 17, 44, 51.  
 Anonymous 1921 A, 233, fig.  
 Antonius, O. 1919 A, 287.  
 Arldt, T. 1907 B, 453.  
     1907 D, 203, 257.  
     1909 C, 458.  
 Berry, E. W. 1922 A, 111.  
 Berthoud, E. L. 1879 A, 155.  
 Boule and Thevenin 1920 A, 116.  
 Case, E. C. 1899 B, 165.  
 Clark, B. L. 1921 A, table.  
 Dall and Harris 1892 A, 285.  
 Fürbringer, M. 1902 A, 203.  
 Gidley, J. W. 1904 B, 193 (= ? Protohippus).  
     1907 A, 868 (Protohippus); 869 (Hippidion).  
 Haug, E. 1911 A, 1708.  
 Hay, O. P. 1919 D, 375.  
     1923 A, 2, 9, 15.  
     1925 D, 241.  
 Heilprin, A. 1887 A, 12 (Hippidion); 371, 372 (Pliohippus).  
 Lohley, J. L. 1908 A, 212.  
 Loomis, F. B. 1926 A, 233, figs. 7, 8, 24.  
 Lucas, F. A. 1901 J, 166.  
 Lull, R. S. 1907 A, 178, 181, fig. 6.  
     1913 A, 12 (Pliohippus, Hippidion).  
     1917 B, 611, 617, 618.  
 Lydekker, R. 1907 A, 5, fig. 12.  
     1912 A, 250 (Pliohippus, Hippidion).  
 Matthew, W. D. 1901 A, 374.  
     1903 A, 20.  
     1908 A, 20 (Pliohippus); 24 (Hippidion).  
     1909 C, 119.  
     1910 G, 155.  
     1913 B, 291.  
     1913 F, 20, 25, fig. 16.  
     1915 A, 196, 236, 314.  
     1915 K, 456.  
     1916 J, 9, 11.  
     1920 C, 475.  
     1924 B, 630.  
     1924 C, 69, 153, 166.  
     1924 D, 1.  
     1924 E, 748.  
     1924 G, 629.  
     1926 C, 151, 161, 167, figs. 8, 27.  
     1928 B, 979, fig. 15.  
 Matthew and Cook 1909 A, 366, 368 (Pliohippus, Hippidion).  
 Merriam, J. C. 1911 B, 215, 216, 217, 219, 221, 265.  
     1915 E, 194 (This genus?); 219, 233.  
     1915 F, 255.  
     1915 G, 99.  
     1916 B, 525.  
     1916 D, 132.  
     1917 A.  
     1919 A, 451, 455, 528.  
 Merriam, Stock, Moody 1925 A, 59.  
 Osborn, H. F. 1904 R, 11.  
 Osborn, H. F. 1905 H, 225.  
     1905 I, 109.  
     1910 B, 346, 349, 350, 628.  
     1912 G, 250.  
     1918 A, 4, 22, 28, 29, 50, 146.  
     1922 E, 282.  
     1926 C, 341.  
 Palacký, J. 1903 B, 317 (Pliohippus, Hippidion).  
 Palmer, T. S. 1904 A, 552, 937.  
 Pavlow, M. W. 1925 A, 317, seq.  
 Schlesinger, G. 1914 A, 214.  
 Scott, W. B. 1913 A, 296, 309.  
     1917 A, 108.  
 Shufeldt, R. W. 1889 D, 11.  
 Taylor, W. P. 1917 A, 272.  
 Thorpe, M. R. 1927 A, 168.  
 Trouessart, E. L. 1905 A, 638.  
 Underhill, B. M. 1907 A, 117, 120.  
 Wallace, A. R. 1876 A, 1, 135.  
 Weber, M. 1904 A, 622.  
 Weber and Abel 1928 A, 680.  
 Woodward, H. 1904 B, 160.  
 Zittel and Schlosser 1911 A, 461.  
     1923 A, 548, 550, 673, 679, 680.
- Pliohippus coaligensis (Merriam).**  
*Merriam, J. C.* 1914 C, 645 (Protohippus).  
*Clark, B. L.* 1921 A, table.  
*Merriam, J. C.* 1914 C, 644, 645 (Protohippus).  
     1915 E, 193, 194, 220, fig. 29.  
     1917 A, 425.  
     1919 A, 507.  
*Merriam, Stock, Moody* 1925 A, 60.  
*Nonland, J. O.* 1917 A, 217.  
*Osborn, H. F.* 1918 A, 24, 30, 31, 147, 165, text-fig. 133.  
     Pliocene (Etchegoin); California.
- Pliohippus cumminsii (Cope).**  
*Hay, O. P.* 1902 A, 616 (Merychippus).  
*Boule and Thevenin* 1920 A, 141 (Equus).  
*Dumble, E. T.* 1894 A, 559 (Equus).  
*Frick, C.* 1921 A, 289, 328, 332.  
*Gidley, J. W.* 1901 A, 107, 126, 140, text-fig. 17 (Protohippus).  
     1903 C, 624, 627 ("Equus=Protohippus sp.?").  
     1907 A, 875, 919 (Protohippus).  
*Matthew, W. D.* 1909 C, 120 (Protohippus).  
*Merriam, J. C.* 1916 B, 526, fig. 15 [Equus (Pliohippus)].  
     1917 A, 435.  
*Montgomery, T. H.* 1904 A, 58 (Equus).  
*Osborn, H. F.* 1918 A, 30, 147, 168, pl. xxiv, figs. 3, 4; text-fig. 135.  
*Trouessart, E. L.* 1905 A, 638 (Merychippus).  
     Pliocene (Blanco); Texas.
- Pliohippus edensis Frick.**  
*Frick, C.* 1921 A, 338, figs. 111-125 (with sub-forms A. B.); 396-401, figs. 132-151 (This species?).  
     1926 C, 441.  
*Stock, C.* 1925 A, 21.  
     Pliocene (Eden); California.

***Pliohippus fairbanksi* Merriam.**

- Merriam, J. C. 1915 D, 55, fig. 8.  
 Clark, B. L. 1921 A, table.  
 Frick, C. 1921 A, 392.  
 Merriam, J. C. 1916 B, 530.  
 1917 A, 425, 428, 429 (This species?); 430.  
 1919 A, 506, 525, 527, 564, figs 183-187, 190-192.  
 Merriam and Stock 1928 A, 8 (This species?).  
 Merriam, Stock, Moody 1925 A, 71.  
 Osborn, H. F. 1918 A, 24, 29, 30, 147, 164, text-fig. 131.  
 Stock, C. 1925 A, 18, 20 (This species?).

Pliocene (Pinole Tuff-Orinda); California: (Rattlesnake); Oregon: (Thousand Creek); Nevada: (Ricardo); California.

***Pliohippus fossulatus* (Cope).**

- Hay, O. P. 1902 A, 616 (Merychippus).  
 Abel, O. 1928 B, 54, 58, fig. 33.  
 Gidley, J. W. 1903 C, 634 (Protohippus).  
 1907 A, 875 (Merychippus); 914 (Protohippus).  
 Gregory, W. K. 1920 B, pl. xviii.  
 Matthew, W. D. 1909 C, 107 (Protohippus).  
 Montgomery, T. H. 1904 A, 57 (Protohippus).  
 Osborn, H. F. 1918 A, 26, 147, 156, pl. xxiii, fig. 1; pl. xxiv, fig. 1; text-figs. 124, 125.  
 Trouessart, E. L. 1905 A, 638 (Merychippus).  
 Upper Miocene or Lower Pliocene (Clarendon); Texas.

***Pliohippus francescanus* Frick.**

- Frick, C. 1921 A, 322, 386, pl. xlvii; fold. ii, figs. 1, 2; text-figs. 35-37 (P. francescana).  
 Hay, O. P. 1927 D, 163.  
 Stock, C. 1925 A, 21.  
 Pliocene (San Timoteo); California.

***Pliohippus francescanus minor* Frick.**

- Frick, C. 1921 A, 330, 386, fold. ii, figs. 3, 4; text-figs. 38-41 (P. francescana m.).  
 Hay, O. P. 1927 D, 163.  
 Stock, C. 1925 A, 21.  
 Pliocene (San Timoteo); California.

***Pliohippus interpolatus* (Cope).**

- Hay, O. P. 1902 A, 619 (Hippidium).  
 Boule and Thevenin 1920 A, 115 (Hippidium).  
 Cummins, W. F. 1893 A, 203 (Hippidium).  
 Dumble, E. T. 1894 A, 559 (Hippidium).  
 Frick, C. 1921 A, 333.  
 Gidley, J. W. 1903 C, 630 (Hippidium).  
 1907 A, 875, 917.  
 Lull, R. S. 1913 A, 3.  
 Matthew, W. D. 1909 C, 117 (Protohippus).  
 1918 A, 214.  
 Merriam, Stock, Moody 1925 A, 71.  
 Montgomery, T. H. 1904 A, 58 (Hippidium).  
 Osborn, H. F. 1918 A, 26, 147, 158, pl. xxiv, fig. 6; pl. xxv, fig. 13; text-fig. 126.  
 Trouessart, E. L. 1905 A, 639.  
 Upper Miocene or Lower Pliocene (Clarendon); Texas.

***Pliohippus leidyianus* Osborn.**

- Osborn, H. F. 1918 A, 28, 147, 162; pl. xxviii, figs. 2, 29; pl. xxx, figs. 1, 2; text-fig. 129.

- Abel, O. 1926 B, 369, 397, 423, figs. 253, 257, 269.  
 1928 B, 33, 43, 58, figs. 12, 20, 25, 31.  
 Loomis, F. B. 1926 A, 142, pl. xiii; figs. 25, 31.  
 Matthew, W. D. 1918 A, 186 (No description).  
 1923 A, 12.  
 1923 E, 131.  
 1924 C, 67, 166, 170.  
 O'Harra, C. C. 1920 A, 159.  
 Osborn, H. F. 1927 A.  
 1928 B, 194.  
 Lower Pliocene (Upper Snake Creek); Nebraska.

***Pliohippus lullianus* Troxell.**

- Troxell, E. L. 1916 A, 335, 336, figs. 1-7.  
 Abel, O. 1926 B, 403, 405.  
 1926 H, (160).  
 1928 B, 35, 52, 56, figs. 15, 29.  
 Freudenberg, W. 1922 A, 10.  
 Gregory, W. K. 1920 B, 269, pl. xviii.  
 Loomis, F. B. 1926 A, 143, fig. 30.  
 Matthew, W. D. 1918 A, 214.  
 1924 C, 166, 171.  
 O'Harra, C. C. 1920 A, 105, 159, fig. 44.  
 Osborn, H. F. 1918 A, 25, 26, 147, 153, 160, pl. xxvii; text-fig. 127.  
 Weber and Abel 1928 A, 678, fig. 465.  
 Upper Miocene or Lower Pliocene (Oak Creek); South Dakota.

***Pliohippus mirabilis* (Leidy).**

- Hay, O. P. 1902 A, 617 (Merychippus).  
 Ameghino, F. 1904 A, 536, figs. 299, 305, 357, 358 (Protohippus).  
 Cook, H. J. 1922 B, 10 (Merychippus. This species?).  
 Dall and Harris 1892 A, 316 (Merychippus).  
 Gidley, J. W. 1903 C, 634 (Protohippus).  
 1906 C, 142 (Protohippus).  
 1907 A, 873, 883.  
 Loomis, F. B. 1926 A, 130.  
 Major, C. J. F. 1877 A, 5, 10 (Merychippus).  
 Matthew, W. D. 1901 B, 359.  
 1909 C, 117 (Protohippus).  
 1918 A, 186, 214.  
 1923 A, 12 (This species?).  
 1924 C, 67, 171.  
 Merriam, J. C. 1915 D, 54 (This species?).  
 1917 A, 430, 436 (This species?).  
 1919 A, 508, 525, 527, 567, fig. 180 (This species?).  
 Merrill, G. P. 1907 A, 46, 47 (Merychippus).  
 Osborn, H. F. 1918 A, 25, 28, 147, 148, pl. xxv, fig. 10; pl. xxvi, fig. 37; text-fig. 117.  
 Pavlow, M. W. 1925 A, 325 (Merychippus).  
 Sinclair, W. J. 1915 A, 77 (This species?).  
 Trouessart, E. L. 1905 A, 639 (Merychippus).  
 Zittel and Schlosser 1911 A, 461, fig. 644 (Merychippus).  
 Upper Miocene or Lower Pliocene (Niobrara River); Nebraska: (Snake Creek); Nebraska: Pliocene (Ricardo); California.

***Pliohippus nobilis* Osborn.**

- Osborn, H. F. 1918 A, 28, 147, 160, pl. xxvi, fig. 4; pl. xxviii, fig. 4; text-fig. 123.  
 Abel, O. 1928 B, 54, 58, fig. 32.

Loomis, F. B. 1926 A, 143.

Matthew, W. D. 1924 C, 87 (This species?).

Lower Pliocene (Republican River); Kansas.

### ***Plihippus osborni* Frick.**

Frick, C. 1921 A, 332, 383, figs. 103-110, with subform A; 393-395, figs. 127-131 (This species?).

1926 C, 441.

Stock, C. 1925 A, 21.

Pliocene (Eden); California.

### ***Plihippus pernix* Marsh.**

Hay, O. P. 1902 A, 618.

Abel, O. 1912 F, 234, fig. 162 (Protohippus).

1913 B, 754, fig. 102.

1914 A, 136, fig. 94 (Protohippus).

1914 D, 26, fig. 1 (Protohippus).

1922 C, 274, fig. 231.

Gidley, J. W. 1906 C, 144 (Protohippus).

1907 A, 873, 892.

Loomis, F. B. 1926 A, 130.

Lull, R. S. 1907 A, 178, fig. 13.

1913 A, 7.

1917 B, 617, fig. 222.

Marsh, O. C. 1874 E, 291.

Matthew, W. D. 1909 C, 117 (Protohippus).

1924 C, 166, 170, 171.

O'Harra, C. C. 1920 A, 159 (Protohippus).

Osborn, H. F. 1918 A, 25, 147, 151, pl. xxv, fig. 12; pl. xxviii, fig. 1; text-figs. 120, 121, 122.

Trouessart, E. L. 1905 A, 638.

Upper Miocene or Lower Pliocene (Little White River); South Dakota: (Upper Snake Creek); Nebraska.

### ***Plihippus robustus* Marsh.**

Hay, O. P. 1902 A, 618.

Gidley, J. W. 1907 A, 694, 873.

Lull, R. S. 1907 A, 178.

1913 A, 7.

Matthew, W. D. 1909 C, 117 (Protohippus).

O'Harra, C. C. 1920 A, 159.

Osborn, H. F. 1918 A, 25, 147, 155, text-fig. 123.

Upper Miocene or Lower Pliocene (Arikaree); Nebraska.

### ***Plihippus spectans* (Cope).**

Hay, O. P. 1902 A, 619 (Hippidion).

Boule and Thevenin 1920 A, 115 (Hippidium).

Cope and Matthew 1915 A, pl. cxlviii, figs. 9-11 (Hippidium, Plihippus).

Cummins, W. F. 1893 A, 203 (Hippidium).

Frick, C. 1921 A, 288.

Gidley, J. W. 1903 C, 630 (Hippidion. This species?).

1907 A, 873, 898.

Matthew, W. D. 1909 C, 117 (Protohippus. This species?).

1918 A, 214.

Merriam, J. C. 1917 A, 428.

Merriam and Sinclair 1907 A, 195.

Merriam, Stock, Moody 1925 A, 59, 71, figs. 26-30.

Osborn, H. F. 1918 A, 28, 30, 147, 164, pl. xxviii, fig. 2; text-fig. 182.

Stock, C. 1925 A, 18.

Trouessart, E. L. 1905 A, 639.

Lower Pliocene (Rattlesnake?); Oregon:

Upper Miocene (Goodnight); Texas.

### ***Plihippus supremus* (Leidy).**

Hay, O. P. 1902 A, 618 (Merychippus).

Abel, O. 1926 B, 423, fig. 269.

Gidley, J. W. 1906 C, 143, figs. 8, 9 (Protohippus).

1907 A, 873, 899.

Haug, E. 1911 A, 1705.

Loomis, F. B. 1926 A, 130.

Matthew, W. D. 1909 C, 117 (Protohippus).

1924 C, 67, 170.

Merriam, J. C. 1911 B, 230.

Merram and Stock 1928 A, 8.

O'Harra, C. C. 1920 A, 159 (Protohippus).

Osborn, H. F. 1909 D, 81.

1918 A, 25, 30, 147, 150, pl. xxv, fig. 11; pl. xxvi, fig. 2; pl. xxxi, figs. 3, 4; text-figs. 118, 119.

Trouessart, E. L. 1905 A, 638 (Syn. of Merychippus mirabilis).

Lower Pliocene (Upper Snake Creek); Nebraska.

### ***Plihippus tantalus* Merriam.**

Merriam, J. C. 1913 H, 440, figs. 4a, 4b (This genus?).

1915 D, 54.

1916 B, 330.

1917 A, 430.

1919 A, 506, 525, 527, 561, figs. 179-182, 189.

Osborn, H. F. 1918 A, 29, 147, 162, text-fig. 130. Lower Pliocene (Ricardo); California.

### ***Plihippus* sp. indet.**

Anonymous 1916 B, 476. Pliocene; Nebraska.

Arnold and Anderson 1910 A, 98, 110, 300, pl. xxxiii, fig. 3. Upper Miocene (Jacalitos); California.

Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.

Clark, B. L. 1921 A, table. Pliocene (Siestan, Etchegoin); California.

Cook, H. J. 1912 D, 44. Pliocene (Snake Creek); Nebraska.

1922 B, 11. Pliocene (Snake Creek); Nebraska, Colorado.

Frick, C. 1921 A, 391, 401, figs. 126, 152-157 (This genus?). Pliocene (Eden); California.

Gidley, J. W. 1922 B, 120, 121. Pliocene? (San Pedro Valley); Arizona.

Hay, O. P. 1927 D, 301, 311 (This genus?). Pleistocene?; Arizona, California, Oregon, Washington.

Matthew, W. D. 1921 G, 661. Pliocene (Snake Creek); Nebraska.

1924 C, 171 (P. sp. max.). Pliocene (Upper Snake Creek); Nebraska.

Matthew and Cook 1909 A, 388, fig. 12. Pliocene (Snake Creek); Nebraska.

Merriam, J. C. 1911 B, 265, figs. 31, 35 (This genus?). Pliocene (Thousand Creek); Nevada.

1915 E, 217, 222, 223, figs. 28, 30, 33-37 (Equus or Plihippus). Pliocene? (Etchegoin); California.

Merriam, J. C. 1917 A, 425 (This genus?). Pliocene? (Etchegoin); California; 426. Pliocene (Chanac) California; 436. Pliocene (Snake Creek); Nebraska.  
 1919 A, 569, figs. 193-210. Pliocene (Riccardo); California.  
 Merriam and Buwalda 1917 A, 258. Miocene (Ellenberg); California.  
 Merriam and Sinclair 1907 A, 196. Miocene (Mascall); Oregon.  
 Merriam and Stock 1928 A, 8, text-fig. 3. Pliocene (Thousand Creek); Nevada.

Merriam, Stock, Moody 1925 A, 54. Pliocene (Rattlesnake); Oregon.  
 Nomland, J. O. 1916 A, 83 (Equus or Pliohippus). Pliocene (Etchegoin); California.  
 Osborn, H. F. 1918 A, 19. Upper Miocene (Pawnee Creek); Colorado.  
 Sinclair, W. J. 1915 A, 77. Pliocene (Snake Creek); Nebraska.  
 Stock, C. 1921 A, 257, figs. 2-6 (This genus?). Pliocene? (Panaca); Nevada.

### PLESIPPUS Matthew. Type *Equus simplicidens* Cope.

Matthew, W. D. 1924 D, 2.  
 Abel, O. 1926 B, 396, 433.  
 1926 H, (160).  
 1928 B, 20, 57, 78.  
 Loomis, F. B. 1926 A, 146.  
 Matthew, W. D. 1924 G, 629 ("horse intermediate").  
 1925 B, 222.  
 1926 C, 150, 160, 167.  
 1928 B, 979, fig. 15.  
 Thorpe, M. R. 1927 A, 168.

### *Plesippus proversus* Merriam.

Merriam, J. C. 1916 B, 525, figs. 1-13 (Pliohippus).  
 Abel, O. 1926 B, 433 (Pliohippus).  
 Clark, B. L. 1921 A, table (Pliohippus).  
 Frick, C. 1921 A, 289, 309, 328 (Pliohippus).  
 Loomis, F. B. 1926 A, 147, fig. 31 (Plesippus).  
 Matthew, W. D. 1924 C, 166 (Pliohippus).  
 Merriam, J. C. 1915 D, 56, figs. 9-12 (Equus or Pliohippus sp.).  
 1915 E, 224, figs. 33, 34 (Equus or Pliohippus sp.).  
 1917 A, 425 (Pliohippus).  
 Osborn, H. F. 1918 A, 24, 31, 32, 33, 147, 170, text-figs. 137, 138 (Pliohippus).  
 Upper or Middle Pliocene (Etchegoin); California.

### *Plesippus simplicidens* (Cope).

Hay, O. P. 1902 A, 618 (Pliohippus).  
 Abel, O. 1926 B, 433.  
 1928 B, 54, figs. 34, 35 (Plesippus).  
 Boule and Thevenin 1920 A, 141 (Equus).  
 Cummins, W. F. 1893 A, 203 (Equus. This species?).  
 Dumble, E. T. 1894 A, 559 (Equus).  
 Frick, C. 1921 A, 289, 328, 332 (Pliohippus).  
 Gidley, J. W. 1901 A, 107, 123, 148, text-fig. 13 (Pliohippus).  
 1903 C, 627 (Pliohippus).  
 1907 A, 875, 911 (Pliohippus).  
 Loomis, F. B. 1926 A, 147, fig. 31.  
 Matthew, W. D. 1909 C, 120 (Pliohippus).  
 1924 D, 2 (Plesippus).  
 1925 B, 222 (Equus).  
 1926 C, 162, figs. 19, 20, 21.  
 Merriam, J. C. 1915 D, 56 (Equus).  
 1915 E, 230 (Equus).  
 1916 B, 526, figs. 14, 17 [E. (Pliohippus)].  
 1917 A, 435 (Pliohippus).  
 Montgomery, T. H. 1904 A, 58 (Pliohippus).  
 Osborn, H. F. 1915 B, 220, fig. 8 (Pliohippus).  
 1918 A, 30, 147, 167, pl. xxiv, fig. 5; pl. xxviii, fig. 5; text-fig. 134 (Pliohippus).  
 Trouessart, E. L. 1905 A, 639 (Pliohippus).  
 Upper Pliocene (Blanco); Texas.

### EQUUS Linnæus. Type *E. caballus* Linnæus.

Hay, O. P. 1902 A, 621.  
 Abel, O. 1902 A, 170.  
 1909 D, (224).  
 1909 E, (246).  
 1912 F, 235, 504, 629, 671, fig. 164.  
 1913 B, 754a (Neohippus).  
 1914 A, 247 (Equus); 248 (Neohippus).  
 1914 D, 25.  
 1919 A, 865, fig. 662.  
 1920 A, 449, fig. 686g (Protohippus pernix).  
 1922 C, 32, 114, figs. 31-35, 106.  
 1926 B, 396, 430, 434, 436, 444.  
 1926 D, 64 ("pferde").  
 1926 H, (163) (Equus, Neohippus).  
 1928 B, 23, 53, 59, 61, 73, figs. 4, 6, 10, 14, 30 (Equus); 61, fig. 37 (Neohippus).  
 Adams, C. C. 1905 A, 54 ("horses").  
 Adloff, P. 1916 A, 598, figs. 6-8.  
 Agassiz, L. 1859 B, 186 ("horses").  
 Altmann, F. 1925 A, 109.  
 Ameghino, F. 1885 A, 203.  
 1889 A, 1012.

Ameghino, F. 1904 A, 530.  
 1904 C, 37.  
 1905 A, 28.  
 1905 C, 433, figs. 82, 84.  
 Anderson, R. J. 1905 A, 332.  
 1914 A, 534.  
 Anonymous 1908 B, 117 ("horses").  
 Anthony, R. 1912 A ("cheval").  
 1913 A, 266 ("cheval").  
 Antonius, O. 1912 A, (64).  
 1913 A, 244.  
 1913 B, 235.  
 1918 A.  
 1919 A, 274, 288.  
 1922 A, 133 ("pferde").  
 1923 A (32).  
 Arldt, T. 1907 D, 653.  
 1909 C, 458.  
 Arloing, S. 1867 A, 55 ("cheval").  
 Aureggio, — 1914 A, 338 ("cheval").  
 Baird, S. F. 1876 A, 357 ("horse").  
 Baker, F. C. 1920 A, 458.

- Bardenfleth, K. S. 1913 A, 92.  
 Baum, H. 1920 A, 19, figs. 3, 4, 7, 8, 10 ("pferd").  
 Beasley, W. L. 1903 A, 451 ("horse").  
 Beddard, F. E. 1902 A, 239.  
 Berry, E. W. 1922 A, 110 ("horses").  
 Bertelli, D. 1909 A, 162, figs. 5, 18.  
 Berthoud, E. L. 1881 A, 414 ("horse").  
 Beyer, H. 1908 A, 81, 98, fig. 23 ("pferd").  
 Black, D. 1915 A, 350, fig. 16.  
 Black, N. 1900 A, 13 ("horse").  
 Boas, J. E. V. 1884 B, 393 ("pferde").  
 1914 B, 596, figs. 43, 44, 45.  
 Bojanus, L. H. 1824 C, 697, pl. lviii, fig. 1.  
 Boule, M. 1910 A, 1.  
 1923 A, 494 ("horse").  
 Boule and Thevenin 1920 A, 86, 120, text-figs. 41, 43, 46, 47-49, 51-53.  
 Bradley, O. C. 1903 A, 112 ("horse").  
 1904 A, 9 ("horse").  
 1905 C, 244, figs. 1, 2.  
 1906 A, 542 ("horse").  
 1906 B, 530 ("horse").  
 1907 A, 46.  
 1908 A, 485 ("horse").  
 Brandt and Woldrich 1887 A, 115.  
 Brinkmann, A. 1922 A, 1-38, pls. i-iii.  
 Broili, F. 1917 A, 567, fig. 7 ("pferd").  
 Bronn, H. G. 1848 A, 465.  
 1849 A, 707.  
 Bugnion, E. 1901 A, 95, fig. 1 ("cheval").  
 Burneister, F. 1879 B, 476.  
 Calvin, S. 1897 A, 21 ("horses").  
 1910 A, xii ("horses").  
 Camerano, L. 1916 B, 7, pl. iv, fig. 10 ("caval-lo").  
 Cardoso, A. 1912 A.  
 Case, E. C. 1899 B, 165.  
 Cleland, J. 1863 B, 299 ("horse").  
 Colyer, J. F. 1905 A, 42 ("horses").  
 Cook, H. J. 1927 C, 241, 245 ("Equus").  
 Cope, E. D. 1880 U, 158.  
 1895 G, 596.  
 Coyle, R. F. 1909 A, 584 ("horse").  
 Cummins, W. F. 1892 A, 149 ("horse").  
 1893 A, 203.  
 Cunningham, J. T. 1904 A, 777 ("horses").  
 1906 A, 323 ("horse").  
 Cuvier, F. 1825 A, 224, pl. xcii ("cheval").  
 Cuvier, G. 1805 A.  
 1825 A, ii, 99-113, pls. i-iii ("cheval").  
 Dall and Harris 1892 A, 283.  
 Dana, J. D. 1863 C, 336 ("horse").  
 De Stefani, C. 1921 A, 256.  
 Depéret, C. 1905 B, 23 ("cheval").  
 Diener, C. 1909 A, 56.  
 1912 A, 218.  
 Dietrich, K. 1841 A, 85.  
 Dollo, L. 1896 A, 88.  
 1922 A, 216 ("cheval").  
 Doran, A. H. G. 1878 A, 420, pl. lxi.  
 Eberlein, R. 1910 A, 72, pls. i-v.  
 Eggeling, H. 1904 A, 99.  
 Eichwald, E. 1832 A, 866 ("pferde").  
 1835 A, 680.  
 Eimer, G. H. T. 1901 A, 257.  
 Eisler, P. 1895 A, 54 ("pferde").  
 Ellenberger and Baum 1903 A ("pferde").  
 Emmons, E. 1852 A, 96 ("horse").  
 Engelmann, O. 1910 A, 486 ("pferd").  
 Ewart, J. C. 1904 A, 590, figs. 1-5.  
 1907 A, 555, seq.  
 1909 A, 219.  
 Fairchild, H. L. 1894 A, 209.  
 Falconer and Murchison 1867 A, 104-112.  
 Fejérváry, G. J. de 1921 B, 183.  
 Felix and Lenk 1891 A, 134.  
 Filhol, H. 1839 A, 221 ("cheval").  
 Fischer, J. B. 1829 A, 429.  
 Floderus, M. 1910 A, 79 ("hästar").  
 Flower, W. H. 1892 A.  
 Foote, J. S. 1916 A, 108, 127, pls. xii, xvi.  
 1921 A, 9, pl. ii, figs. 20, 21.  
 Fraas, E. 1913 D, lxiii ("pferde").  
 Frassetto, F. 1903 A, 183.  
 Frech, F. 1907 A, 318 ("pferde").  
 Frech and Geinitz 1903 A, 34.  
 Freudenberg, W. 1922 A, 4.  
 Freund, L. 1906 A, 115.  
 1911 A, 386.  
 1912 A, 557 ("pferde").  
 Frey, H. 1911 A, 416.  
 Fürbringer, M. 1902 A, 202 ("pferd").  
 Gadow, H. 1914 A, 504 ("horse").  
 Garman, S. 1884 E, 252 ("horses").  
 Garner, R. 1870 A, 121 ("horse").  
 Gaudry, A. 1891 C, 50, figs. 16-18.  
 1906 A, 26, fig. 42 ("cheval").  
 Gaupp, E. 1905 D, 1037 ("pferd").  
 1908 A, 184.  
 1908 C, 683, 745.  
 1912 B, 219.  
 Gegenbaur, C. 1880 A, 594 ("pferde").  
 Geikie, J. 1914 A, 323 ("horse").  
 Geinitz, E. 1903 A.  
 1904 A.  
 Geoffroy St. Hilaire, E. F. 1832 A, 354 ("cheval").  
 Geoffroy St. Hilaire, I. 1835 A, 97.  
 Gervais, P. 1852 A, 64, 67.  
 1853 B, 35 ("cheval").  
 1855 A, 33.  
 1859 A, 77.  
 Gidley, J. W. 1901 A, 91.  
 1907 A, 869.  
 1912 C, 19 ("horses").  
 1913, in Matson and Sanford 1913 A, 143.  
 Giebel, C. G. 1855 A, 63, pl. xxvi.  
 1883 A, pls. xxx, lvii, lxix, lxxv, lxxxiv, lxxxviii.  
 Gordon, C. H. 1913 A, 31, 64.  
 Gottlieb, H. 1914 A, 200 ("pferd").  
 Graves, R. J. 1831 A, 85 ("horse").  
 Gregory, W. K. 1908 A, 117, 5 figs.  
 1912 F, 275, 285, 288, figs. 1, 6, 7.  
 1917 D, 624, 633, fig. 1 ("horse").  
 1920 B, 269, pl. xviii; text-figs. 9, 13.  
 1927 I, 557.  
 1927 J, 444, figs. 1, 2, 4, 5.  
 Hasse and Schwarck 1870 A, 129.  
 Haug, E. 1911 A, 1886.  
 Haworth, E. 1897 A, 280 ("horses").  
 Hay, O. P. 1909 G, 890.  
 1910 D, 371.

- Hay, O. P. 1912 B, 10, 13, fig. 8.  
 1912 D, 581, text-figs. 30-33a.  
 1914 A, 151, text-fig. 48.  
 1919 A, 311 ("horses").  
 1919 D, 368, 374.  
 1923 A, 484.  
 1924 D, 377.  
 1925 D, 239.  
 1926 E, 388.  
 1928 B, 238 ("horses").  
 Heilprin, A. 1887 A, 369-371.  
 Hensel, R. 1879 A, 535.  
 Hescheler, K. 1906 A, 29 ("pferd").  
 Hilzheimer, M. 1912 A, 105.  
 Hinze, R. 1910 A, 374.  
 Hoernes, R. 1886 A, 671.  
 Hoever, R. 1911 A, 90 ("pferde").  
 Holmes, F. S. 1870 A, 17 ("horse").  
 Hrdlička, A. 1903 A, 379.  
 Hue, E. 1907 A, pls. lv, lxxviii, lxxvii, ci, cxv, cxviii, cxxxix, cli, clxvi, clxxix.  
 Humphry, G. M. 1870 B, 72, fig. 5 ("horse").  
 Hutchinson, H. N. 1910 A, 245, fig. 90.  
 Huxley, T. H. 1863 F, 580 ("horse").  
 1870 F, 533, 542.  
 1876 D, 200.  
 1876 F, 183 ("horse").  
 1877 A, 42.  
 1880 E, 459.  
 Ingebrigtsen, O. 1924 A, 96.  
 Jacobi, A. 1921 A, 200, 211 ("pferde").  
 Jaekel, O. 1902 E, 1114.  
 Jaworski, Z. 1924 A, 525.  
 Joly, G. 1898 A, 1579 ("cheval").  
 Kampfen, P. N. 1905 A, 576, 580, figs. 63, 66.  
 Kennedy, W. 1893 A, 67 ("horse").  
 Keuchenius, P. E. 1913 A, 448.  
 Kingsbury, B. F. 1926 A, 102 ("horse").  
 Kingsley, J. S. 1925 A, 201, 298, figs. 209, 321.  
 Klaauw, C. J. 1924 B, 600.  
 Klatt, B. 1912 A, 163 ("pferde").  
 Köstlin, O. 1884 A.  
 Kraglievich, L. 1926 C, 70.  
 Laloy, L. 1907 A, 585 ("cheval").  
 Lankester, E. R. 1905 A, 134, figs. 91, 98.  
 1908 A, 333 ("horse").  
 Larger, R. 1913 A, 701 ("cheval").  
 Leche, W. 1887 A, pls. xciv, xcv.  
 1900 A, 1035 ("pferd").  
 LeDamany, P. 1902 A, 335 ("cheval").  
 1902 B, 371 ("cheval").  
 1903 G, 155 ("cheval").  
 1906 B, 164 ("cheval").  
 Lee, Stone, Gale 1915 A, 10.  
 Leunis and Ludwig 1883 A, 269.  
 Lindgren, W. 1911 A, 52.  
 Loble, J. L. 1908 A, 212.  
 Loomis, F. B. 1926 A, 18, 59, 147-150, figs. 1-5, 7-12.  
 Lubosch, W. 1914 A, 425.  
 1923 A, 71, figs. 15-17 ("pferd").  
 1926 A, 111 ("pferde").  
 Lull, R. S. 1907 A, 182, figs. 4, 6.  
 1913 A, 12.  
 1917 B, 301, 607, 611, figs. 210, 211.  
 Lydekker, R. 1894 B, 34.  
 1903 D, 123 ("horse").  
 Lydekker, R. 1904 A, 16.  
 1904 D, 171.  
 1906 A, 473, fig. 1 ("horse").  
 1907 A, 2.  
 1912 A.  
 Mackenzie, W. 1911 A, 363.  
 Magitot, E. 1875 A, 80 ("cheval").  
 Major, C. J. F. 1877 A.  
 1880 A.  
 Mannu, A. 1923 A, 162, figs. 1-5 ("pferd").  
 Marchlewski, M. T. 1924 A, 501.  
 Marsh, O. C. 1874 E, 288, fig. 75.  
 Martins, C. 1857 A, 70 ("cheval").  
 Matthew, W. D. 1902 G, 9, pl. ("horse").  
 1903 A, 23, pl. v.  
 1908 I, 117 ("horses").  
 1910 G, 154.  
 1913 F, 21, 25, 37, figs. 1-3, 13-15, 16-21, 24-38.  
 1914 G, 234.  
 1915 A, 187, 236, 314.  
 1915 K, 403, 410, 418, 453.  
 1916 J, 2, figs.  
 1917 A, 575.  
 1920 C, 475.  
 1924 B, 630.  
 1924 C, 168.  
 1924 D, 2.  
 1924 E, 748, 751, 753.  
 1924 G, 630.  
 1926 B, 5, 6.  
 1926 C, figs. 1-6, 8, 25-27.  
 1928 B, 979, fig. 15.  
 Matthew and Cook 1909 A, 367.  
 Meckel, J. F. 1823 A, 4 ("pferd").  
 1825 A ("pferd").  
 Menmuir, W. H. 1902 A, 275 ("horse").  
 Merriam, J. C. 1906 D, 249.  
 1910 C, 45, 50 ("horses").  
 1911 B, 215, 217.  
 1915 F, 261.  
 1915 G, 100.  
 1916 B, 525.  
 1917 A.  
 Middleton, J. 1844 A, 286 ("horse").  
 Miller, L. H. 1912 A, 74.  
 Mivart, St. G. 1878 B, 233, fig. 7 ("horse").  
 1888 A, 378 ("horse").  
 Montgomery, T. H. 1901 A, 21733 ("horse").  
 Moodie, R. L. 1923 B, 232, fig. 19.  
 Nehring, A. 1880 A.  
 1882 A, 31.  
 1884 A, 81-160.  
 Noack, T. 1902 A, 135 ("pferde").  
 1902 B, 164.  
 1903 A, 370.  
 1909 A, 782.  
 Noordenbos, W. 1905 B, 403 ("pferd").  
 Ohm, — 1908 A, 356 ("pferde").  
 Osborn, H. F. 1904 R, 11.  
 1905 H, 225.  
 1905 I, 91, 107.  
 1905 J, 282.  
 1905 K, 608.  
 1906 E ("arab horse").  
 1907 G, 176, figs. 163, 164.  
 1909 D, 65, 125.

- Osborn, H. F. 1910 A, 213.  
 1910 B, 614.  
 1912 A, 57.  
 1912 G, 250, 251.  
 1912 L, 177, 187, figs. 4-8.  
 1915 B, 212, fig. 5.  
 1916 B, 538.  
 1917 B, 314 ("horse").  
 1918 A, 4, 24, 33.  
 1926 A, 188.  
 1926 C, 341.
- Owen, R. 1845 B, 572, pl. cxxxvi, figs. 1-11;  
 pl. cxxxvii.  
 1848 B, pl. ii, fig. 19.  
 1868 A, 879, figs. 280-285.  
 1869 E, 536, pls. lvi-lx; text-figs. 4, 6.
- Palacký, J. 1903 B, 318.
- Palmer, T. S. 1904 A, 268, 937.
- Pavlow, M. 1906 A, 200.  
 1925 A, 313, seq.
- Perna, G. 1906 A, 122, pl. vi, figs. 19, 21.
- Petronievics, B. 1921 A, 102, 195.
- Pilgrum, G. E. 1913 A, 273.
- Pocock, R. I. 1902 A, 304.  
 1906 A, 377 ("horse").
- Pouchet and Chabry 1884 A, 163 ("cheval").
- Preiswerk, G. 1895 A, 436, fig. 5.
- Pugh, D. 1904 A, 3 ("horse").
- Reche, O. 1905 A.
- Regnault, F. 1903 A, 108, 110 ("cheval").
- Rehs, J. 1914 A, 46.
- Reichenau, W. 1915 A.
- Reichert, K. B. 1849 A, 474 ("pferde").
- Reinhardt, R. 1908 A, figs. 1-13 ("pferde").
- Retterer, E. 1884 A, 497 ("cheval").  
 1908 B, 536 ("cheval").  
 1919 C, 620 ("cheval").  
 1919 E, 1223 ("cheval").
- Retterer and Lelièvre 1910 B, 986 ("cheval").
- Retzius, A. 1837 A, 491, pl. xxii, fig. 3.  
 1849 A, 662.
- Reynolds, S. H. 1897 A, 430, 471, 501, 507, 524,  
 figs. 82, 110.
- Ridgeway, W. 1902 A, 187.
- Rogenhofer, A. 1908 A, (42).
- Rosenberg, A. 1873 A, 132 ("pferd").
- Roth, S. 1908 A, 141.
- Rudolf, G. de M. 1922 A, 140, figs. 5-7.
- Rutten, L. M. R. 1909 A, 51.
- Sanson, A. 1868 A, 225, figs. 1-10.
- Scharff, R. F. 1911 A, 80, 81, 146.
- Schlesinger, G. 1914 A, 211, figs. 1, 7, 8.
- Schlosser, M. 1897 B, 18 ("pferd").  
 1900 C, 134 ("pferd").  
 1902 J, 208.  
 1903 I, 85, 182.
- Schmidt, O. 1886 A, 209, 213, figs. 37, 38.
- Schuchert, C. 1910 A, 599.
- Schuchert and Levene 1927 A, 343, 347.
- Schumann, A. 1904 A, 283.
- Schwarz, E. 1912 A.  
 1922 A, 150.  
 1922 B, 132 ("pferde").
- Scott, W. B. 1896 D, 48, 53 ("horse").  
 1913 A, 295, 305, 680, fig. 154.  
 1917 A, 176.  
 1924 A, 438 ("horses").
- Seeley, H. G. 1876 C, 158 ("horse").  
 1878 A, 224.
- Sefve, I. 1910 A.  
 1912 A, 137.  
 1913 A, 363, 366.  
 1927 A, 78.
- Sellards, E. H. 1915 C, 8.
- Shimek, B. 1908 A, 923.
- Shufeldt, R. W. 1889 D, 12.
- Shumard, B. F. 1863 A, 141.
- Sisson, S. 1910 A, 31, figs. 5-7 ("horse").
- Skoda, K. 1912 A, 417-434, 5 text-figs.  
 ("pferde").
- Smith and Packard 1919 A, 102, 104 ("horses").
- Soergel, W. 1911 A, 740.
- Spencer, J. W. 1898 A, 28 ("horse").
- Steele, L. L. 1906 A, 290, figs. 1, 2.
- Stehlin, H. G. 1905 A, 569, figs. 47, 51.
- Steinmann, G. 1907 A, 491.
- Stejneger, L. 1907 A, 469.
- Stratz-Haag, C. H. 1906 A, 91 ("pferde").
- Strecker, C. 1887 A, 315.
- Stremme, A. 1911 A, 88.
- Taschenberg, O. 1899 A, 4546.
- Taylor, W. P. 1917 A, 272.
- Terra, P. 1911 A, 309, figs.
- Thorpe, M. R. 1927 A, 168.
- Tichomirov, A. 1902 A, 344.
- Tornier, G. 1888 A, 300 ("pferde").
- Tourneux, F. and J. P. 1912 A, 82, figs. 17, 18  
 ("cheval").
- Trouessart, E. L. 1892 A, 188.  
 1905 A, 642.  
 1913 A, 725.
- Turner, H. N. 1850 B, 105 ("horse").
- Underhill, B. M. 1907 A, 117, 121, fig. 1.  
 1910 A, 79.
- Upham, W. 1902 A, 149 ("horse").  
 1903 C, 22679 ("horse").
- Van de Pas, L. 1909 A, 149.
- Veith, A. 1912 A, 1.
- Villada, M. M. 1903 A, 441, 444.
- Virchow, H. 1907 A, 49 ("zebra").  
 1910 F, 266, fig. 2 ("pferd").
- Wagner, R. 1843 A.
- Wallace, A. R. 1876 A, i, 493.
- Wallisch, W. 1906 A, 310 ("pferd").
- Weber, M. 1904 A, 613.
- Weber and Abel 1928 A, 415, 633, 638, 654, 682,  
 figs. 258, 429, 430, 435, 438.
- Weber and Burlet 1927 A, figs. 49, 73, 114, 190.
- Wilder, B. 1865 A, 53 ("horse").  
 1872 B, 320.
- Williston, S. W. 1905 F, 346.
- Wilson, T. 1901 A, 311 ("cheval").
- Winchell, N. H. 1903 A, 152.  
 1917 A, 133, 134.
- Winca, H. 1890 A, 650, pl. xxiv ("pferd").
- Woodward, A. S. 1898 D, 333.
- Wright, G. F. 1911 A, 282 ("horse").  
 1911 B, 436, 438, 690 ("horse").
- Wright, R. R. 1883 A, 251.
- Wüst, E. 1901 A, 281.
- Ziegler, H. E. 1924 A, ix ("pferd").
- Zietzschmann, O. 1915 A, 371, pls. xvi, xvii.  
 1917 A, 440, pl. xxv.
- Zittel, K. A. 1897 A, 126 ("pferde").

Zittel and Schlosser 1911 A, 462.

1923 A 541, 549, 550, 680, 681, figs. 670, 671, 684.

### ***Equus barcenæi* Cope.**

Cope, E. D. 1884 G, 10, 15.

Hay, O. P. 1902 A, 624 (E. tau, in part).

Felix and Lenk 1891 A, 136, pl. xxx, fig. 6.

Freudenberg, W. 1921 A, 139 (Syn. of E. tau).

Hay, O. P. 1924 D, 4, 131, 132.

Rath, G. 1886 A, 106.

Trouessart, E. L. 1905 A, 643 (Syn. of E. tau).

Villada, M. M. 1903 A, 446 (E. barcenæi).

Pleistocene; Mexico.

### ***Equus bautistensis* Frick.**

Frick, C. 1921 A, 302, pl. xlv, fold. i, figs. 1-3; text-figs. 19-25.

Hay, O. P. 1925 D, 241 (E. bautistensis).

1927 D, 68, 162.

Stock, C. 1925 A, 119.

Pleistocene (Bautista); California.

### ***Equus caballus* Linnæus.**

Hay, O. P. 1902 A, 622.

Anderson, R. J. 1909 A, 745.

Chubb, S. H. 1912 A, 114, figs. 1, 2.

Duerst, J. U. 1908 A, 384.

Ewart, J. C. 1904 A, 591 (E. c. prjevalskii); 592 (E. c. celticus); 595 (E. c. typicus).

Gidley, J. W. 1900 A, 111, figs. 4, 5.

1901 A, 98, seq., pl. xix, fig. C; text-figs. 4, 5, 6, 26.

1903 B, 474, 476.

Gray, J. E. 1869 A, 263.

Hay, O. P. 1914 A, 152, 185, 186, 193, 194, text-figs. 43, 45-47.

1915 A, 528, 531, 550, 559, 566.

Leidy, J. 1880 A, 348.

1880 B, 257.

Lull, R. S. 1907 A, 181, fig. 16.

Lydekker, R. 1912 A, figs.

Matthew, W. D. 1914 F, 661.

Merriam, J. C. 1913 F, 402, 412.

Nehring, A. 1883 A, 31.

1884 A, 81, seq.

Osborn, H. F. 1902 A, 84, fig. 3.

1907 C, 259, figs. 1-3.

1910 B, 614.

Schwarz, E. 1922 D.

Scott, W. B. 1913 A, 199.

Sellards, E. H. 1915 D, 77 (This species?).

Stejneger, L. 1907 A, 470.

Troxell, E. L. 1915 A, 617, fig. 3.

Tscherski, J. D. 1892 A, 94, seq.

Williston, S. W. 1910 G, 595.

*Equus caballus* has not been certainly identified as a fossil in North America.

### ***Equus calobatus* Troxell.**

Troxell, E. L. 1915 A, 615, 619, figs. 3, 4, 5 [E. (Asinus)].

Abel, O. 1926 B, 433 (Syn. ? of E. semiplicatus).

Antonius, O. 1919 A, 280 (Syn. ? of E. semiplicatus).

1923 A, (32).

Freudenberg, W. 1922 A, 5 (Asinus).

Hay, O. P. 1924 D, 124, 239.

1923 C, 425, 426.

Joleaud, L. 1920 C, 92.

Zittel and Schlosser 1923 A, 549.

Pleistocene (Sheridan); Texas, Mexico.

### ***Equus complicatus* Leidy.**

Hay, O. P. 1902 A, 622.

Abel, O. 1919 A, 864 (Neohippus).

Allen, G. M. 1926 A, 453.

Antonius, O. 1919 A, 279 [E. (Neohippus)].

Bain, H. F. 1896 A, 277 (E. major).

Baker, F. C. 1920 A, 458 (E. complicatus, E. major).

Boule and Thevenin 1920 A, 142.

Broadhead, G. C. 1874 A, 157 ("extinct horse").

Cahn, A. R. 1922 A, 23.

Calvin, S. 1909 A, 137.

1909 B, 342, 347, 855, pls. xix-xxi.

1911 A, 210.

Chamberlin, R. T. 1916 A, 35 ("horse").

Chamberlin, T. C. 1894 A, 759.

1919 A, 316.

Cooper, Smith and Dekay 1831 A, 371 ("horse").

Cope, E. D. 1867 F, 138 ("horse").

1869 M, 250, fig. 55 (E. fraternus).

1878 II, 125 (E. major).

1895 G, 599 (E. major).

Dall, W. H. 1896 A, 354 (E. major).

Dall and Harris 1892 A, 264 (E. major. This species?).

Dawson, J. W. 1894 D, 4 (E. major. This species?).

Deeley, R. M. 1913 A, 14, tab. ("Equus").

Deussen, A. 1924 A, 20, 108.

Dumble, E. T. 1894 A, 564 (E. major).

Ewart, J. C. 1904 A, 590.

1907 A, 555-587, pls. i-iii.

Falconer, H. 1863 A, 61 (E. americanus); 64 (E. complicatus).

Foster, J. W. 1869 A, 254 (E. americanus).

1873 A, 59 ("horse"); 90 (E. major).

Frech and Geinitz 1903 A, 35, 36 (E. major).

Freudenberg, W. 1921 A, 139.

1922 A, 5, 10, 25 (E. complicatus, E. major).

Frick, C. 1921 A, 289.

Gervais, P. 1859 A, 365 (E. americanus, E. curvidens).

Gidley, J. W. 1901 A, 95, 109, 139, pl. xviii, fig. B; text-figs. 2, 3, 7, 8.

1903 C, 623.

1911 A, 436 (E. complicatus?).

1927 E, 274.

Gilbert, G. K. 1890 A, 394.

Gregory, W. K. 1917 D, 633, fig. 1.

Harris, G. D. 1899 A, 20, 38 (E. major).

Haug, E. 1911 A, 1886

Haworth and Beede 1897 A, 290 (E. major).

Hay, O. P. 1909 G, 891.

1912 D, 586, text-figs. 34, 35.

1913 B, 584.

1914 A, 26, 157, pl. ix, figs. 5, 6; pl. x, figs. 1-3, 5, 6; pls. xi, xii; pl. xiii, figs. 1, 2; pl. xiv, figs. 1, 2; text-figs. 49-65.

1916 E, 54.

1917 D, 43, pl. ii, fig. 1.



- Hay, O. P. 1917 F, 439.  
 1918 B, 10, seq.  
 1919 D, 363, 369, 372.  
 1920 B, 97, 118, pl. vii, fig. 1.  
 1923 A, 484.  
 1924 D, 377 (E. complicatus, E. major, E. intermedius).  
 1925 C, 28.  
 1926 C, 2.  
 1926 E, 391 ("horse").  
 1927 D, 301, 305.  
 1928 B, 237.  
 1928 C, 425, 428.
- Hayes, S. 1895 B, 40 (E. fraternus).  
 Hayes and Kennedy 1903 A, 20 ("Equus").  
 Hilgard, E. W. 1860 A, 196 ("fossil horse." This species?).  
 Holmes, W. H. 1903 A, 244 ("horse").  
 Hrdlička, A. 1907 A, 17 ("Equus"); 18 (E. major).  
 Le Conte, J. 1882 A, 922 (E. major). This species?  
 1882 B, 3 (E. major).  
 Lee, W. T. 1907 B, 215.  
 Leidy, J. 1859 J, 181 ("horse").  
 Loomis, F. B. 1924 C, 506.  
 1926 A, 161, fig. 34.  
 Lucas, F. A. 1902 B, 258.  
 Lull, R. S. 1921 B, 159 (E. scotti).  
 Lyell, C. 1845 B, II, 56 ("horse").  
 McAdams, W. 1883 A, lxxx ("fossil horse." This species?).  
 McGee, W. J. 1891 A, 495.  
 Manigault, G. E. 1887 A, 130 ("fossil horse").  
 Matson and Clapp 1909 A, 137 (E. major).  
 Matthew, W. D. 1902 F, 318.  
 1926 C, 151, fig. 8.  
 Mercer, H. C. 1894 C ("horse").  
 1897 A, 444 ("horse").  
 Merriam, C. H. 1884 A, 47 (E. major. This species?).  
 Merriam, J. C. 1912 C, 221 (E. americanus).  
 Murchison, R. I. 1843 B, 132 ("horse").  
 Osborn, H. F. 1904 R, 12.  
 1910 B, 456, 478, 484, 485.  
 1915 B, 220, fig. 8.  
 Owen, R. 1846 A, 93 ("horse").  
 Pavlow, M. 1906 A, 201 (E. intermedius).  
 1925 A, 318 (Neohippus).  
 Peabody, C. 1908 A, 12 (This species?).  
 Rhoads, S. N. 1903 A, 237.  
 Richardson, G. B. 1907 A, 32.  
 1909 A, 44.  
 Schmidt, E. 1872 A, 245, 251 (E. major).  
 Scott, W. B. 1913 A, 200.  
 Sellards, E. H. 1915 D, 77 (E. caballus); 110, figs. 40-43 (E. complicatus).  
 1916 B, 105.  
 1916 C, 149, 158.  
 1916 D, 617.  
 1916 E, 16.  
 1916 F, 9.  
 Shaler, N. S. 1877 A, 197 ("horse").  
 Shimek, B. 1902 A, 285 (E. americanus).  
 1904 A, 305 (E. americanus).  
 1910 A, 128, 130, 136.  
 1910 B, 316-322.
- Silliman, B. Sr. 1831 A, 372 ("horse").  
 Soergel, W. 1911 A, 745 (This species?).  
 Spier, L. 1928 A, 161 ("horse").  
 Todd, J. E. 1900 A, 100 (E. major).  
 Trouessart, E. L. 1905 A, 642.  
 Tuomey, M. 1848 A, 165, 166 ("Equus").  
 Upham, W. 1895 B, 282.  
 Usher, W. 1854 A, 349 ("horse").  
 Veatch, A. C. 1899 A, 245 (E. major); 246 (E. intermedius).  
 Wilder, F. A. 1900 A, 117 (E. major).  
 Wilson, T. 1892 A, 629 (E. major).  
 1901 A, 322 (E. major).  
 Woolman, L. 1897 A, 208, pl. x.  
 Zittel and Schlosser 1923 A, 549, 680.
- Equus conversidens** Owen.  
 Hay, O. P. 1902 A, 623.  
 Ameghino, F. 1897 B, 264.  
 Antonius, O. 1919 A, 280.  
 Boule and Thevenin 1920 A, 142.  
 Freudenberg, W. 1921 A, 139.  
 1922 A, 5.  
 Gidley, J. W. 1901 A, 107, 118, 139, pl. xxi.  
 Osborn, H. F. 1905 E, 931.  
 1910 B, 434.  
 Trouessart, E. L. 1905 A, 643.  
 Veith, A. 1912 A, 14.  
 Pleistocene; Mexico.
- Equus crenidens** Cope.  
 Hay, O. P. 1902 A, 623.  
 Boule and Thevenin 1920 A, 142, 143.  
 Felix and Lenk 1891 A, 134.  
 Freudenberg, W. 1921 A, 139.  
 1922 A, 5.  
 Gidley, J. W. 1901 A, 107, 122, 138.  
 Hay, O. P. 1924 D, 377.  
 Rath, G. 1886 A, 106.  
 Trouessart, E. L. 1905 A, 643.  
 Villada, M. M. 1903 A, 444.  
 Pleistocene; Mexico.
- Equus excelsus** Leidy.  
 Hay, O. P. 1902 A, 623.  
 Baker, F. C. 1920 A, 458.  
 Boule and Thevenin 1920 A, 142.  
 Dall and Harris 1892 A, 286.  
 Deussen, A. 1924 A, 110, 116, pl. xxviii, fig. 2.  
 Dumble, E. T. 1894 A, 564.  
 Felix and Lenk 1891 A, 126, 127, 128, 135, pl. xxx, fig. 7.  
 Frech and Geinitz 1903 A, 35 (E. excelsior).  
 Freudenberg, W. 1922 A, 5.  
 Gidley, J. W. 1901 A, 107, 113, 138, text-fig. 9.  
 1903 C, 623.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1913 B, 592, pl. lxxi, fig. 3; text-fig. 28.  
 1914 A, 186, 190, pl. xiv, fig. 6; text-figs. 71-74.  
 1917 D, 46.  
 1920 B, 119.  
 1923 A, 8.  
 1924 D, 377.  
 1927 D, 305.  
 1928 C, 425, 426.

- Holmes, W. H. 1903 A, 244 ("horse").  
 Leidy, J. 1880 B, 256.  
 Lindgren, W. 1898 A, 628 (This species?).  
     1911 A, 51, 212 (This species?).  
 Lindgren and Drake 1904 A, 3 (This species?).  
 Loomis, F. B. 1926 A, fig. 34.  
 Louderback, G. D. 1924 A, 7.  
 Lucas, F. A. 1904 F, 3 (E. excelsus. This species?).  
 Lull, R. S. 1913 A, 3.  
 Martin, H. T. 1924 A, 274 (This species?).  
 Matthew, W. D. 1918 A, 227.  
 Merriam, J. C. 1913 F, 410, 415.  
     1917 A, 432 (This species?).  
 Merrill, G. P. 1907 A, 36.  
 Osborn, H. F. 1904 R, 12.  
     1905 E, 931 (This species?).  
     1909 D, 83, 84.  
     1910 B, 368.  
     1915 B, 220, fig. 8.  
     1918 A, 31, 32.  
 Pavlow, M. 1906 A, 201.  
 Rath, G. 1886 A, 106.  
 Reche, O. 1905 A, 236, 239.  
 Shimek, B. 1910 B, 320.  
 Trouessart, E. L. 1905 A, 643.  
     Pleistocene (Sheridan); Nebraska, Iowa, Texas?: (Idaho); Idaho, Mexico.

### ***Equus francisci* Hay.**

- Hay, O. P. 1915 A, 535, 566, pls. xxxv-xxxvii; text-figs. 4, 5.  
     1917 F, 439.  
     1924 D, 377.  
 Deussen, A. 1924 A, 20, 108.  
 Loomis, F. B. 1926 A, 160, fig. 36.  
     Pleistocene (Lissie); Texas.

### ***Equus giganteus* Gidley.**

- Hay, O. P. 1902 A, 623.  
 Antonius, O. 1919 A, 279, 294.  
 Boule and Thevenin 1920 A, 142.  
 Cope, E. D. 1887 N, 1072, fig. 42 (E. crenidens).  
 Deussen, A. 1924 A, 110 (E. crenidens).  
 Diener, C. 1912 A, 220.  
 Dumble, E. T. 1894 A, 564 (E. crenidens).  
 Freudenberg, W. 1921 A, 137, 139.  
     1922 A, 5.  
 Frick, C. 1921 A, 327.  
 Gidley, J. W. 1901 A, 107, 137, text-fig. 27.  
 Hay, O. P. 1920 B, 97 (This species?).  
     1921 A, 619, pl. cxviii, fig. 12; pl. cxxiv, figs. 2, 3 (This species?).  
     1922 A, 446 ("Equus." This species?).  
     1923 A, 484.  
     1924 D, 130, 133, 246.  
     1927 D, 305.  
 Loomis, F. B. 1926 A, 161, fig. 34.  
 Lull, R. S. 1907 A, 182.  
 Lydekker, R. 1912 A, 246.  
 Osborn, H. F. 1904 R, 12.  
     1905 I, 109.  
     1910 B, 484, 485.  
     1915 B, 220, fig. 8.  
 Scharff, R. F. 1911 A, 146.  
 Scott, W. B. 1913 A, 200, 295.

- Trouessart, E. L. 1905 A, 643.  
     Pleistocene (Early and Middle); Texas, Maryland, Arizona, Mexico.

### ***Equus hatcheri* Hay.**

- Hay, O. P. 1915 A, 527, 531, 566, pls. xxxii-xxxiv; text-figs. 2, 3.  
     1917 F, 437.  
     1920 B, 119, pl. vii, fig. 2.  
     1924 D, 377.  
     1927 D, 137.  
 Gidley, J. W. 1926 C, 482, 483 (This species?).  
 Holmes, W. H. 1903 A, 244 ("horse").  
 Loomis, F. B. 1926 A, 163, fig. 35.  
     Pleistocene (Aftonian); Nebraska, Oklahoma.

### ***Equus holmesi* Hay.**

- Hay, O. P. 1920 B, 119, pl. vii, figs. 9-12.  
     1924 D, 377.  
     1927 D, 292.  
     Pleistocene (Aftonian); Oklahoma.

### ***Equus idahoensis* Merriam, J. C.**

- Merriam, J. C. 1918 A, 527, figs. 3-5.  
 Frick, C. 1921 A, 310.  
 Hay, O. P. 1923 A, 8.  
     1925 D, 241.  
     1927 D, 305.  
 Merriam, J. C. 1917 A, 432, 433 (No description).  
 Osborn, H. F. 1918 A, 31.  
     Pleistocene (Idaho); Idaho.

### ***Equus jubatus* Hay.**

- Hay, O. P. 1927 D, 292, pl. xii, figs. 3-5.  
     Pleistocene (Early); Texas.

### ***Equus lambei* Hay.**

- Hay, O. P. 1917 F, 435, pls. lvi-lviii.  
 Gilmore, C. W. 1918 B, 59 ("horse").  
 Hay, O. P. 1923 B, 101, pl. vii, figs. 1, 2.  
     1924 D, 154 ("horse").  
     1927 A, 6.  
     1927 D, 273.  
 Lambe, L. M. 1911 B, 271 ("horse").  
 Loomis, F. B. 1926 A, 164, fig. 36 (E. lambei).  
     Pleistocene; Klondike, Yukon, Alberta.

### ***Equus laurentius* Hay.**

- Hay, O. P. 1913 B, 584, pls. lxxii, lxxiii, text-figs. 25-27.  
 Antonius, O. 1919 A, 280 [E. (Neohippus)].  
     1923 A (32).  
 Baker, F. C. 1920 A, 458.  
 Hay, O. P. 1914 A, 26, 201, pl. xui, fig. 3; pls. xvii, xviii; text-figs. 80-83.  
     1915 A, 566, 568 (This species?).  
     1917 F, 437.  
     1920 B, 119.  
     1922 A, 446.  
     1924 D, 377.  
     1927 A, 5.  
     1927 D, 305.  
     1928 C, 425, 426.  
 Holmes, W. H. 1903 A, 244 ("horse").  
 Merriam, J. C. 1913 F, 398, 402, 413, 418.

- Osborn, H. F. 1915 B, 220, fig. 8.  
 Todd, J. E. 1918 A, 45 ("horse").  
 Zittel and Schlosser 1923 A, 549 (E. laurentinus).  
 Pleistocene (Aftonian); Nebraska, Kansas,  
 Iowa, Oklahoma.
- Equus leidyi** Hay.  
 Hay, O. P. 1913 B, 572, text-figs. 7-16.  
 Abel, O. 1902 A, 623 (E. fraternus).  
 1919 A, 864 (Neohippus fraternus).  
 1926 B, 81, fig. 57 (Neohippus).  
 1928 B, 61.  
 Allen, G. M. 1926 A, 453.  
 Antonius, O. 1919 A, 279 [E. (Neohippus) fraternus]; 280 [E. (Neohippus) leidyi].  
 Baker, F. C. 1920 A, 458 (E. fraternus).  
 Balch, E. S. 1917 A, 481.  
 Boule and Thevenin 1920 A, 142 (E. fraternus).  
 Chamberlin, R. T. 1916 A, 35 ("horse").  
 Ewart, J. C. 1904 A, 590 (E. fraternus).  
 Falconer, H. 1863 A, 64 (E. fraternus).  
 Freudenberg, W. 1922 A, 5 (E. fraternus).  
 Frick, C. 1921 A, 289 (E. fraternus).  
 Gidley, J. W. 1901 A, 107, 110, 138, text-fig. 8 (E. fraternus).  
 1911 A, 346 (E. fraternus).  
 1915 D, 68 (E. fraternus).  
 1925 A, x ("horses").  
 1927 E, 274.  
 Hay, O. P. 1913 B, 569, pl. lxi, fig. 1; text-figs. 4-6 (E. fraternus).  
 1914 A, 26 (E. fraternus).  
 1917 D, 44, pl. ii, figs. 2-4; pl. iii, figs. 5, 6.  
 1918 B, 12.  
 1919 C, 106.  
 1919 D, 367, 369.  
 1920 B, 84, 87.  
 1923 A, 484.  
 1924 D, 377 (E. leidyi); 141, 142 (E. curvidens); 131, 132 (E. fraternus).  
 1925 D, 241 (E. fraternus).  
 1927 D, 305 (E. fraternus).  
 1928 C, 428.  
 Hrdlička, A. 1918 A, 27.  
 Loomis, F. B. 1925 C, 506 (E. complicatus).  
 1925 D, 436 ("horse").  
 1926 A, 162.  
 Lucas, F. A. 1901 J, 163 (E. fraternus).  
 1902 B, 259.  
 Lull, R. S. 1921 B, 175 (E. fraternus).  
 Lydekker, R. 1912 A, 246 (E. fraternus).  
 Lyell, C. 1855 A, i, 348 (E. curvidens).  
 MacCurdy, G. G. 1916 A, 61 (This species?).  
 Matson and Clapp 1909 A, 136, 137 (E. fraternus).  
 Matthew, W. D. 1902 F, 318 (E. fraternus).  
 1924 C, 166, 168 (E. fraternus).  
 Miller and Stephenson 1912 A, 57 (E. fraternus).  
 Osborn, H. F. 1910 B, 456, 470.  
 1915 B, 220, fig. 8.  
 1918 A, 31, 174 (E. fraternus).  
 Pavlow, M. W. 1925 A, 318 (Neohippus fraternus).  
 Rogers, H. D. 1844 A, 258 ("horse." This species?).  
 Schlosser, M. 1902 H, 142 (E. fraternus).
- Scott, W. B. 1913 A, 199 (E. fraternus).  
 Sellards, E. H. 1913 A, pl. v, fig. 2 ("horse").  
 1915 D, 77.  
 1916 B, 102 (E. fraternus. This species?); 103, 104 (E. leidyi).  
 1916 C, 132, 139, 149, 158.  
 1916 D, 617.  
 1916 E, 16.  
 1916 F, 7, 9.  
 Shuler, E. W. 1923 A, 333 (E. fraternus?).  
 Simpson, G. G. 1928 H, 2 (This species?).  
 Spencer, J. W. 1895 A, 137 (E. fraternus).  
 Trouessart, E. L. 1905 A, 643 (E. fraternus).  
 Pleistocene (Early); Nebraska, Florida, Alabama, Mississippi, Texas, Pennsylvania, Kansas, Mexico.
- Equus littoralis** Hay.  
 Hay, O. P. 1913 B, 575, figs. 17, 18.  
 Allen, G. M. 1926 A, 453.  
 Antonius, O. 1919 A, 280 [E. (Neohippus?)].  
 Baker, F. C. 1920 A, 374.  
 Chamberlin, R. T. 1916 A, 35 ("horse").  
 Gidley, J. W. 1901 A, 121-122 (E. tau).  
 1927 E, 274.  
 Hay, O. P. 1917 E, 44 (This species?).  
 1920 B, 88.  
 1923 A, 484.  
 1924 D, 377.  
 1926 C, 2 (This species?).  
 1927 D, 274, 286.  
 Loomis, F. B. 1926 A, 162.  
 Merriam, J. C. 1917 A, 439.  
 Sellards, E. H. 1915 D, 77.  
 1916 B, 94.  
 1916 C, 149, 158.  
 1916 D, 617.  
 1916 E, 16.  
 1916 F, 9.  
 Pleistocene (Early); Florida, Tennessee.
- Equus nevadanus** Hay.  
 Hay, O. P. 1927 D, 57-59, 61, 152, pls. ii, iii.  
 Pleistocene (Early); Nevada.
- Equus niobrarensis** Hay.  
 Hay, O. P. 1913 B, 576, pl. lxi, figs. 2-4; pl. lxx; pl. lxxi, figs. 1, 2; text-figs. 19-24.  
 Antonius, O. 1919 A, 280 [E. (Neohippus?)].  
 1923 A (34).  
 Baker, F. C. 1920 A, 458.  
 Frick, C. 1921 A, 289, 311.  
 Hay, O. P. 1913 E, 3, fig. 2.  
 1914 A, 26, 191, 198, pl. x, figs. 2-4; pl. xiv, figs. 3-5; pls. xv, xvi; text-figs. 75-79.  
 1915 A, 528, 531, 566.  
 1917 F, 437.  
 1921 A, 609 (This species?).  
 1923 A, 190, 354.  
 1924 D, 377.  
 1927 A, 6.  
 1927 D, 305.  
 1928 C, 425, 426.  
 Loomis, F. B. 1926 A, 164, fig. 35.  
 Matthew, W. D. 1918 A, 227, 228.  
 Merriam, J. C. 1913 F, 398, 402, 410, 413, 416

- Osborn, H. F. 1915 B, 220, fig. 8.  
1918 A, 7, 8, figs. 4, 4a.
- Sefve, I. 1927 A, 8, text-figs. 4, 5.
- Sternberg, C. H. 1898 B, 169 (E. excelsus).  
Pleistocene (Aftonian); Nebraska, Iowa, Missouri, Kansas.
- Equus niobrarensis alaskæ Hay.**
- Hay, O. P. 1913 E, 1, pls. i, ii.  
1917 F, 439.
- Merriam, J. C. 1913 F, 398.  
Pleistocene silts; Tofty, Alaska.
- Equus occidentalis Leidy.**
- Hay, O. P. 1902 A, 623.
- Abel, O. 1919 A, 884 (Neohippus).  
1926 B, 238.
- Antevs, E. 1925 A, 75 (This species?).
- Antonius, O. 1919 A, 279 (Neohippus).
- Baker, F. C. 1920 A, 210, 213, 395.
- Boule and Thevenin 1920 A, 141.
- Bryan, K. 1923 A, 32.
- Calvin, S. 1909 A, 137 (E. occidentalis; later referred to E. complicatus).
- Clayton, J. E. 1884 A, 171 ("horse." This species?).
- Cooper, J. G. 1875 A, 390.
- Cope, E. D. 1878 II, 125.  
1895 G, 599.
- Denton, W. 1875 A, 186 ("horse." This species?).
- Deussen, A. 1924 A, 110.
- Diller, J. S. 1906 A, 11 ("horse").
- Dumble, E. T. 1894 A, 564 (This species?).
- Ewart, J. C. 1904 A, 590.
- Frick, C. 1921 A, 308.
- Furlong, E. L. 1904 A, 54.  
1906 A, 243.  
1907 A, 393.
- Gidley, J. W. 1901 A, 107, 114, 139, text-fig. 10.  
1923 B, 30 (This species?).
- Gilbert, J. Z. 1910 B, 25 ("horse").
- Hanna, G. D. 1923 A, 65, pl. ix, fig. c.
- Haug, E. 1911 A, 1886.
- Hay, O. P. 1920 B, 121.  
1921 A, 618, pl. cxviii, fig. 11; pl. cxxiv, fig. 1 (This species?).  
1922 A, 446.  
1923 A, 9.  
1924 D, 377.  
1925 D, 241.  
1926 D, 359.  
1926 F, 426 ("Equus").  
1927 D, 301, 302, 305.
- Hoffmann, R. 1927 A, 155 (This species?).
- Holmes, W. H. 1901 A, 423 ("horse." This species?).
- Kellogg, R. 1922 A, 61.
- Knowlton, F. H. 1911 D, 63 ("horse").
- Le Conte, J. 1882 B, 3.  
1883 A, 101 (This species?).
- Leidy, J. 1880 B, 256.
- Lindgren, W. 1911 A, 51.
- Loomis, F. B. 1926 A, 16, 153, pl. iii.
- Louderback, G. D. 1907 A, 212 ("horse").
- McCormack, E. C. 1920 A, 17, 23.
- Matthew, W. D. 1914 I, 41.
- Merriam, J. C. 1908 D, 473 ("horse").  
1909 C, 11, fig. ("colt").  
1913 F, 399, 402, 410, figs. 1-14.  
1914 B, 201 ("horse." This species?).  
1916 B, 528, figs. 16, 18.  
1918 A, 528, 530.  
1918 D, 518.
- Merriam and Buwalda 1917 A, 259.
- Merriam and Stock 1921 A, 567.  
1925 A, 10, 11.
- Muller, L. H. 1912 A, 71, 73, 74.
- Osborn, H. F. 1910 B, 460, 477, 484.  
1915 B, 220, fig. 8.  
1925 D, 528, 531, 535, figs.
- Reche, O. 1905 A, 239.
- Scott, W. B. 1913 A, 200.
- Sinclair, W. J. 1903 A, 711.  
1904 A, 18.  
1908 A, 112.
- Stock, C. 1925 A, 113, 118.  
1927 A, 156 (This species?).
- Trouessart, E. L. 1905 A, 643.
- Villada, M. M. 1903 A, 445, pl. ii (This species?).
- Wright, R. R. 1883 A, 234, fig. 121.
- Zittel and Schlosser 1923 A, 549.  
Pleistocene; western States of the United States, Mexico?
- Equus pacificus Leidy.**
- Hay, O. P. 1902 A, 623.
- Antevs, E. 1925 A, 75 (This species?).
- Antonius, O. 1919 A, 279, 294.
- Boule and Thevenin 1920 A, 142.
- Calvin, S. 1909 B, 355.  
1911 A, 210.
- Diller, J. S. 1906 A, 11 ("horse").
- Frick, C. 1921 A, 308.
- Gidley, J. W. 1901 A, 107, 116, 138, text-fig. 11.  
1926 C, 481, 482 (This species?).
- Haug, E. 1911 A, 1886.
- Hay, O. P. 1923 E, 395 ("horses." This species?).  
1926 D, 359.  
1927 D, 302, 305, 310.
- Hodge, E. T. 1925 A, x ("horse").
- Jones, J. C. 1925 A, 49 (This species?).
- Knowlton, F. H. 1911 D, 63 ("horse").
- Lawson, A. 1914 A, 15.
- Le Conte, J. 1882 B, 3.  
1883 A, 101 (This species?).
- Leidy, J. 1880 B, 257.
- Loomis, F. B. 1926 A, 159, fig. 34.
- McCormack, E. C. 1920 A, 17, 23.
- Matthew, W. D. 1902 F, 320.
- Merriam, J. C. 1913 F, 410, 414.  
1914 D, 15.  
1915 C, 379, 381, pl. xli; text-fig. 3 (This species?).  
1918 A, 530.  
1918 D, 520.
- Merriam and Stock 1925 A, 10.
- Miller, L. H. 1912 A, 71, 81 (This species?).
- Osborn, H. F. 1904 R, 12.  
1910 B, 614 (This species?).  
1915 B, 220, fig. 8.
- Russell, I. C. 1884 A, 460 ("horse").

- Scott, W. B. 1913 A, 201.  
 Shmek, B. 1911 A, 318.  
 Sinclair, J. 1904 A, 18, 20.  
 Smith and Packard 1919 A, 103.  
 Stock, C. 1925 A, 113, 195.  
 Trouessart, E. L. 1905 A, 643.  
   Pleistocene (Early); Oregon, California,  
   Nevada?
- Equus pectinatus** Cope.  
 Hay, O. P. 1902 A, 624.  
 Abel, O. 1919 A, 864 (Neohippus).  
 Antonius, O. 1919 A, 279, 284 [E. (Neohippus)].  
 Baker, F. C. 1920 A, 208, 213, 395.  
 Boule and Thevenin 1920 A, 142.  
 Freudenberg, W. 1922 A, 5.  
 Gidley, J. W. 1901 A, 107, 133, 139, text-fig. 23.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1923 A, 484.  
   1924 D, 377.  
   1925 D, 241.  
   1927 D, 182, 293, 295.  
 Loomis, F. B. 1926 A, fig. 34.  
 Osborn, H. F. 1904 R, 12.  
   1910 B, 470, 484.  
   1915 B, 220, fig. 8.  
 Pavlow, M. W. 1925 A, 318 (Neohippus).  
 Rhoads, S. N. 1903 A, 237.  
 Scott, W. B. 1913 A, 200.  
 Trouessart, E. L. 1905 A, 643.  
   Pleistocene (Early, Middle); Pennsylvania,  
   Illinois, Mexico.
- Equus princeps** (Leidy).  
 Hay, O. P. 1902 A, 622 (E. complicatus, in part).  
 Abel, O. 1923 B, 79, 88, fig. 46 (Hipparion, Neohipparion fraternus).  
 Gidley, J. W. 1907 A, 875, 910 (Neohipparion).  
 Hay, O. P. 1923 A, 199.  
 Matson and Clapp 1909 A, 137 (Hippotherium).  
 Matthew, W. D. 1909 C, 117 (Neohipparion).  
   1924 C, 166 (Neohipparion); 168 (Hipparion).  
 Merrill, G. P. 1907 A, 41 (Hippotherium).  
 Osborn, H. F. 1918 A, 201, figs. 166, 166a (Equus, Hipparion).  
 Sellards, E. H. 1916 B, 94, 97 (Hipparion).  
 Trouessart, E. L. 1905 A, 642 (Syn. of E. complicatus).  
   The type of this species is a tooth which may be an abnormal one of *Equus icidyi*.  
   Pleistocene; Florida.
- Equus scotti** Gidley.  
 Gidley, J. W. 1900 A, 111, figs. 1-3, 5a.  
 Hay, O. P. 1902 A, 624.  
 Abel, O. 1912 F, 19.  
   1923 B, 77, 93, fig. 45.  
 Anonymous 1908 B, 122.  
 Antonius, O. 1919 A, 279.  
   1923 A, (32).  
 Baker, F. C. 1920 A, 458.  
 Boule and Thevenin 1920 A, 141.  
 Brown, B. 1903 A, 200.  
 Calvin, S. 1909 B, 346, 355, pls. xvii, xviii.  
   1911 A, 210, 211.
- Eastman, C. R. 1913 B, 677.  
 Ewart, J. C. 1907 A, 562, 564.  
 Freudenberg, W. 1922 A, 5 (Syn.? of E. crenidens).  
 Frick, C. 1921 A, 308.  
 Gidley, J. W. 1901 A, 103, 134, 139, pl. xx; text-figs. 25, 26.  
   1903 C, 618, 624.  
   1926 C, 482, 483.  
   1927 D, 266, fig.  
   1928 B, 14 (This species?).  
 Gregory, W. K. 1908 A, 122.  
   1912 F, 286.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1912 D, 582, text-figs. 29, 30a.  
   1913 B, 584.  
   1914 A, 26, 32, 79, text-figs. 66-70.  
   1915 A, 566.  
   1917 F, 439.  
   1923 A, 194.  
   1924 D, 377.  
   1925 D, 241.  
   1927 D, 162.  
   1928 C, 425.  
 Lambe, L. M. 1917 E, 291.  
 Loomis, F. B. 1926 A, 153-158, pl. xiv, fig. 33.  
 Lull, R. S. 1913 A, 8, fig.  
   1917 B, 619, pl. xxiv; text-fig. 227.  
 Matthew, W. D. 1902 F, 318 (This species?).  
   1903 A, 7, pl. ii.  
   1903 I, 122.  
   1914 G, 234.  
   1915 K, 454, fig. 29.  
   1916 J, 2.  
 Merriam, J. C. 1915 F, 398, 410, 413, 416.  
 Osborn, H. F. 1901 A, pl. 1.  
   1904 F, 32.  
   1904 O, 156.  
   1905 J, 282.  
   1910 B, 614.  
 Reche, O. 1905 A, 236.  
 Shmek, B. 1910 A, 130, 136, 139.  
   1910 B, 316-322.  
   1912 A, 142 (This species?).  
 Trouessart, E. L. 1905 A, 643.  
 Troxell, E. L. 1915 A, 615, 616, pl. ix; text-figs. 2-5.  
   1916 A, 340.  
   1917 A, 81, figs. 1-6.  
 Zittel and Schlosser 1911 A, 463.  
   1923 A, 549.  
   Pleistocene (Aftonian); Texas.
- Equus semiplicatus** Cope.  
 Hay, O. P. 1902 A, 624.  
 Abel, O. 1926 B, 433.  
 Antonius, O. 1919 A, 279 [E. (Neohippus?)].  
   1923 A, (32).  
 Boule and Thevenin 1920 A, 142.  
 Deussen, A. 1924 A, 110.  
 Dumble, E. T. 1894 A, 564.  
 Freudenberg, W. 1921 A, 130 (This species?).  
 Gidley, J. W. 1901 A, 107, 129, 139, text-figs. 20, 21.  
   1903 C, 623.  
   1924 A, 70 (E. occidentalis?).  
 Hay, O. P. 1923 B, 116.

- Hay, O. P. 1924 D, 377.  
1927 D, 297.  
1928 C, 425, 426.
- James, J. F. 1891 B, 161 (E. excelsus).
- Matthew, W. D. 1903 A, 25, pl. vii (E. intermedius).
- Montgomery, J. H. 1904 A, 58.
- Osborn, H. F. 1910 B, 484.  
1915 B, 220, fig. 8.
- Scott, W. B. 1913 A, 200.
- Trouessart, E. L. 1905 A, 643.  
Pleistocene (Early); Texas, Mexico?
- Equus tau Owen.**
- Hay, O. P. 1902 A, 624.
- Ameghino, F. 1897 B, 264.
- Cope, E. D. 1895 G, 599.
- Deussen, A. 1924 A, 110 (This species?)
- Diener, C. 1912 A, 220.
- Dumble, E. T. 1894 A, 564 (This species?).
- Ewart, J. C. 1904 A, 590.
- Felix and Leuk 1891 A, 135.
- Freudenberg, W. 1921 A, 139.  
1922 A, 5 (Syn. of E. barcenai).
- Gidley, J. W. 1901 A, 107, 120, 123, 139, fig. 12.  
1903 C, 623.  
1911 A, 436 (This species?).
- Hay, O. P. 1915 A, 539.  
1924 D, 377.  
1926 C, 2 (This species?).  
1927 D, 54, 130.  
1928 C, 425 (This species?).
- Osborn, H. F. 1905 E, 931.
- Trouessart, E. L. 1905 A, 643.
- Villada, M. M. 1903 A, 445.
- Wilkens, M. 1884 B, 329 ("E. asinus fossils").
- Zittel and Schlosser 1923 A, 549.  
Pleistocene (Early); Mexico, Texas?
- Equus sp. indet.**
- Adams, A. Leith 1879 A, 117 ("horse").
- Anderson, F. M. 1908 A, 35 ("horse"). Pleistocene; California.
- Antevs, E. 1925 A, 75 ("horse"). Pleistocene (Walker River); Nevada.
- Bailey, T. L. 1926 A, 59 (E. fraternus?). Pleistocene (Reynosa); Texas.
- Baker, C. L. 1915 A, 34 ("horse"). Pleistocene; Texas.
- Bancroft, H. H. 1875 A, 677 ("horses"). Pleistocene; California.
- Barbour, E. H. 1927 A, 133. Pleistocene (Early); Nebraska.
- Becker, G. F. 1888 A, 221 (This genus?). Pleistocene (Cache Lake); California.
- Bell, R. 1898 A, 373 ("horse").
- Blake, W. P. 1884 A, 273. Pleistocene; Nevada.
- Broadhead, G. C. 1881 A, 521 ("horse").
- Brown, B. 1912 C, 167. Pleistocene (Jalisco); Mexico.
- Bryan, K. 1923 A, 31. Pleistocene; Liguria, Arizona.
- Buwalda, J. P. 1914 A, 451 (2 species). Pleistocene (Manix); California.
- Calvin, S. 1911 A, 211, pl. xix, figs. 1-4. Pleistocene; Iowa.
- Cannon, G. L. 1888 B, 61 ("horse"). Pleistocene; Colorado.
- Cobb, C. 1923 A, 31. Pleistocene (Early); Enfield, North Carolina.
- Collier, A. J. 1902 A, 27. Pleistocene; Alaska.  
1913 A, 35. Pleistocene (Early); Montana.
- Condon, T. 1902 A, 141, pl. xxiii. Pleistocene; Touchet, Oregon.  
1910 A, 175, pl. xxiii. Pleistocene; Touchet, Oregon.
- Conrad, T. A. 1838 A, x ("horse").
- Cook, H. J. 1925 A, 460. Pleistocene; Texas.  
1926 D, 335, 2 sp. Pleistocene; Colorado, Texas.  
1927 A, 117. Pleistocene (Aftonian); Oklahoma.
- Cooke, C. W. 1926 A, 445 ("horse"). Florida.  
1928 A, 421. Florida.
- Cragin, F. W. 1899 A, 610 ("horse").  
1900 A, 23 ("horse").
- Cummins, W. F. 1893 A, 182, 183 ("Equus"). Pleistocene; Texas.
- Dumble, E. T. 1920 A, 268. Pleistocene (Early); Texas.
- Eaton, G. F. 1923 A, 236, figs. 7, 8. Pleistocene; Mexico.
- Ferguson, H. G. 1917 A, 182. Pleistocene; Nevada.
- Freudenberg, W. 1910 A, 5. Pleistocene (Early); Mexico.  
1922 A, 5, 26, 28. Pleistocene (Early); Mexico.
- Frick, C. 1918 A, 163. Pleistocene (Bautista Creek); California.
- Furlong, E. L. 1925 A, 139; 140, 142, 144. Pleistocene; Tequiquiac, Hidalgo: Zumpango, Guerrero: Saltillo; Coahuila: Monterey; Nuevo Leon: Mexico.
- Gaudry, A. 1903 A, 553 ("cheval").
- Gidley, J. W. 1913 B, 96. Pleistocene; Maryland.  
1915 D, 20 ("Equus") Florida.  
1917 C, 182. Pleistocene; Nevada.  
1918 C, 182. Pleistocene (Early); Montana.
- 1920 B, 283 ("horse"). Pleistocene (Middle); Maryland.
- 1922 B, 120, 121. Pliocene? (San Pedro Valley); Arizona.
- 1923 D, 75. Pleistocene (Gila conglomerate); Arizona.
- 1924 A, 69. Pleistocene (Early); Nevada.
- 1926 C, 433. Pleistocene (Early); Arizona.
- 1928 B, 13, 16, fig. 13 ("horse"). Pleistocene; Oklahoma, Florida.
- Gilbert, G. K. 1875 A, 543. Pleistocene?; New Mexico.  
1890 A, 303, 394 ("Equus").
- Gilmore, C. W. 1908 A, 31, 38 (Pleistocene); Alaska.
- Gordon, C. H. 1913 A, 31 ("Equus"). Knox County, Texas.
- Gregory, H. E. 1917 A, 82 ("Equus"). Pleistocene; Arizona.
- Hartnagel and Bishop 1921 A, 81, 94 ("horse"). Recent?; New York.

- Hay, O. P. 1917 B, 15. Pleistocene; Texas.  
 1920 B, 110. Pleistocene; Illinois.  
 1921 A, 600. Pleistocene (Early); Colorado.  
 1923 A, 484.  
 1924 B, 260, 262 ("Equus"). Pleistocene; Florida.  
 1924 D, 377. Pleistocene; Alberta, Arkansas, Colorado, Iowa, Kansas, Manitoba, Missouri, Montana, Nebraska, New Mexico, South Dakota, Texas, Wyoming.  
 1926 G, 131 ("large horse").  
 1927 D, 301, 302, 305, 314  
 1928 C, 423.
- Haynes, H. W. 1889 A, 353. Pleistocene, Nevada.
- Hills, R. C. 1889 A, 221. Pleistocene (Huerfano); Colorado.
- Holmes, F. S. 1860 A, iii ("horse").
- Hrdlička, A. 1918 A, 18. Pleistocene (La Brea); California.
- Kellogg, R. 1922 A, 80. Pleistocene (San Pedro); California.
- Koch, A. 1840 A, 3 ("antediluvian horse"). Pleistocene; Missouri.
- Lambe, L. M. 1910 C, 273 (E. caballus).  
 1912 B, 349 (E. caballus). Pleistocene; Yukon.  
 1917 E, 295. Pleistocene; Yukon
- Lee, W. T. 1907 A, 32 ("Equus"). Pleistocene; New Mexico.
- Lee, Stone and Gale 1915 A, 173 ("horse"). Pleistocene (Lake Lahontan); Nevada.
- Leidy, J. 1868 D, 195 ("indigenous horse").
- Leighton, M. M. 1921 A, 513. Pleistocene (Sangamon?); Illinois.
- Lindgren, W. 1911 A, 193 ("horses," 2 species). Carson, Nevada.
- Lindgren and Drake 1904 A, 2 ("Equus"). Pleistocene? (Idaho); Idaho.  
 1904 B, 2 ("Equus"). Pleistocene (Idaho); Idaho.
- Loomis, F. B. 1926 B, 262. Pleistocene; Florida.
- Lucas, F. A. 1900, in Lindgren, W. 1900 A, 99 ("Equus").  
 1900 H, 99. Pleistocene; Ada County, Idaho.  
 1902 J, 27 (E. complicatus?). Pleistocene; Alaska.  
 1904 B, 2 ("Equus"). Pleistocene? (Idaho); Idaho.  
 1904 F, 2, 3. Pleistocene? (Idaho); Idaho.
- McCornack, E. C. 1920 A, 16, 19. Pleistocene (Touchet River); Washington.
- McGee, W. J. 1888 A, ("horse"). Pleistocene (Early); Nevada.  
 1889 A, 303 ("horse"). Pleistocene (Lake Lahontan); Nevada.
- Matthew, W. D. 1902 F, 321.  
 1926 C, 164, fig. 22. Pleistocene (Lower); Nebraska.
- Mercer, H. C. 1894 A, 98 ("horse"). Lenape stone.
- Merriam, J. C. 1900 A, 613. Pleistocene; California.
- Merriam, J. C. 1910 C, 50. Pleistocene? (Thousand Creek); Nevada.  
 1911 B, 265, figs 32, 36 (This genus?).  
 1914 C, 644 (This genus?).  
 1914 D, 15. Pleistocene (San Antonio); California.  
 1915 E, 223, figs. 33-37 (Equus sp. or Pliohippus sp.). Pleistocene? (Etchegoin); California.  
 1915 F, 261. ("Equus," 2 species). Pleistocene (Manix); California.  
 1916 E, 172. Pleistocene? (Etchegoin); California.
- Merriam and Buwalda 1917 A, 256 (Ringold); Washington.
- Miller, L. H. 1912 A, 78, 81. Pleistocene (La Brea); California.  
 1925 A, 309 ("horse") Pleistocene (McKittrick); California.
- Miller and Stephenson 1912 A, 50, 55 ("horse"). Pleistocene; North Carolina.
- Mitchell, S. L. 1826 A, 7, 8. Pleistocene (Navesink Hills); New York.
- Newberry, J. S. 1870 D, 28 ("horse"). Pliocene or Pleistocene (Idaho beds); Idaho.
- Nomland, J. O. 1916 A, 83 (Equus or Pliohippus). Pleistocene (Jacalitos); California.
- Obalski, T. 1904 A, 216 ("cheval"). Pleistocene; Alaska.
- Osborn, H. F. 1910 B, 368 ("Equus"). Pleistocene (Peace Creek); Florida, Alaska: 490 ("Equus"); Alaska: 468 ("horse"); Pleistocene (Lake Lahontan); Nevada.
- Paret, T. D. 1894 A, 97 ("horse").
- Peterson, O. A. 1917 A, 474. Pleistocene (Middle); Virginia.  
 1926 A, 274. Pleistocene; Pennsylvania.
- Quackenbush, L. S. 1909 A, 91-93.
- Ransome, F. L. 1919 A, 74 (Equus complicatus). Pleistocene (Gila conglomerate); Arizona.
- Ross, C. P. 1923 A, 75. Pleistocene (Gila conglomerate); Arizona.
- Russell, I. C. 1885 A, 238 ("horse"). Pleistocene (Lake Lahontan); Nevada.
- Schmidt, E. 1872 A, 254 ("pferd"). Pleistocene (Table Mountain); California.
- Sellards, E. H. 1916 D, 616. Pleistocene; Florida.
- Shimek, B. 1910 A, 130, seq.  
 1912 A, 140, 143, 145 ("horse").
- Sinclair, W. J. 1904 A, 20. Pleistocene; California: (Fossil Lake); Oregon.  
 1904 B, 11. Pleistocene; Nevada.
- Smith, D. T. 1904 A, 11 ("horse"). Pleistocene (Lahontan); Nevada.
- Stephenson, L. W. 1912 B, 268 ("horse"). Pleistocene; North Carolina.
- Stock, C. 1924 A, 11 ("horse").  
 1925 A, 113, 201. Pleistocene; California.
- Todd, J. E. 1900 A, 99 ("horse"). Sioux Falls, South Dakota.
- Turner, H. W. 1906 A, 275 (Texas).
- Whitney, J. D. 1865 A, 102, 242, 251, 282 ("horse"). Pleistocene; California.  
 1879 B, 261 ("horse"); California.
- Whittelsey, C. 1848 A, 215 ("horse").

- Whittelsey, C. 1866 A, 16 ("horse"). Pleistocene; Ohio, New York.  
 Wyman, J. 1875 A, 35, 42, 81 ("extinct horse").  
 Young and Cooper 1926 A, 5 ("horse").  
 1927 A, 2 ("horse").

*Superfamily BRONTOTHERIOIDÆ, new form.*

- Hay, O. P. 1902 A, 629 (Brontotherioidea).  
 Abel, O. 1912 D, 608 ("titanotherien").  
 Case, E. C. 1898 C, 333 (Titanotheroidæ).  
 Gadley, J. W. 1912 B, 179 (Titanotherioidea).  
 Gregory, W. K. 1920 A, 247 (Titanotherioidea).  
 Hay, O. P. 1927 E, 77 ("titanotheres").  
 Howes, G. B. 1902 A, 523 (Titanotheria).  
 Osborn, H. F. 1903 G, 835 ("titanotheres").  
 1910 B, 556 (Titanotherioidea).  
 Schlosser, M. 1901 B, 300 (Titanotherioidea).  
 Weber and Abel 1923 A, 426, 626, 684 (Titanotherioidea).

LAMBDOOTHERIIDÆ Cope.

- Cope, E. D. 1889 R, 629.  
 Hay, O. P. 1902 A, 629 (Lambdotheriinae).  
 Abel, O. 1913 B, 730, 754a (Palæosyopinae).  
 1914 A, 251 (Palæosyopinae).  
 1919 A, 367 (Palæosyopinae).  
 Ameghino, F. 1902 B, 10 (Palæosyopinae).  
 Arldt, T. 1907 D, 253 (Palæosyopinae).  
 Osborn, H. F. 1910 B, 556 (Palæosyopidae).  
 Palacký, J. 1903 B, 306 ("palæosyopinen").  
 Riggs, E. S. 1912 A, 25, 40 (Dolichorinae).  
 Trouessart, E. L. 1905 A, 618 (Palæosyopinae).  
 Weber, M. 1904 A, 614, 617 (Palæosyopidae).  
 Weber and Abel 1923 A, 426, 650, 684 (Palæosyopidae).  
 Zittel and Schlosser 1911 A, 465 (Palæosyopinae).  
 1923 A, 551, 669 (Palæosyopinae).

LAMBDOOTHERIUM Cope. Type *L. popoagicum* Cope.

- Hay, O. P. 1902 A, 629.  
 Abel, O. 1922 C, 260, fig. 212.  
 Arldt, T. 1907 D, 253.  
 Granger, W. 1910 A, 246.  
 1914 A, 202.  
 Gregory, W. K. 1910 A, 336, 387.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 1926 C, 169, fig. 26.  
 1928 B, 967, 979, figs. 10, 15.  
 Osborn, H. F. 1897 I, 107.  
 1907 G, 175, figs. 167, 168.  
 1909 D, 23, 128.  
 1910 B, 124, 130, 134, 178, 556.  
 1912 G, 226, fig. 3.  
 1914 B, 403.  
 1919 B, 558.  
 Palmer, T. S. 1904 A, 363, 942.  
 Schlosser, M. 1901 E, 150.  
 Schuchert, C. 1910 A, 599.  
 Schuchert and Levene 1927 A, 347.  
 Scott, W. B. 1913 A, 275, 315.  
 Seeley, H. G. 1886 A, 476.  
 Sinclair and Granger 1911 B, 723.  
 Trouessart, E. L. 1905 A, 618.  
 Weber, M. 1904 A, 617, 620.  
 Zittel and Schlosser 1911 A, 465.  
 1923 A, 551, 666.  
 Lambdotherium popoagicum Cope.  
 Hay, O. P. 1902 A, 629.  
 Loomis, F. B. 1907 B, 357, 362, fig. 2 (L. primævum).  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1908 A, 599, figs. 1-3.  
 1909 D, 46, 47, 49 (L. popoagicum); 38, 48 (L. primævum).  
 1913 C, 414, figs. 4A, 7B, 9I-L.  
 1919 B, 559.  
 Schlosser, M. 1901 E, 150.  
 Sinclair and Granger 1911 A, 91, 108 (L. primævum a syn.).  
 Trouessart, E. L. 1905 A, 618.  
 Lower Eocene (Wasatch and Wind River); Wyoming, New Mexico.  
 Lambdotherium priscum Osborn.  
 Osborn, H. F. 1913 C, 413, figs. 7a, 9a-e.  
 Abel, O. 1922 C, 259, fig. 211.  
 Osborn, H. F. 1919 B, 559, 560, fig. 3.  
 Lower Eocene (Wind River); Wyoming.  
 Lambdotherium progressum Osborn.  
 Osborn, H. F. 1913 C, 415, figs. 8, 9f-h.  
 1919 B, 559, 560, fig. 2.  
 Lower Eocene (Wind River); Wyoming.

**Lambdotherium magnum** Osborn.

- Osborn, H. F. 1919 B, 559, 562, fig. 3.  
 Lower Eocene (Huerfano); Colorado.

EOTITANOPS Osborn. Type *Palæosyops borealis* Cope.

- Osborn, H. F. 1907 A, 242.  
 Abel, O. 1922 C, 271.  
 Christman, E. S. 1921 A, 621, fig.  
 Granger, W. 1910 A, 243, 246.  
 1914 A, 202.  
 Gregory, W. K. 1912 F, 285.  
 1921 B, 621.  
 Haug, E. 1911 A, 1528.  
 Lydekker, R. 1915 C, 621, fig. 2.  
 Matthew, W. D. 1909 C, 102.  
 1926 C, 170, fig. 26.  
 1928 B, 967, 979, fig. 15.  
 Osborn, H. F. 1908 A, 600.  
 1909 D, 23, 44, 45.  
 1910 B, 130, 134, 556.  
 1912 B, 258, 263, figs. 3, 4.  
 1912 G, 236, fig. 3.  
 1912 L, 184, figs. 3, 4.



Osborn, H. F. 1913 C, 407.

1914 B, 403.

1914 C, 406.

1915 B, 215, figs. 4, 5

1917 B, 263, 264, figs.

1919 B, 558.

Schuchert and Levene 1927 A, 347, fig.

Scott, W. B. 1913 A, 275, 291, 315.

Zittel and Schlosser 1923 A, 551, 666.

### **Eotitanops borealis (Cope).**

Hay, O. P. 1902 A, 631 (Telmatherium).

Granger, W. 1910 A, 243.

Gregory, W. K. 1910 A, 394, fig. 24.

Matthew, W. D. 1909 C, 95.

Osborn, H. F. 1897 I, 107 (Telmatherium).

1908 A, 600, fig. 4.

1909 D, 44, 46, 48.

1913 C, 409, figs. 3, 4d, 5b.

1917 B, 264, fig.

1919 B, 562.

Peterson, O. A. 1914 B, 57 (Titanops).

Lower Eocene (Wind River); Wyoming.

### **Eotitanops brownianus (Cope).**

Cope, E. D. 1881 D, 196 (Lambdotherium).

Hay, O. P. 1902 A, 631 (Telmatherium boreale, in part).

Granger, W. 1910 A, 343.

Matthew, W. D. 1909 C, 95.

Osborn, H. F. 1908 A, 601.

1909 D, 46.

1913 C, 408, figs. 2, 4c.

1919 B, 559, 563, fig. 4.

Schlosser, M. 1901 E, 150 (Palaeosyops).

Lower Eocene (Wind River); Wyoming.

### **Eotitanops gregoryi Osborn.**

Osborn, H. F. 1913 C, 408, figs. 1, 4B, 5A.

1917 B, 265.

1919 B, 559, 564, fig. 4.

Lower Eocene (Wind River); Wyoming.

### **Eotitanops major Osborn.**

Osborn, H. F. 1913 C, 412, figs. 5D, 6.

1919 B, 562.

Lower Eocene (Wind River); Wyoming.

### **Eotitanops minimus Osborn.**

Osborn, H. F. 1919 B, 559, 564, fig. 4.

Lower Eocene (Huerfano); Colorado.

### **Eotitanops princeps Osborn.**

Osborn, H. F. 1913 C, 410, figs. 4E, 5C.

1919 B, 562.

Lower Eocene (Wind River); Wyoming.

## **PALÆOSYOPS Leidy. Type *P. paludosus* Leidy.**

Hay, O. P. 1902 A, 630.

Abel, O. 1922 C, 263, fig. 213.

1926 B, 340, fig. 226.

Ardt, T. 1907 D, 253.

Beddard, F. E. 1902 A, 266.

Case, E. C. 1898 C, 338.

Christman, E. S. 1921 A, 625, fig.

Cope, E. D. 1880 U, 154.

Depéret, C. 1912 A, 707.

Dollo, L. 1889 C, 630.

Gaudry, A. 1898 A, 128.

Granger, W. 1909 A, 22.

Gregory, W. K. 1912 F, 285.

1917 D, 630.

1921 B, 625.

Gidley, J. W. 1917 A, 433.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 372.

Matthew, W. D. 1909 C, 102.

1924 E, 748.

1926 C, 170, fig. 26.

1928 B, 967, 979, 983, fig. 15.

Osborn, H. F. 1897 I, 107.

1905 I, 100, pl. iii, fig. 1.

1905 L, 568.

1907 G, 162, figs. 135, 170.

1908 D, 750, figs. 1, 3.

1909 D, 49, 54.

1910 A, 206.

1910 B, 626, fig. 61.

1912 B, 258, fig. 3.

1912 L, 177, 184, figs. 1, 3.

1914 B, 403.

1914 C, 406.

1915 C, 215, fig. 5.

1919 B, 558.

1925 C, 750.

Palmer, R. W. 1913 A, 886.

Palmer, T. S. 1904 A, 504, 942.

Reynolds, S. H. 1897 A, 432.

Sauvage, H. E. 1882 A, 106 (Palaeosyops).

Schlosser, M. 1898 C, 373.

Scott, W. B. 1913 A, 272, 317, 318, figs. 165, 166.

Seeley, H. G. 1886 A, 476.

Trouessart, E. L. 1905 A, 619.

Wallace, A. R. 1876 A, 1, 136.

Weber, M. 1904 A, 617.

Weber and Abel 1928 A, 684.

Zittel and Schlosser 1911 A, 465.

1923 A, 551, 667.

### **Palaeosyops copei Osborn.**

Osborn, H. F. 1908 A, 606, fig. 10.

Depéret, C. 1892 A, 68, 75.

Gregory, W. K. 1917 D, 630.

Osborn, H. F. 1898 V, 206.

Steinmann, G. 1907 A, 489.

Middle Eocene (Bridger); Wyoming.

### **Palaeosyops fontinalis Cope.**

Cope, E. D. 1873 EE, 1.

Hay, O. P. 1902 A, 630 (Limnocyops).

Matthew, W. D. 1909 C, 98.

Osborn, H. F. 1919 B, 557, 559, 564, 565, fig. 5.

Middle Eocene (Bridger); Wyoming.

### **Palaeosyops grangeri Osborn.**

Osborn, H. F. 1908 A, 604, fig. 2.

Middle Eocene (Bridger); Wyoming.

### **Palaeosyops humilis Leidy.**

Hay, O. P. 1902 A, 630.

Matthew, W. D. 1909 C, 98.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops junior** Leidy.

Hay, O. P. 1902 A, 630.

Eocene (Bridger); Wyoming.

**Palaeosyops laevicens** Cope.

Cope, E. D. 1873 EE, 1 (Limnohyus).

Hay, O. P. 1902 A, 630.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops leidyi** Osborn.

Osborn, H. F. 1908 A, 604, fig. 8.

Abel, O. 1913 B, 755a, fig. 106.

1922 C, 263, fig. 220.

Gregory, W. K. 1916 A, 245, fig. 4.

1917 D, 630.

Osborn, H. F. 1910 B, 163, fig. 63.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops longirostris** Earle.

Hay, O. P. 1902 A, 631.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops major** Leidy.

Hay, O. P. 1902 A, 631 (P. paludosus, in part).

Abel, O. 1919 A, 868, fig. 664 (P. maior).

1922 C, 263, fig. 219 (P. maior).

Gregory, W. K. 1917 D, 630.

Osborn, H. F. 1904 F, 3, 26.

1921 D, 3, fig. 1.

Weber and Abel 1928 A, 634, fig. 470.

**LIMNOHYOPS** Marsh. Type *L. laticeps* Marsh.

Hay, O. P. 1902 A, 630.

Dollo, L. 1889 C, 680 (Limnohyus).

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 102.

Osborn, H. F. 1914 B, 403.

Palmer, T. S. 1904 A, 376, 942.

Trouessart, E. L. 1905 A, 618.

Wallace, A. R. 1876 A, 136 (Limnohyus).

Zittel and Schlosser 1911 A, 465.

1923 A, 551, 667.

**Limnohyops laticeps** Marsh.

Hay, O. P. 1902 A, 630.

Matthew, W. D. 1909 C, 98.

Osborn, H. F. 1897 I, 107 (Palaeosyops).

**HETEROTITANOPS** Peterson. Type *H. parvus* Peterson.

Peterson, O. A. 1914 B, 53.

**TELMATHERIUM** Marsh. Type *T. validum* Marsh.

Hay, O. P. 1902 A, 631.

Abel, O. 1922 C, 263.

Beddard, F. E. 1902 A, 267 (Telmatotherium).

Granger, W. 1909 A, 22.

Gregory, W. K. 1910 A, 188, 192.

1912 A, 546.

1916 A, 251, fig. 9.

1927 E, 345.

Matthew, W. D. 1909 C, 102.

1926 C, 170, fig. 26.

1928 B, 967, 979, fig. 15.

Zittel and Schlosser 1911 A, 464, fig. 646.

1923 A, 551, fig. 685.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops paludosus** Leidy.

Hay, O. P. 1902 A, 631.

Baird, S. F. 1876 A, 322 (P. agenus, error for P. diaconus?).

Cope, E. D. 1872 SS, 1.

1873 EE, 1 (P. paludosus, Limnohyus robustus).

Gregory, W. K. 1917 D, 630.

Marsh, O. C. 1884 F, fig. 69 (P. robustus).

Matthew, W. D. 1909 C, 98 (Limnohyops diaconus, P. major, P. paludosus, P. robustus).

Merrill, G. P. 1907 A, 53.

Osborn, H. F. 1897 I, 107.

1902 A, 80, fig. 2.

1904 F, 43 ("Palaeosyops").

Trouessart, E. L. 1905 A, 619.

Middle Eocene (Bridger); Wyoming.

**Palaeosyops ultimus** Matthew.

Hay, O. P. 1902 A, 631.

Matthew, W. D. 1909 C, 99 (Manteoceras).

Upper Eocene (Uinta); Utah.

**Palaeosyops** sp. *indet.*

Hills, R. C. 1889 A, 222. Eocene (Huerfano); Colorado.

Trouessart, E. L. 1905 A, 618.

Middle Eocene (Bridger); Wyoming.

**Limnohyops matthewi** Osborn.

Osborn, H. F. 1908 A, 602, fig. 6.

Middle Eocene (Bridger); Wyoming.

**Limnohyops monoconus** Osborn.

Osborn, H. F. 1908 A, 603, fig. 7.

Eocene; Wyoming.

**Limnohyops priscus** Osborn.

Osborn, H. F. 1908 A, 601, fig. 5.

Middle Eocene (Bridger); Wyoming.

**Heterotitanops parvus** Peterson.

Peterson, O. A. 1914 B, 53, pl. xi; text-figs.

1, 2.

Upper Eocene (Uinta); Utah.

**Teilmatherium validum** Marsh.

Osborn, H. F. 1897 I, 107 (Telmatotherium).

1905 I, 100, pl. iii, fig. 2 (Telmatotherium).

1910 B, 164, 556.

1912 B, 258, fig. 3.

1912 L, 184, fig. 3.

1914 B, 403.

1915 B, 215, fig. 5.

1925 E, 8.

Palmer, T. S. 1904 A, 667, 942.

Schlosser, M. 1899 S, 320 (Telmatotherium).

Scott, W. B. 1913 A, 291.

Trouessart, E. L. 1905 A, 619 (*Telmatotherium*).  
 Weber, M. 1904 A, 618 (*Telmatotherium*).  
 Zittel and Schlosser 1911 A, 465.  
 1923 A, 551, 667-670.

**Telmatherium accola** Cook.

Cook, H. J. 1926 B, 16, pls. ix-x, fig. 3.  
 Lower Oligocene (Chadron); Colorado.

**Telmatherium advocatum** Cook.

Cook, H. J. 1926 B, 17, pls. ix, xi (*T. advocata*).  
 Lower Oligocene (Chadron); Colorado.

**Telmatherium altidens** Osborn.

Osborn, H. F. 1908 A, 614, fig. 18 (*This genus?*).  
 Upper Eocene (Uinta); Utah.

**Telmatherium cultridens** (Scott and Osborn).

Hay, O. P. 1902 A, 631.  
 Gregory, W. K. 1910 A, 192, fig. 13.  
 1927 E, 347.  
 Matthew, W. D. 1909 C, 98.  
 Middle Eocene (Bridger); Wyoming.

**Telmatherium? marshii** (Hay).

Hay, O. P. 1902 A, 776 (*Canis*).  
 Matthew, W. D. 1909 D, 340 ("*Canis*"); 341 (*Telmatherium?*).

**STHENODECTES** Gregory. Type *Telmatherium incisivum* Douglass.

Gregory, W. K. 1912 A, 546.  
 Osborn, H. F. 1914 B, 403.  
 Riggs, E. S. 1912 A, 38, 41.

Trouessart, E. L. 1904 A, 216 (*Vulpavus*).  
 A species of doubtful position.  
 Middle Eocene (Bridger), Wyoming.

**Telmatherium ultimum** Osborn.

Osborn, H. F. 1908 A, 613, fig. 17.  
 Abel, O. 1922 C, 263, fig. 221.  
 Gregory, W. K. 1912 A, 546.  
 1927 J, 441.  
 Upper Eocene (Uinta); Utah.

**Telmatherium validum** Marsh.

Hay, O. P. 1902 A, 632.  
 Matthew, W. D. 1909 C, 98.  
 Trouessart, E. L. 1905 A, 619.  
 Middle Eocene (Bridger); Wyoming.

**Telmatherium validens** (Cope).

Cope, E. D. 1872 SS, 1 (*Palaeosyops*).  
 Hay, O. P. 1902 A, 632.  
 Matthew, W. D. 1909 C, 98.  
 Schlosser, M. 1899 G, 168 (*Manteoceras*).  
 Trouessart, E. L. 1905 A, 619 (*Syn. of T. validum*).  
 Middle Eocene (Bridger and Washakie); Wyoming.

**Telmatherium sp. indet.**

Matthew, W. D. 1909 C, 99. Eocene (Uinta); Wyoming, Utah.

**DIPLACODON** Marsh. Type *D. elatus* Marsh.

Hay, O. P. 1902 A, 632.  
 Abel, O. 1922 C, 263, fig. 218.  
 1926 B, 340, fig. 226.  
 Arldt, T. 1907 D, 253.  
 Case, E. C. 1898 C, 838.  
 Dollo, L. 1889 C, 680.  
 Eastman, C. R. 1913 B, 677.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 1924 E, 748.  
 1923 B, 967.  
 Osborn, H. F. 1909 D, 23, 54.  
 1910 B, 169, 170, 206, 556.  
 1912 G, 237, 239.  
 1914 B, 403.  
 Palmer, T. S. 1904 A, 236, 942.  
 Schlosser, M. 1899 G, 167.  
 1899 S, 320.

**MANTEOCERAS** Hatcher. Type *Palaeosyops manteoceras* Osborn.

Hay, O. P. 1902 A, 632.  
 Abel, O. 1922 C, 263, fig. 218.  
 1926 B, 340, fig. 226.  
 Beddard, F. E. 1902 A, 267.  
 Granger, W. 1909 A, 22.  
 1912 A, 546.

**Sthenodectes incisivus** (Douglass).

Douglass, E. 1910 A, 305, pl. xiii, fig. 1; text-figs. 1-3 (*Telmatherium?*).  
 Gregory, W. K. 1912 A, 546.  
 Riggs, E. S. 1912 A, 38, 39, pl. xii.  
 Upper Eocene (Uinta); Utah.

**Diplacodon elatus** Marsh.

Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 206, 313, 317, fig. 165.  
 Trouessart, E. L. 1905 A, 620.  
 Weber, M. 1904 A, 617.  
 Weber and Abel 1928 A, 684.  
 Zittel and Schlosser 1911 A, 465.  
 1923 A, 552, 669.  
 Hay, O. P. 1902 A, 632.  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1914 A, 29, 36, pl. ix (*D. elatum*).  
 Upper Eocene (Uinta); Utah.

**Diplacodon sp. indet.**

Matthew, W. D. 1909 C, 99. Upper Eocene (Uinta); Utah.

**Gregory, W. K. 1920 A, 197, fig. 174.**

1927 E, 347.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 Osborn, H. F. 1905 I, 100, pl. iii, fig. 3.  
 1908 A, 606.

- Osborn, H. F. 1909 D, 53.  
 1910 A, 206.  
 1910 B, 17, 139, 142, 164, 167, 556, fig. 49.  
 1912 B, 258, fig. 3.  
 1912 G, 241, fig. 6.  
 1912 L, 177, 184, figs. 1, 3.  
 1914 B, 403.  
 1915 B, 215, fig. 5.  
 1925 E, 2.

Palmer, T. S. 1904 A, 399, 942.

Scott, W. B. 1913 A, 272, 317, fig. 165.

### **Manteoceras foris** Cook.

Cook, H. J. 1926 B, 18, pl. vii.

Lower Oligocene (Chadron); Colorado.

### **Manteoceras manteoceras** (Osborn).

Hay, O. P. 1902 A, 632.

Abel, O. 1919 A, 868, fig. 664.

Matthew, W. D. 1909 C, 98.

Osborn, H. F. 1897 I, 107 (Palaeosyops).

1902 A, 80 (Limnocypris).

1902 E, 360 (Palaeosyops).

1908 A, 606.

Osborn, H. F. 1917 B, 264, fig.

1921 D, 3, fig. 1.

Trouessart, E. L. 1905 A, 619 (Limnocypris).

Middle Eocene (Bridger); Wyoming.

### **Manteoceras pratensis** Cook.

Cook, H. J. 1926 B, 18, pl. viii.

Lower Oligocene (Chadron); Colorado.

### **Manteoceras uintensis** Douglass.

Douglass, E. 1910 A, 307, pl. xii, fig. 4; text-figs. 4, 5.

Upper Eocene (Uinta), Utah.

### **Manteoceras washakiensis** Osborn.

Osborn, H. F. 1908 A, 607, fig. 11.

Granger, W. 1909 A, 21, fig. 2.

Middle Eocene (Washakie); Wyoming.

### **Manteoceras** sp. indet.

Cook, H. J. 1926 B, 18, pl. xi. Oligocene (Chadron); Colorado

Matthew, W. D. 1909 C, 99. Upper Eocene (Uinta); Wyoming.

## **Protitanotherium** Hatcher. Type *Diplacodon emarginatus* Hatcher.

Hatcher, J. B. 1895 A, 1084.

Hay, O. P. 1902 A, 632 (Diplacodon, in part).

Gregory, W. K. 1927 E, 338, 345.

1927 J, 442

Matthew, W. D. 1924 E, 748.

1926 C, 170, fig. 26.

1928 B, 979, fig. 15.

Osborn, H. F. 1910 B, 142, 169, 556, fig. 49.

1912 G, 239.

1914 B, 403.

1925 E, 1, 6.

Palmer, T. S. 1904 A, 580, 942.

Peterson, O. A. 1914 A, 29.

1914 F, 220.

Scott, W. B. 1913 A, 266, 313.

Zittel and Schlosser 1911 A, 466.

1923 A, 553, 609.

## **Protitanotherium emarginatum** Hatcher.

Hay, O. P. 1902 A, 633 (Diplacodon).

Gregory, W. K. 1927 E, 338.

Matthew, W. D. 1909 C, 99 (Diplacodon).

Osborn, H. F. 1904 F, 4 (Diplacodon).

1917 B, 264, fig.

1925 E, 7.

Peterson, O. A. 1914 A, 31.

Schlosser, M. 1899 G, 168 (Diplacodon).

Upper Eocene (Uinta); Utah.

## **Protitanotherium superbum** Osborn.

Osborn, H. F. 1908 A, 615, fig. 19.

1925 E, 1, 7.

Upper Eocene (Uinta); Utah.

## **Dolichorhinus** Hatcher. Type *Telmatherium cornutum* Osborn.

Hay, O. P. 1902 A, 632.

Granger, W. 1909 A, 22.

Gregory, W. K. 1912 A, 546.

1927 E, 345.

Matthew, W. D. 1909 C, 102.

1926 C, 170, fig. 26.

Osborn, H. F. 1905 I, 100, pl. iii, fig. 4.

1908 D, 750, figs. 1, 2.

1909 D, 53.

1910 B, 613.

1912 B, 258, fig. 3.

1912 G, 237, 241, fig. 6.

1912 L, 177, fig. 1.

1914 B, 405.

1915 B, 215, fig. 5.

1919 B, 569.

1925 E, 1.

Peterson, O. A. 1924 A, 405, 430.

Riggs, E. S. 1912 A, 31, 40.

Scott, W. B. 1913 A, 272, 291.

Weber and Abel 1923 A, 684.

Zittel and Schlosser 1911 A, 465.

1923 A, 551, 608.

## **Dolichorhinus cornutus** (Osborn).

Hay, O. P. 1902 A, 632.

Abel, O. 1919 A, 868, fig. 664.

Beddard, F. E. 1902 A, 267 (Telmatherium).

Matthew, W. D. 1902 C, 99.

Osborn, H. F. 1901 A, 80, fig. 2 (Telmatherium).

1902 E, 360 (Telmatherium).

1909 D, 54, 57.

Peterson, O. A. 1924 A, 408, 431, text-figs. 5-7.

Riggs, E. S. 1912 A, 31.

Schlosser, M. 1899 G, 168 (Telmatherium).

Zittel and Schlosser 1911 A, 465, fig. 647 (Telmatherium).

1923 A, 552, fig. 686 (Telmatherium).

Upper Eocene (Uinta); Utah.

**Dolichorhinus fluminalis** Riggs.

- Riggs, E. S. 1912 A, 33, pl. x.  
 Holland and Peterson 1913 A, 233.  
 Peterson, O. A. 1924 A, 437, 442, text-figs. 16-18.  
 Upper Eocene (Uinta); Utah.

**Dolichorhinus heterodon** Douglass.

- Douglass, E. 1910 A, 310, pl. xiii, fig. 3; text-figs. 6, 7.  
 Peterson, O. A. 1924 A, 435, figs. 8, 9.  
 Riggs, E. S. 1912 A, 32.  
 Upper Eocene (Uinta); Utah.

**Dolichorhinus hyognathus** (Scott and Osborn).

- Hay, O. P. 1902 A, 632 (Telmatherium).  
 Abel, O. 1919 A, 867, fig. 663.  
 1922 C, 267, 271, figs. 225, 228.  
 Granger, W. 1909 A, 19.  
 Matthew, W. D. 1909 C, 98 (Telmatherium).  
 Osborn, H. F. 1908 A, 611, fig. 16.  
 1921 D, 3, fig. 1.  
 1925 E, 2.  
 Peterson, O. A. 1924 A, 408, 410, 430, text-fig. 4.  
 Riggs, E. S. 1912 A, 32.  
 Weber and Abel 1928 A, 685, fig. 471.  
 Upper Eocene (Washakie); Wyoming.

**Dolichorhinus intermedius** Osborn.

- Osborn, H. F. 1908 A, 611, fig. 15.  
 Peterson, O. A. 1924 A, 431, 439, text-fig. 12.  
 Riggs, E. S. 1912 A, 32.  
 Upper Eocene (Uinta); Utah.

**Dolichorhinus longiceps** Douglass.

- Douglass, E. 1910 A, 312, pl. xiii, fig. 2; pls. xiv, xv; text-fig. 8.  
 Peterson, O. A. 1914 D, 129, figs. 1-7 (This species?).  
 1924 A, 406, 437, pls. xlv-lvii; text-figs. 2, 3, 10, 11.  
 Riggs, E. S. 1912 A, 32, pl. ix, figs. 1, 2.  
 Upper Eocene (Uinta); Utah.

**Dolichorhinus superior** (Riggs).

- Riggs, E. S. 1912 A, 26, 39, pl. vi (Mesatirhinus).  
 Peterson, O. A. 1923 C, 436 (Mesatirhinus); 440, text-figs. 13, 14 (Dolichorhinus).  
 Scott, W. B. 1913 A, 271, 314, figs. 140, 163 (Mesatirhinus).  
 Upper Eocene (Uinta); Utah.

**Dolichorhinus** sp. indet.

- Holland, W. J. 1919 A, 38. Upper Eocene (Uinta); Utah.  
 Matthew, W. D. 1909 C, 99. Upper Eocene (Uinta); Wyoming.

## TANYORHINUS Cook.

- Cook, H. J. 1926 B, 13.

**Tanyorhinus blairi** Cook.

- Cook, H. J. 1926 B, 13, pls. i-iii.  
 Young and Cooper 1927 A, 2.  
 Lower Oligocene (Chadron); Colorado.

Type *T. blairi* Cook.**Tanyorhinus bridgeri** Cook.

- Cook, H. J. 1926 B, 15, pls. iv-vi.  
 Lower Oligocene (Chadron); Colorado.

**Tanyorhinus harundivorax** Cook.

- Cook, H. J. 1926 B, 16, pl. x, fig. 2.  
 Lower Oligocene (Chadron); Colorado.

MESATIRHINUS Osborn. Type *Palaeosyops megarhinus* Earle.

- Osborn, H. F. 1908 A, 608.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1912 A, 546.  
 1927 E, 347.  
 Osborn, H. F. 1909 D, 51-53.  
 1910 A, 206.  
 1910 B, 164, 556.  
 1912 G, 241, fig. 6.  
 1914 B, 405.  
 1919 B, 568, 569.  
 Peterson, O. A. 1914 D, 138.  
 Riggs, E. S. 1912 A, 26, 40.  
 Zittel and Schlosser 1911 A, 465.  
 1923 A, 551.

**Mesatirhinus megarhinus** (Earle).

- Hay, O. P. 1902 A, 632 (Telmatherium).  
 Matthew, W. D. 1909 C, 98 (Telmatherium).  
 Osborn, H. F. 1909 D, 52-54.  
 1919 B, 569.  
 Peterson, O. A. 1924 A, 441.  
 Middle Eocene (Bridger); Wyoming.

**Mesatirhinus petersoni** Osborn.

- Osborn, H. F. 1908 A, 608, fig. 12.  
 Gregory, W. K. 1910 A, 395, fig. 25.  
 Peterson, O. A. 1924 A, 441.  
 Riggs, E. S. 1912 A, 39.  
 Middle Eocene (Washakie, Bridger); Wyoming.

EOTITANOTHERIUM Peterson. Type *Diploceras osborni* Peterson.

- Peterson, O. A. 1914 F, 220.  
 Gregory, W. K. 1927 J, 442.  
 Peterson, O. A. 1914 A, 30 (Diploceras, pre-occupied).  
 1914 D, 136.  
 1924 A, 417.

**Eotitanotherium osborni** (Peterson).

- Peterson, O. A. 1914 A, 30, pls. vi-vii, v; text-figs. 1-15 (Diploceras).  
 1924 A, 424.  
 Upper Eocene (Uinta); Utah.

SPHENOCCELUS Osborn. Type *S. uintensis* Osborn.

- Hay, O. P. 1902 A, 691.  
Holland and Peterson 1913 A, 215.  
Osborn, H. F. 1914 B, 405.  
Palmer, T. S. 1904 A, 640, 909.  
Peterson, O. A. 1924 A, 409.

**Sphenocelus uintensis** Osborn.

- Hay, O. P. 1902 A, 691.  
Holland and Peterson 1913 A, 215.  
Upper Eocene (Uinta); Utah.

EOMETARHINUS Osborn. Type *E. huerfanensis* Osborn.

- Osborn, H. F. 1919 B, 568.

**Eometarhinus huerfanensis** Osborn.

- Osborn, H. F. 1919 B, 568, fig. 7.  
Lower Eocene (Huerfano); Colorado.

METARHINUS Osborn. Type *M. fluviatilis* Osborn.

- Osborn, H. F. 1908 A, 609.  
Gregory, W. K. 1912 A, 546.  
Huene, F. 1911 E, 107.  
Osborn, H. F. 1910 B, 166, 168, 556.  
1914 B, 405.  
1919 B, 568, 569.  
1925 E, 2.

- Riggs, E. S. 1912 A, 27, 40.

**Metarhinus cristatus** Riggs.

- Riggs, E. S. 1912 A, 27, 28, pl. ix, fig. 3.  
Upper Eocene (Uinta); Utah.

**Metarhinus earlei** Osborn.

- Osborn, H. F. 1908 A, 610, fig. 14.  
Granger, W. 1909 A, 19.  
Gregory, W. K. 1912 A, 546.  
Riggs, E. S. 1912 A, 29, pl. viii; pl. xi, fig. 1.  
Middle Eocene (Washakie); Wyoming.

**Metarhinus fluviatilis** Osborn.

- Osborn, H. F. 1908 A, 609, fig. 13.  
Riggs, E. S. 1912 A, 27.  
Upper Eocene (Uinta); Wyoming.

**Metarhinus riparius** Riggs.

- Riggs, E. S. 1912 A, 27, 28, pl. vii.  
Upper Eocene (Uinta); Utah.

RHADINORHINUS Riggs. Type *R. abbotti* Riggs.

- Riggs, E. S. 1912 A, 36, 39, 41.  
Osborn, H. F. 1914 B, 405.  
1919 B, 569.

**Rhadinorhinus abbotti** Riggs.

- Riggs, E. S. 1912 A, 36, pl. xi, figs. 2, 3.  
Upper Eocene (Uinta); Utah.

**Rhadinorhinus diploconus** (Osborn).

- Hay, O. P. 1902 A, 631 (Telmatherium).  
Matthew, W. D. 1909 C, 99 (Telmatherium).  
Riggs, E. S. 1912 A, 37, 39.  
Upper Eocene (Uinta); Utah.

## BRONTOTHERIIDÆ Marsh.

Unless otherwise indicated the authors cited employ the name Titanotheriidae for this family.

- Marsh, O. C. 1873 H, 486 (Brontotheriidae).  
Hay, O. P. 1902 A, 629.  
Abel, O. 1912 D, 599 ("titanotheriden").  
1912 F, 645 ("titanotherien").  
1913 B, 730, 754a.  
1914 A, 240.  
1919 A, 865.  
1920 A, 451 ("titanotheriiden").  
1922 C, 263, 271 ("titanotheriiden").  
1926 B, 340 ("titanotheriiden").  
Andrews, C. W. 1903 C, 1 ("titanotheres").  
Arlt, T. 1907 D, 685 (Titanotheriidae).  
1912 A, 700 (Titanotheriidae).  
Bassler, R. S. 1919 A, 61 ("titanotheres").  
Boddard, F. E. 1902 A, 264.  
Delafontaine, M. 1875 A, 174 ("brontothérides").  
Depéret, C. 1912 A, 708 ("titanothéridés").  
Dollo, L. 1889 C, 679 (Brontotheriidae).  
Flower, W. H. 1876 B, xiii, 327 (Titanotheriidae).  
1876 C, 109 (Titanotheriidae).  
Fraas, E. 1902 C, lxxvii (Titanotherium).  
Gidley, J. W. 1917 A, 432 ("titanotheres").  
Gregory, W. K. 1912 E, 15 ("titanotheres").

- Gregory, W. K. 1912 F, 294.  
1914 D, 294 ("titanotheres").  
1927 A, 601 ("titanotheres").  
1927 E, 345 ("titanotheres").  
Hoernes, R. 1886 A, 668 (Brontotheriidae).  
Leche, W. 1887 A.  
Lee, Stone, Gale 1915 A, 39 ("titanotheres").  
Lydekker, R. 1914 A, 635.  
Matthew, W. D. 1909 C, 95, 98, 102, 104, 111.  
1914 B, 386.  
1917 A, 577.  
1921 D, 214.  
1926 C, 168, 169, fig. 26 ("titanotheres").  
1928 B, 968, 980 ("titanotheres").  
O'Hara, C. C. 1910 A, 98.  
1920 A, 110.  
Osborn, H. F. 1897 I, 107 ("titanotheres").  
1902 A, 79 ("titanotheres").  
1902 B, 91 ("titanotheres").  
1902 E, 359 ("titanotheres").  
1905 B, 28 ("titanotheres").  
1905 D, 315 ("titanotheres").  
1905 H, 219, 224, fig. 7.  
1905 I, 100 ("titanotheres").  
1906 C, 841, 847, 857 ("titanotheres").  
1907 G, 175 ("titanotheres").

Osborn, H. F. 1908 B, 148 ("titanotheres").

1908 C, 255 ("titanotheres").

1909 D, 41, 52, 59, 61.

1910 B, 556, 633 (Titanotheridae).

1910 C, 80 ("titanotheres").

1911 A, 825 ("titanotheres").

1912 B, 252 ("titanotheres").

1912 C, 595 ("titanotheres").

1912 E, 144 ("titanotheres").

1912 F, 279 ("titanotheres").

1912 L, 177, 178, 184, 189, fig. 3 ("titanotheres").

1914 B, 403 ("titanotheres").

1914 E, 411 ("titanotheres").

1915 B, 218 ("titanotheres").

1915 D, 284 ("titanotheres").

1918 C, 133.

1921 D, 6 ("titanotheres").

1925 E, 5.

1926 A, 189 ("titanotheres").

1926 C, 341 ("titanotheres").

Palacký, J. 1903 B, 313 ("titanotherien").

Palmer, T. S. 1904 A, 774, 941.

Reynolds, S. H. 1897 A, 432, 470.

Riggs, E. S. 1912 A, 17.

Sauvage, H. E. 1882 A, 105 (Menodontidae).

Schlosser, M. 1911 A, 165 ("titanotheriden").

Schmidt, O. 1886 A, 198 (Brontotheridae).

Scott, W. B. 1913 A, 291, 308, 691 (Titanotheridae).

Steinmann, G. 1907 A, 488.

Trouessart, E. L. 1905 A, 618.

Wallace, A. R. 1876 A, 1, 137 (Brontotheridæ).

Wanless, H. R. 1923 A, 207 ("titanotheres"); 206, 246 (Titanotherium).

Weber, M. 1904 A, 614, 618.

Weber and Abel 1928 A, 650, 684.

Winge, H. 1906 A, 71, 155 (Titanotheriini).

Woodward, A. S. 1910 B, 469 ("titanotheres").

1923 C, 29.

Zittel and Schlosser 1911 A, 464.

1923 A, 550, 602, 667, 670.

### SYMBORODON Cope. Type *S. torvus* Cope.

Hay, O. P. 1902 A, 637.

Abel, O. 1913 B, 755a.

Haug, E. 1911 A, 1528.

Lull, R. S. 1905 B, 423.

Matthew, W. D. 1909 C, 111.

Osborn, H. F. 1902 B, 92, 93, 103, fig. 1.

1902 F, 626.

1905 H, 224, fig. 7.

1905 I, pl. iv, fig. 3; pl. v, fig. 3.

1910 B, 212, 556, fig. 100.

Palmer, T. S. 1904 A, 655, 942.

Schlosser, M. 1899 S, 321.

Trouessart, E. L. 1905 A, 621.

### *Symborodon acer* Cope.

Hay, O. P. 1902 A, 637.

Lambe, L. M. 1904 C, 28, 38, 50 (This species?).

Matthew, W. D. 1901 B, 356 (*S. acer*, *S. altirostris*).

1909 C, 104.

Osborn, H. F. 1902 B, 103 (*S. altirostris* a syn.).

Trouessart, E. L. 1905 A, 622.

Lower Oligocene (Chadron); Colorado, Canada.

### *Symborodon copei* Osborn.

Osborn, H. F. 1908 A, 616, fig. 21.

Abel, O. 1919 A, 871, fig. 667.

O'Hara, C. C. 1920 A, 150.

Lower Oligocene (Chadron); South Dakota.

### *Symborodon montanus* (Marsh).

Hay, O. P. 1902 A, 637.

Cook, H. J. 1912 D, 34 (Symborodon).

Matthew, W. D. 1909 C, 104.

Merrill, G. P. 1907 A, 61 (This genus?).

O'Hara, C. C. 1920 A, 150.

Osborn, H. F. 1902 B, 103, fig. 8.

Trouessart, E. L. 1905 A, 622.

Lower Oligocene (Chadron); Nebraska.

### *Symborodon torvus* Cope.

Hay, O. P. 1902 A, 637.

Matthew, W. D. 1901 B, 356.

1909 C, 104.

Osborn, H. F. 1902 B, 103.

1914 E, 414 (Menodus).

Trouessart, E. L. 1905 A, 621.

Lower Oligocene (Chadron); Colorado.

### MENODUS Pomel. Type *Menodus giganteus* Pomel = *Palæotherium? proutii* Owen, Norwood, Evans.

Pomel, A. 1849, Arch. Sci., Nat. Bibl. Univ. Genève, x, 75.

Unless otherwise indicated the authors, as quoted, use for this genus the name *Titanotherium*. It is antedated by *Menodus* Pomel.

Hay, O. P. 1902 A, 635.

Abel, O. 1910 B (186).

1913 B, 754a.

1922 C, 263, fig. 218.

1926 B, 340, fig. 226.

Ameghino, F. 1904 A, 492.

Anonymous 1912 A, 92.

Ardt, T. 1907 D, 253.

Baird, S. F. 1876 A, 357 (Symborodon).

Beddard, F. E. 1902 A, 264.

Case, E. C. 1898 C, 838.

Cooper, C. F. 1923 A, 49.

Delafontaine, M. 1875 A, 174.

Depéret, C. 1907 B.

Douglass, E. 1905 A, 211.

Fairchild, H. L. 1894 A, 208.

Gaudry, A. 1875 D, 1282.

1893 A, 22.

1896 A, 99.

1906 A, 20.

Gervais, P. 1852 A, 186.

Greene, F. V. 1853 A, 292.

Gregory, W. K. 1910 A, 109.

Grinnell, G. B. 1923 A, 334.

Haug, E. 1911 A, 1528.

Hay, O. P. 1911 B, 400.

Heilprin, A. 1887 A, 372.

Hoernes, R. 1886 A, 668.

Knowlton, F. H. 1922 A, 21, 22.

Lambe, L. M. 1905 D, 368a.

Matthew, W. D. 1901 B, 369.

1902 G, 8, fig.

1906 B, 265.

- Matthew, W. D. 1909 C, 111.  
 1915 K, 420.  
 1926 C, 169, fig. 26.  
 1928 B, 967.
- Osborn, H. F. 1902 B, 92, 93, 95, fig. 1.  
 1902 F, 626.  
 1905 I, pl. iv, fig. 2; pl. v, fig. 2.  
 1909 D, 23, 61, 62, 65.  
 1910 B, 633, fig. 100.  
 1912 G, 243, fig. 8.  
 1914 B, 405 (Menodus).  
 1925 C, 750.  
 1925 E, 5, 9.
- Palacký, J. 1903 B, 306.
- Palmer, T. S. 1904 A, 681, 942.
- Reynolds, S. H. 1897 A, 508, fig. 106.
- Rogers, A. F. 1924 A, 545.
- Schuchert, C. 1910 A, 599.
- Scott, W. B. 1913 A, 317, 318, 691, figs. 165, 168.  
 1914 A, 139 (Menodus).
- Schlosser, M. 1899 G, 168.  
 1899 S, 319.
- Shumard, B. F. 1863 A, 141.
- Steinmann, G. 1907 A, 489.
- Sternberg, C. H. 1917 A, 14, fig. 7.
- Toula, F. 1896 A, 922.
- Trouessart, E. L. 1905 A, 620.
- Wallace, A. R. 1876 A, 1, 137.
- Weber, M. 1904 A, 617, 618.
- Weber and Abel 1928 A, 685.
- Woodward, A. S. 1898 B, 330.  
 1898 D, 331.
- Zittel and Schlosser 1911 A, 466.  
 1923 A, 421, 553, fig. 523.

### **Menodus heloceras (Cope).**

Unless otherwise indicated the authors, as quoted, apply to this species the generic name *Titanotherium*.

- Hay, O. P. 1902 A, 636.
- Cook, H. J. 1912 D, 34 (T. heloceras).
- Granger, W. 1910 A, 240 (This species?).
- Matthew, W. D. 1901 B, 356.  
 1909 C, 104 (T. heloceras).
- O'Harra, C. C. 1920 A, 149.
- Osborn, H. F. 1902 B, 95, fig. 2.  
 1912 G, 245.  
 1914 E, 414 (Menodus).
- Schlosser, M. 1899 S, 319.  
 Lower Oligocene; Colorado, South Dakota, Nebraska.

### **Menodus ingens (Marsh).**

Unless otherwise indicated the authors, as quoted, use the generic name *Titanotherium*.

- Hay, O. P. 1902 A, 636.
- Abel, O. 1912 D, 608.  
 1922 C, 270, fig. 226.  
 1926 B, 337, fig. 224.
- Cook, H. J. 1912 D, 34.

- Matthew, W. D. 1909 C, 104.
- O'Harra, C. C. 1910 A, 100, pl. xxxvii.  
 1920 A, pl. xx.
- Osborn, H. F. 1902 B, 96.  
 1925 E, 5 ("M. giganteus = M. ingens").
- Schmidt, O. 1886 A, 199, fig. 34.
- Trouessart, E. L. 1905 A, 620.
- Weber and Abel 1928 A, 685, fig. 472 (Brontotherium).
- Wyckoff, W. C. 1874 A, 3, 10, 2 figs. ("Brontotherium").  
 Lower Oligocene (Chadron); Colorado, South Dakota, Nebraska.

### **Menodus proutii (Owen, Norw., and Evans).**

Unless otherwise indicated the authors, as quoted, use the generic name *Titanotherium*.

- Hay, O. P. 1902 A, 636.
- Abel, O. 1922 C, 266, fig. 222.  
 1926 B, 339, fig. 225 (This species?).
- Cook, H. J. 1912 D, 34 (T. proutii).
- Gervais, P. 1859 A, 360 (Titanotherium proutii, Palaeotherium giganteum).
- Giebel, C. G. 1883 A, pl. xlii (T. proutii).
- Lull, R. S. 1918 B, 204.
- Matthew, W. D. 1909 C, 104.
- O'Harra, C. C. 1910 A, 101.  
 1920 A, 115, 149, fig. 53 (Titanotherium proutii).
- Osborn, H. F. 1914 E, 414 (Menodus giganteus, M. proutii).  
 1925 E, 1 (M. giganteus).
- Schlosser, M. 1898 C, 372.  
 1899 S, 319 (Palaeotherium).
- Trouessart, E. L. 1905 A, 620 (Syn. of Titanotherium giganteum).  
 Lower Oligocene (Chadron); South Dakota, Nebraska.

### **Menodus trigonoceras (Cope).**

Unless otherwise indicated the authors quoted use the generic name *Titanotherium*.

- Hay, O. P. 1902 A, 637.
- Beddard, F. E. 1902 A, 265, fig. 137.
- Matthew, W. D. 1901 B, 356.  
 1909 C, 104.
- O'Harra, C. C. 1920 A, 149.
- Osborn, H. F. 1902 B, 96.  
 1914 E, 414 (Menodus).
- Richardson, G. B. 1912 A, 270 (T. trigonoceros?).  
 1915 A, 9 (T. trigonas?, T. trigonoceras?).
- Weber and Abel 1928 A, 686, fig. 473.  
 Lower Oligocene (Chadron); South Dakota, Colorado.

### **Menodus sp. indet.**

- Figgins, J. D. 1921 A, 16, 19 (Titanotherium).

### **ALLOPS Marsh. Type *A. serotinus* Marsh.**

- Hay, O. P. 1902 A, 633 (Megacerops, in part).
- Haug, E. 1911 A, 1528.
- Matthew, W. D. 1909 C, 104.
- Osborn, H. F. 1902 B, 102.
- Trouessart, E. L. 1905 A, 621.

### **Allops amplius (Marsh).**

- Hay, O. P. 1902 A, 633 (Megacerops?).
- Cook, H. J. 1912 D, 34.
- Lull, R. S. 1905 D, 445 (Megacerops).
- Matthew, W. D. 1909 C, 104.



O'Harra, C. C. 1920 A, 150.  
 Osborn, H. F. 1902 (Allops); fig. 7 (Diploclonus).  
 Trouessart, E. L. 1905 A, 621.  
 Lower Oligocene (White River); South Dakota?

### **Allops crassicornis Marsh.**

Hay, O. P. 1902 A, 634 (Megacerops?).  
 Cook, H. J. 1912 D, 34.  
 Matthew, W. D. 1909 C, 104.  
 Merrill, G. P. 1907 A, 21.  
 O'Harra, C. C. 1920 A, 150.  
 Osborn, H. F. 1902 B, 102.  
 Trouessart, E. L. 1905 A, 621.  
 Lower Oligocene (White River); South Dakota?

### **TELEODUS Marsh. Type *T. avus* Marsh.**

Hay, O. P. 1902 A, 638.  
 Arldt, T. 1907 D, 253.  
 Palmer, T. S. 1904 A, 667, 942.  
 Schlosser, M. 1899 S, 321.

### **Allops serotinus Marsh.**

Hay, O. P. 1902 A, 634 (Megacerops?).  
 Cook, H. J. 1912 D, 34 (A. serotinus).  
 Matthew, W. D. 1909 C, 104.  
 Merrill, G. P. 1907 A, 21.  
 O'Harra, C. C. 1920 A, 150.  
 Osborn, H. F. 1902 B, 102.  
 Trouessart, E. L. 1905 A, 621.  
 Lower Oligocene (White River); South Dakota

### **Allops walcotti Osborn.**

Osborn, H. F. 1916 A, 721, fig. 1.  
 Lower Oligocene (White River); South Dakota?

### **MEGACEROPS Leidy. Type *M. coloradensis* Leidy.**

Hay, O. P. 1902 A, 633.  
 Abel, O. 1913 B, 755a.  
 Gaudry, A. 1893 A, 24 (Brontops).  
 Hatcher, J. B. 1901 B, 256, pls. vii, viii; text-fig. 1 (Titanotherium).  
 Haug, E. 1911 A, 1528.  
 Hutchinson, H. N. 1910 A, 261, pl. xlii (Brontops).  
 Kingsley, J. S. 1925 A, 287, fig. 310.  
 Lull, R. S. 1905 B, 419, figs. 1-3.  
 Lydekker, R. 1882 B, 101.  
 Matthew, W. D. 1909 C, 111.  
 O'Harra, C. C. 1910 A, 99.  
 1920 A, 178, pls. xii, xviii.  
 Osborn, H. F. 1902 B, 92, 93, 97, fig. 1.  
 1902 F, 626.  
 1904 F.  
 1905 H, 224, fig. 7.  
 1905 I, pl. iv, fig. 1; pl. v, fig. 1.  
 1910 B, 212, 556, fig. 100.  
 1914 B, 405 [M. (= Symborodon), Diploclonus].  
 1914 C, 406 (Brontops).  
 1925 E, 1 (Brontops).  
 Palmer, T. S. 1904 A, 146, 941 (Brontops); 403, 942 (Megacerops).  
 Schlosser, M. 1899 S, 321 (Diploclonus, Brontops).  
 Trouessart, E. L. 1905 A, 620.  
 Wallace, A. R. 1876 A, r, 137.  
 Zittel and Schlosser 1923 A, 552 (Brontops).

### **Megacerops angustigenis (Cope).**

Hay, O. P. 1902 A, 633.  
 Lambe, L. M. 1904 C, 28, 38, 50.  
 1908 A, 10, 45, 50, 52, text-figs. 1-6 (M. angustidens); 10, 48, figs. 9, 10 (M. syceras).  
 Matthew, W. D. 1909 C, 104.  
 Osborn, H. F. 1902 B, 99.

### **Teleodus avus Marsh.**

Hay, O. P. 1902 A, 638.  
 Lambe, L. M. 1908 A, 49 (Megacerops).  
 Osborn, H. F. 1902 B, 99 (Megacerops).  
 Palacký, J. 1903 B, 311 (Diplacodus avus).  
 Oligocene (White River); South Dakota.

Trouessart, E. L. 1905 A, 621.  
 Lower Oligocene (Swift Current Creek); Canada.

### **Megacerops assiniboiensis Lambe.**

Lambe, L. M. 1908 A, 11, 51, pl. v, fig. 6; pl. vi, fig. 3; text-figs. 12, 13.  
 Oligocene (Cypress Hills); Saskatchewan.

### **Megacerops bicornutus Osborn.**

Osborn, H. F. 1902 B, 99, fig. 5.  
 Abel, O. 1912 F, 580, fig. 430.  
 1919 A, 871, fig. 666.  
 Cook, H. J. 1912 D, 34.  
 Lull, R. S. 1905 D, 445.  
 Matthew, W. D. 1909 C, 104.  
 Trouessart, E. L. 1905 A, 620.  
 Lower Oligocene (Chadron); Nebraska.

### **Megacerops brachycephalus Osborn.**

Osborn, H. F. 1902 A, 97, figs. 3, 4.  
 Cook, H. J. 1912 D, 34.  
 Matthew, W. D. 1909 C, 104.  
 O'Harra, C. C. 1920 A, 150.  
 Osborn, H. F. 1925 E, 5, 8 (Brontops).  
 Trouessart, E. L. 1905 A, 620.  
 Lower Oligocene (Chadron); Nebraska.

### **Megacerops coloradensis Leidy.**

Hay, O. P. 1902 A, 633.  
 Cannon, G. L. 1894 B, 232 (Megacerotops coloradensis).  
 Cope, E. D. 1873 FF, 1 ("Megacerotops").  
 Knowlton, F. H. 1922 A, 20.  
 Lambe, L. M. 1904 C, 28, 38, 50.  
 Matthew, W. D. 1909 C, 104.  
 Osborn, H. F. 1902 B, 99.  
 Peale, A. C. 1876 A, 150 (Megacerotops coloradensis).

Trouessart, E. L. 1905 A, 621.

Lower Oligocene (White River); Colorado, Canada.

### **Megacerops dispar (Marsh).**

Hay, O. P. 1902 A, 634.

Abel, O. 1912 F, 59, fig. 21.

Cook, H. J. 1912 D, 34.

Hatcher, J. B. 1902 A, 347, pls. xvi-xviii.

Matthew, W. D. 1909 C, 104.

Merrill, G. P. 1907 A, 26 (Brontops *dispar*, B. *validus*); 45 (M. *dispar*, M. *brachycephalus*).

O'Harra, C. C. 1910 A, 102.

1920 A, 149.

Osborn, H. F. 1902 B, 98 (Brontops *validus* a syn.).

1925 E, 1 (Brontops *brachycephalus*).

Peterson, O. A. 1924 A, 414, 416, 422 (Brontops).

Trouessart, E. L. 1905 A, 621.

Zittel and Schlosser 1911 A, 466, fig. 649 (Titanotherium).

1923 A, 553, fig. 638.

Lower Oligocene (White River); South Dakota, Nebraska.

### **Megacerops marshi Osborn.**

Osborn, H. F. 1902 B, 100, fig. 6.

Abel, O. 1913 B, 755a, fig. 107.

Cook, H. J. 1912 D, 34.

Matthew, W. D. 1909 C, 104.

O'Harra, C. C. 1920 A, 111, 150, fig. 49.

Trouessart, E. L. 1904 A, 621.

Lower Oligocene (Chadron); Nebraska.

### **Megacerops primitivus Lambe.**

Lambe, L. M. 1908 A, 11, 49, pl. vi, figs. 4, 5.

Lower Oligocene (Cypress Hills); Saskatchewan.

### **Megacerops riggsi Osborn.**

Osborn, H. F. 1916 A, 723, fig. 2.

Lower Oligocene (White River); Colorado.

### **Megacerops robustus Marsh.**

Hay, O. P. 1902 A, 635 (Brontotherium).

Abel, O. 1914 A, 256, fig. 230.

1919 A, 870, fig. 665.

1920 A, 452, fig. 691.

1922 C, 182, fig. 147.

Beddard, F. E. 1902 A, 264 (Titanotherium).

Boule, M. 1891 A, 35, fig. 11 (Brontops).

1902 B, 911, fig. 19 (Brontops).

Cooke, H. J. 1912 D, 34.

Dollo, L. 1889 C, 678 (Brontops).

Gaudry, A. 1906 A, 13, fig. 21 (Titanotherium).

Knipe, H. R. 1912 A, 141, fig. (Titanotherium).

Lankester, E. R. 1905 A, 145, fig. 101 (Titanotherium).

### **BRONTOTHERIUM Marsh. Type *B. gigas* Marsh.**

Hay, O. P. 1902 A, 634.

Abel, O. 1913 B, 755a.

Arlt, T. 1907 D, 253.

Boule, M. 1891 A, 34.

1902 B, 911.

Christman, E. S. 1921 A, 620, fig.

Lull, R. S. 1917 F, 214 (Brontotherium, Brontops).

Matthew, W. D. 1909 C, 104.

Moodie, R. L. 1917 B, 384, fig. 7 (Titanotherium).

1918 C, 279 (Titanotherium).

1923 B, 125, pl. xx (Titanotherium).

O'Harra, C. C. 1910 A, 101, pl. xxxv.

1920 A, 113, 150, fig. 52.

Osborn, H. F. 1899 K, 273, fig. 2 (Titanotherium).

1902 B, 101.

1904 F, 24 ("Brontotherium sp." This species?).

Osborn and Wortmann 1895 A, 346, pls. viii, ix; text-figs. 1-3 (Titanotherium. This species?).

Schlosser, M. 1898 C, 372 (Titanotherium); 373 (Brontops).

Schuchert and Levene 1927 A, 348 (Brontops).

Scott, W. B. 1913 A, 309, fig. 180 (Titanotherium).

Trouessart, E. L. 1905 A, 621.

Williams, H. S. 1897 A, 679, fig. ("titanothe-rium").

Woodward, A. S. 1898 B, 331, fig. 190 (Titanotherium).

1923 C, 30, fig. 12 (Titanotherium).

Zittel and Schlosser 1911 A, 466, fig. 648 (Titanotherium).

1923 A, 552, fig. 637 (Brontops).

Lower Oligocene (Chadron); South Dakota, Nebraska.

### **Megacerops? selwynianus Cope.**

Hay, O. P. 1902 A, 635 (Brontotherium?).

Lambe, L. M. 1904 C, 23 (Menodus); 38, 50 (Megacerops).

1908 A, 10, 47, text-figs. 7, 8.

Matthew, W. D. 1909 C, 104.

Osborn, H. F. 1902 B, 99.

Trouessart, E. L. 1905 A, 621.

Lower Oligocene (Cypress Hills); Saskatchewan.

### **Megacerops tichoceras Scott and Osborn.**

Hay, O. P. 1902 A, 635 (Brontotherium).

Cook, H. J. 1912 D, 34.

Matthew, W. D. 1909 C, 104.

O'Harra, C. C. 1920 A, 150.

Osborn, H. F. 1902 B, 99.

Trouessart, E. L. 1905 A, 621.

Lower Oligocene (Chadron); South Dakota.

### **Megacerops tyleri Lull.**

Lull, R. S. 1905 D, 445, pls. iii, iv; text-figs. 1, 2.

Lower Oligocene (White River); South Dakota.

Delafontaine, M. 1875 A, 174.

Dollo, L. 1889 C, 679 (Brontotherium, Brontops).

Gregory, W. K. 1912 F, 285.

1921 B, 620, figs.

Haug, E. 1911 A, 1528.

- Heilprin, A. 1887 A, 372.  
 Hoernes, R. 1886 A, 668.  
 Leche, W. 1887 A.  
 Lull, R. S. 1926 A, 461.  
 Lydekker, R. 1915 C, 621, fig. 2.  
 Matthew, W. D. 1909 C, 111.  
 O'Harra, C. C. 1910 A, 99, pl. xxxix.  
 Osborn, H. F. 1902 B, 92, 93, 94, 104, fig. 1.  
     1902 F, 626.  
     1905 H, 224, fig. 4.  
     1905 I, pl. iv, fig. 4; pl. v, fig. 4.  
     1907 G, 179, fig. 171.  
     1910 B, 209, 212, 213, 215, 556, fig. 100.  
     1912 B, 261, fig. 4.  
     1912 L, 187, fig. 4.  
     1914 B, 405.  
     1914 C, 406.  
     1915 B, 212, fig. 4.  
     1917 B, 263, 264, 270, fig.  
 Peterson, O. A. 1924 A, 416, 422 (Brontops).  
 Schlosser, M. 1898 C, 373 (Titanops).  
 Schuchert and Levene 1927 A, 347.  
 Trouessart, E. L. 1905 A, 622.  
 Wallace, A. R. 1876 A, 137.  
 Wasmuth, P. 1905 A, 63 (Brontops).
- Brontotherium bucco** (Cope).  
 Hay, O. P. 1902 A, 634.  
 Matthew, W. D. 1901 B, 356 (Symborodon).  
     1909 C, 104.  
 Osborn, H. F. 1902 B, 107.  
 Trouessart, E. L. 1905 A, 622.  
     Oligocene (Lower); Colorado.
- Brontotherium curtum** (Marsh).  
 Hay, O. P. 1902 A, 634.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 104.  
 Merrill, G. P. 1907 A, 62 (Titanops).  
 Osborn, H. F. 1902 B, 107 (Menodus peltoceras a syn.).  
 Trouessart, E. L. 1905 A, 622.  
     Oligocene (Lower); Colorado; (Chadron); Nebraska.
- Brontotherium dolichoceras** (Scott and Osborn).  
 Hay, O. P. 1902 A, 634.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 104.  
 O'Harra, C. C. 1920 A, 150.  
 Osborn, H. F. 1902 B, 107 (Titanops medius a syn.).  
 Trouessart, E. L. 1905 A, 622.  
     Lower Oligocene (Chadron); Nebraska.
- Brontotherium gigas** Marsh.  
 Hay, O. P. 1902 A, 635.  
 Beddard, F. E. 1902 A, 265, fig. 137 (Titanotherium elatum).  
 Cook, H. J. 1912 D, 35.  
 Cooper, C. F. 1923 A, 49, 50, figs. 14, 24.  
 Matthew, W. D. 1909 C, 104.  
 O'Harra, C. C. 1910 A, 102, pl. xl.  
     1920 A, 112, fig. 51 (Titanotherium elatum).

Osborn, H. F. 1902 B, 107 (Titanops elatus a syn.).  
     1910 B, 209, fig. 97.

Scott, W. B. 1913 A, 311, fig. 162 (Tit. elatum).

Sternberg, C. H. 1913 A, 45.

Trouessart, E. L. 1905 A, 622.

Weber and Abel 1928 A, 673, fig. 459.

Oligocene (Lower); Colorado; (Chadron); Nebraska.

### **Brontotherium hatcheri** Osborn.

Osborn, H. F. 1908 A, 615, fig. 20.

Gilmore, C. W. 1921 F, 66 ("Brontotherium").

O'Harra, C. C. 1920 A, 150.

Lower Eocene (Titanotherium); South Dakota.

### **Brontotherium hypoceras** (Cope).

Hay, O. P. 1902 A, 635.

Matthew, W. D. 1901 B, 356 (Symborodon).

1909 C, 104.

Merrill, G. P. 1907 A, 26.

Osborn, H. F. 1902 B, 105 (Symborodon); 106 figs. 11-13 (Brontotherium).

Trouessart, E. L. 1905 A, 622.

Lower Oligocene (White River); Colorado.

### **Brontotherium leidyi** Osborn.

Osborn, H. F. 1902 B, 105, figs. 9, 10, 12, 13.

Cook, H. J. 1912 D, 35.

Matthew, W. D. 1909 C, 104.

Merrill, G. P. 1907 A, 26 (B. leidyi); 46 (Mc-nops varians).

O'Harra, C. C. 1920 A, 150.

Trouessart, E. L. 1905 A, 622.

Lower Oligocene (Chadron); South Dakota, Nebraska.

### **Brontotherium medium** (Marsh).

Hay, O. P. 1902 A, 635.

Merrill, G. P. 1907 A, 62 (Titanops).

Trouessart, E. L. 1905 A, 622 (Syn. of B. dolichoceras).

Lower Oligocene (White River); South Dakota.

### **Brontotherium? orphyras** (Cope).

Hay, O. P. 1902 A, 635.

Trouessart, E. L. 1905 A, 622 (Miobasilus).

Lower Oligocene (White River); Colorado.

### **Brontotherium platyceras** (Scott and Osborn).

Hay, O. P. 1902 A, 635.

Beddard, F. E. 1902 A, 265, fig. 137 (Titanotherium).

Cook, H. J. 1912 D, 35 (B. platyceras).

Gregory, W. K. 1912 E, 17, fig.

Matthew, W. D. 1909 C, 104.

O'Harra, C. C. 1921 A, 111, fig. 50.

Osborn, H. F. 1902 B, 108.

1904 F, 21.

Weber and Abel 1928 A, 686, fig. 473 (Titanotherium platyceras).

Trouessart, E. L. 1905 A, 622.  
Lower Oligocene (Chadron); South Dakota,  
Nebraska.

**Brontotherium ramosum** (Osborn).

Hay, O. P. 1902 A, 635.  
Cook, H. J. 1912 D, 35.  
Matthew, W. D. 1909 C, 104.  
O'Harra, C. C. 1920 A, 150.

Osborn, H. F. 1902 B, 108.

Trouessart, E. L. 1905 A, 622.  
Lower Oligocene (Chadron); South Dakota,  
Nebraska.

**Brontotherium** sp. indet.

Figgins, J. D. 1925 A, 19, pl. Lower Oligo-  
cene; Colorado.

*Superfamily TAPIROIDÆ, new name.*

Unless otherwise indicated the authors, as  
quoted, use the name Tapiroidea.

Hay, O. P. 1902 A, 624.  
Case, E. C. 1898 C, 833.  
1899 B, 168.  
Gill, T. 1872 B, 12 (Tapiroidea); 86 (Lophio-  
dontoidea).  
Gregory, W. K. 1920 A, 247.

Gidley, J. W. 1912 B, 179.

Haeckel, E. 1873 A, 554 (Tapiromorpha).

Hay, O. P. 1914 A, 209.

Osborn, H. F. 1910 B, 556.

Schlosser, M. 1901 B, 300.

Weber, M. 1904 A, 615, 624.

Weber and Abel 1928 A, 426, 659.

Winge, H. 1906 A, 71, 158 (Tapiridæ).

**HELALETIDÆ** Osborn.

Osborn, H. F. in Osborn and Wortman 1892 A,  
127.

Inasmuch as the genera listed below are by  
some writers referred to the Lophiodontidæ,  
by others to the Helaletidæ, citations are  
made to the literature of both families.

Hay, O. P. 1902 A, 624 (Lophiodontidæ).  
Abel, O. 1913 B, 730, 753a (Lophiodontinæ).  
1914 A, 236 (Lophiodontinæ).  
Ameghino, F. 1906 A, 326 (Lophiodontidæ).  
1911 A, 23 ("lophiodontidés").

Arlt, T. 1912 A, 700 (Lophiodontidæ).

Beddard, F. E. 1902 A, 247 (Lophiodontidæ);  
250 (Lophiodontinæ).

Case, E. C. 1899 B, 168 (Lophiodontidæ).

Chardin, T. 1922 A, 74 ("lophiodontidés").

Cuvier, G. 1825 A, 11, 165-222, pls. i-xi (Lop-  
hion).

Depéret, C. 1904 B, 40 ("Helaletidés").

1911 A, 558 ("lophiodontidés").

1912 B, 769 ("lophiodontidés").

Gill, T. 1872 B, 12, 86 (Lophiodontidæ).

Holland and Peterson 1913 A, 201, 203 (Schizo-  
theriinae).

Matthew, W. D. 1909 C, 94, 98, 102, 104, 105,  
111 (Lophiodontidæ).

1909 D, 301 (Lophiodontidæ).

Matthew, W. D. 1914 B, 387 (Lophiodontidæ).

1915 A, 240 (Lophiodontidæ).

1921 D, 214 (Lophiodontidæ).

Matthew and Granger 1925 C, 4 (Helaletidæ).

1925 F, 1, 5 (Helaletidæ, Lophiodontidæ).

O'Harra, C. C. 1910 A, 92 (Lophiodontidæ).

Osborn, H. F. 1902 E, 359 (Lophiodontidæ);  
360 (Helaletinæ).

1909 D, 41, 54 (Helaletinæ); 128 (Lophio-  
dontidæ).

1910 B, 621 (Lophiodontidæ).

Peterson, O. A. 1919 A, 104 (Helaletidæ, Hela-  
letinae, Schizotheriinae).

Sauvage, H. E. 1882 A, 105 (Lophiodontidæ).

Scharff, R. F. 1911 A, 353 (Lophiodontidæ).

Schlosser, M. 1898 C, 374 (Lophiodontidæ).

Scott, W. B. 1913 A, 280, 291, 319, 684 (Lop-  
hiodontidæ).

Trouessart, E. L. 1905 A, 630 (Lophiodontinæ).

Weber, M. 1904 A, 615, 624 (Lophiodontidæ);  
624 (Helaletidæ).

Weber and Abel 1928 A, 660.

Winge, H. 1906 A, 156 (Helaletini).

Zittel and Schlosser 1911 A, 447 (Lophiodon-  
tinæ).

1923 A, 532 (Lophiodontinæ).

**HEPTODON** Cope. Type *Lophiodon ventorum* Cope.

Hay, O. P. 1902 A, 625.

Case, E. C. 1899 B, 168.

Chardin, T. 1922 A, 83.

Depéret, C. 1902 D, 1281.

1904 A, 580.

1904 B, 40.

1911 A, 585.

1912 B, 770.

Gregory, W. K. 1910 A, 451, 452.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 102.

1915 K, 473.

1924 E, 749.

1926 C, 170, fig. 26.

1928 B, 967, 979, fig. 15.

Osborn, H. F. 1902 E, 360.

1909 D, 38, 41, 46.

1910 B, 124, 127, 135, 557.

1912 G, 236, fig. 3.

Palmer, T. S. 1904 A, 320, 938.

Peterson, O. A. 1919 A, 103, 111, 125.  
 Schlosser, M. 1898 C, 374.  
 1899 P, 313.  
 1899 Q, 315.

Scott, W. B. 1913 A, 275, 291, 327.  
 Seeley, H. G. 1886 A, 476.  
 Stehlin, H. G. 1903 A, 63, 67, 151.  
 Trouessart, E. L. 1905 A, 630.  
 Troxell, E. L. 1922 C, 370.  
 Weber, M. 1904 A, 624.  
 Weber and Abel 1928 A, 660.  
 Winge, H. 1906 A, 156.  
 Wortman, J. L. 1903 A, xv, 431.  
 Zittel and Schlosser 1911 A, 447.  
 1923 A, 532, 666, 668.

### **Heptodon calciculus** Cope.

Hay, O. P. 1902 A, 625.  
 Gregory, W. K. 1910 A, 393, figs. 23, 24.  
 Matthew, W. D. 1909 C, 94.  
 Osborn, H. F. 1904 F, 10.  
 Sinclair and Granger 1911 A, 91.  
 Stehlin, H. G. 1903 A, 67.  
 Lower Eocene (Wind River); Wyoming.

### **Heptodon posticus** Cope.

Hay, O. P. 1902 A, 625.  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 94.  
 Lower Eocene (Wasatch); Wyoming.

### **Heptodon singularis** (Cope).

Hay, O. P. 1902 A, 625.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A; 42 (Hyrachus).  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.

### **Heptodon ventorum** Cope.

Hay, O. P. 1902 A, 625.  
 Matthew, W. D. 1909 C, 94.  
 Sinclair and Granger 1911 A, 91, 108.  
 Stehlin, H. G. 1903 A, 67.  
 Lower Eocene (Wind River); Wyoming.

### **Heptodon** sp. indet.

Douglass, E. 1903 A, 155, fig. 1.  
 Matthew, W. D. 1909 C, 99. Upper Eocene  
 (Uinta); Montana.

## **HELALETES** Marsh. Type *H. boops* Marsh.

Hay, O. P. 1902 A, 625.  
 Abel, O. 1922 C, 273.  
 Case, E. C. 1899 B, 168.  
 Cope, E. D. 1880 U, 154 (Tapirulus).  
 Depéret, C. 1904 A, 578, 580.  
 1904 B, 40.  
 1911 A, 565.  
 1912 B, 770.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 369.  
 Matthew, W. D. 1909 C, 102 (Helaletes, Diloph-  
 odon).  
 1915 A, 239.  
 1926 C, 170, fig. 26.  
 1928 B, 979, fig. 15.  
 Matthew and Granger 1925 E, 3.  
 1926 A, 3.  
 Osborn, H. F. 1910 B, 161, 557.  
 Palacký, J. 1903 B, 307.  
 Palmer, T. S. 1904 A, 313, 938.  
 Peterson, O. A. 1919 A, 104, 114.  
 Schlosser, M. 1898 C, 374.  
 1899 Q, 315.  
 Schmidt, O. 1886 A, 193.  
 Scott, W. B. 1913 A, 272.  
 Stehlin, H. G. 1903 A, 63, 65.  
 Terra, P. 1911 A, 313.

Trouessart, E. L. 1905 A, 631.  
 Troxell, E. L. 1922 C, 365.  
 Weber, M. 1904 A, 624.  
 Winge, H. 1906 A, 157.  
 Zittel and Schlosser 1911 A, 447.  
 1923 A, 532, 667.

### **Helaletes boops** Marsh.

Hay, O. P. 1902 A, 625.  
 Matthew, W. D. 1909 C, 98.  
 Peterson, O. A. 1919 A, 104, 113, pl. xli, figs.  
 1-9; pl. xlii, figs. 1-3.  
 Troxell, E. L. 1922 C, 365, 367, figs. 2, 3.  
 Middle Eocene (Bridger); Wyoming.

### **Helaletes nanus** Marsh.

Hay, O. P. 1902 A, 626.  
 Matthew, W. D. 1909 C, 98.  
 Peterson, O. A. 1919 A, 106, 112.  
 Schlosser, M. 1898 C, 374.  
 Stehlin, H. G. 1903 A, 65.  
 Troxell, E. L. 1922 C, 365, 366, fig. 1.  
 Middle Eocene (Bridger); Wyoming.

### **Helaletes** sp. indet.

Matthew, W. D. 1909 C, 98. Middle Eocene  
 (Bridger); Wyoming.

## **DILOPHODON** Scott. Type *D. minusculus* Scott.

Scott, W. B. 1883 A, 51.  
 Hay, O. P. 1902 A, 625 (Helaletes, in part).  
 Granger, W. 1909 A, 22.  
 Osborn, H. F. 1923 B, 1.  
 Palmer, T. S. 1904 A, 231, 938.  
 Peterson, O. A. 1919 A, 114.

### **Dilophodon minusculus** Scott.

Hay, O. P. 1902 A, 626 (Helaletes).  
 Matthew, W. D. 1909 C, 98.  
 Osborn, H. F. 1904 F, 9.  
 Peterson, O. A. 1919 A, 104, 113, pl. xlii, fig. 5  
 Troxell, E. L. 1922 C, 365.  
 Middle Eocene (Bridger); Wyoming.

**EOMOROPUS** Osborn. Type *Triplopus amarorum* Cope.

- Osborn, H. F. 1913 B, 262, 264, figs. 5-8.  
 Abel, O. 1921 A, 282.  
 Cooper, C. F. 1922 A, 544.  
 Eastman, C. R. 1914 B, 689.  
 Gregory, W. K. 1920 A, 195.  
 Holland and Peterson 1913 A, 202, 204.  
 Lydekker, R. 1915 C, 622.  
 Matthew, W. D. 1917 A, 576.  
     1926 C, 170, fig. 26.  
     1928 B, 979, fig. 15.  
 Peterson, O. A. 1919 A, 139.  
 Scott, W. B. 1913 A, 291, 357.  
 Zittel and Schlosser 1923 A, 554.

**Eomoropus amarorum** (Cope).

- Hay, O. P. 1902 A, 640 (Triplopus).

- Abel, O. 1920 B, 28.  
 Depéret, C. 1911 A, 565 (Triplopus).  
     1912 B, 770 (Triplopus).  
 Granger, W. 1909 A, 22 (Not Triplopus).  
 Holland and Peterson 1913 A, 216.  
 Matthew, W. D. 1909 C, 97 (This genus?).  
 Osborn, H. F. 1913 B, 261 (Triplopus); 266,  
     figs. 1, 3-8 (Eomoropus).  
 Peterson, O. A. 1919 A, 139.  
 Schlosser, M. 1901 E, 150 (Triplopus).  
 Zittel and Schlosser 1923 A, 554 (Triplopus).  
     Middle Eocene (Washakie); Wyoming.

**Eomoropus annectens** Peterson.

- Peterson, O. A. 1919 A, 139, pl. xxxvi, fig. 2.  
 Upper Eocene (Uinta); Utah.

**DESMATOTHERIUM** Scott. Type *D. guyotii* Scott.

- Scott, W. B. 1883 A, 46.  
 Hay, O. P. 1902 A, 625 (Helaletes, in part).  
 Granger, W. 1909 A, 22.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 98.  
     1925 F, 1, figs. 1-3.  
     1926 C, 170, fig. 26.  
 Matthew and Granger 1924 A, 7.  
     1925 E, 5.  
     1925 F, 5.  
 Osborn, H. F. 1910 B, 557.  
     1923 B, 1.  
 Palmer, T. S. 1904 A, 223, 938.  
 Peterson, O. A. 1919 A, 127, 128.

**Desmatotherium guyotii** Scott.

- Scott, W. B. 1883 A, 42, pl. viii.  
 Hay, O. P. 1902 A, 625 (Helaletes).  
 Matthew, W. D. 1909 C, 98.  
 Matthew and Granger 1925 E, 4.  
     1925 F, 1.  
 Osborn, H. F. 1904 F, 9.  
     1923 B, 2.  
 Peterson, O. A. 1919 A, 127, pl. xlv, fig. 6.  
 Stehlin, H. G. 1903 A, 63.  
 Troxell, E. L. 1922 C, 365.  
     Middle Eocene (Washakie); Wyoming.

**COLODON** Marsh. Type *C. luxatus* Marsh.

- Hay, O. P. 1902 A, 626.  
 Case, E. C. 1899 B, 168.  
 Depéret, C. 1904 A, 578.  
     1904 B, 40.  
     1911 A, 565.  
     1912 B, 770.  
 Douglass, E. 1905 A, 211.  
 Earle, C. 1898 B, 115.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1901 B, 369.  
     1909 C, 111.  
     1915 K, 420.  
     1917 A, 576.  
     1920 C, 168, 169, fig. 26.  
     1928 B, 979, fig. 15.  
 Matthew and Granger 1925 C, 5.  
     1925 E, 4.  
 Osborn, H. F. 1902 E, 361.  
     1910 B, 16, 213, 220, 223, 557.  
 Palacký, J. 1903 B, 307, 311.  
 Palmer, T. S. 1904 A, 196, 938.  
 Peterson, O. A. 1919 A, 115, 126.  
 Schlosser, M. 1898 C, 374, 375.  
     1899 P, 313.  
     1899 Q, 315, 316.  
 Scott, W. B. 1913 A, 257, 326.  
 Sinclair, W. J. 1924 A, 121.  
 Stehlin, H. G. 1903 A, 63, 64.  
 Trouessart, E. L. 1905 A, 633 (Mesotapirus).  
 Weber, M. 1904 A, 624.  
 Weber and Abel 1928 A, 660.

- Winge, H. 1906 A, 157.  
 Zittel and Schlosser 1911 A, 448.  
     1923 A, 532, 670.

**Colodon cingulatus** Douglass.

- Douglass, E. 1901 B, 243, 255.  
     1903 A, 150.  
 Matthew, W. D. 1909 C, 105.  
 Trouessart, E. L. 1905 A, 633 (C. angulatus).  
     Middle Oligocene (White River); Montana.

**Colodon copei** (Osborn and Wortman).

- Hay, O. P. 1902 A, 614 (Miohippus).  
 Ameghino, F. 1904 A, 152 (Mesochippus).  
 O'Hara, C. C. 1920 A, 154.  
 Osborn, H. F. 1904 B, 168, 177 (Colodon, pelvis).  
     1918 A, 37, 50.  
 Schlosser, M. 1899 R, 317 (Mesochippus).  
 Veith, A. 1912 A, 12 (Mesochippus).  
     Oligocene (White River); South Dakota.

**Colodon dakotensis** Osborn and Wortman.

- Hay, O. P. 1902 A, 626.  
 Cook, H. J. 1912 D, 37.  
 Matthew, W. D. 1909 C, 105.  
 Osborn, H. F. 1904 F, 10.  
 Peterson, O. A. 1920 A, 402, 435 (Cenopus).  
 Schlosser, M. 1898 C, 375.  
     1899 Q, 315.

Sinclair, W. J. 1924 A, 102.  
 Trouessart, E. L. 1905 A, 633 (Mesotapirus).  
 Middle Oligocene (Brule); South Dakota,  
 Nebraska.

**Colodon longipes** Osborn and Wortman.

Hay, O. P. 1902 A, 626.  
 Cook, H. J. 1912 D, 37.  
 Matthew, W. D. 1909 C, 105.  
 Osborn, H. F. 1904 B, 168, 176.  
 Peterson, O. A. 1919 A, 115.  
 Schlosser, M. 1898 C, 375.  
 Trouessart, E. L. 1905 A, 633 (Mesotapirus).  
 Middle Oligocene (Brule); South Dakota,  
 Nebraska.

**Colodon luxatus** Marsh.

Hay, O. P. 1902 A, 626.  
 Oligocene (White River); South Dakota.

**Colodon occidentalis** (Leidy).

Hay, O. P. 1902 A, 626.  
 Cook, H. J. 1912 D, 34 (Colodon [Mesotapirus]).  
 Matthew, W. D. 1909 C, 104.  
 Matthew and Granger 1925 E, 4.

Merriam and Sinclair 1907 A, 186 (This genus  
 and species?).

O'Harra, C. C. 1910 A, 92  
 1920 A, 149.

Osborn, H. F. 1904 F, 10.

Schlosser, M. 1898 C, 375.  
 1899 Q, 315.

Sinclair, W. J. 1901 A, 702 (Lophodon ore-  
 gonensis)

1924 A, 102, 121, fig. 7.

Stehlin, H. G. 1905 A, 577.

Trouessart, E. L. 1905 A, 633 (Mesotapirus).

Oligocene (Lower); South Dakota, Mon-  
 tana?; (John Day); Oregon: (Chadron);  
 Nebraska.

**Colodon procuspidatus** Osborn and  
 Wortman.

Hay, O. P. 1902 A, 626.

Cook, H. J. 1912 D, 37.

Douglass, E. 1901 B, 255.

Matthew, W. D. 1909 C, 105

O'Harra, C. C. 1920 A, 152 [C. (Mesotapirus)].

Schlosser, M. 1898 C, 375

Sinclair, W. J. 1924 A, 121.

Trouessart, E. L. 1905 A, 633 (Mesotapirus).

Middle Oligocene (Brule); South Dakota,  
 Nebraska.

HOMOGALAXINÆ Peterson.

Peterson, O. A. 1919 A, 116.

**HOMOGALAX** Hay. Type *Systemodon primævus* Wortman.

Unless otherwise indicated the authors, as  
 quoted, use for this genus the name *System-*  
*odon*.

Hay, O. P. 1902 A, 627 (Homogalax).

Ameghino, F. 1911 A, 23 (Sistemodon).

Ardt, T. 1907 D, 260.

Beddard, F. E. 1902 A, 250.

Bensley, B. A. 1901 C, 252.

Depéret, C. 1902 C, 345.

1904 B, 37.

Granger, W. 1914 A, 203.

Gregory, W. K. 1920 A, 195.

1927 J, 444, figs. 1, 2.

Haug, E. 1911 A, 1528.

Lydekker, R. 1903 D, 124.

1908 A, 507 (Homogalax).

Matthew, W. D. 1909 C, 102.

1915 K, 421, 473.

1924 E, 749.

1926 C, 153.

1928 B, 964, 967, 979, figs. 10, 15.

Osborn, H. F. 1907 G, 162, figs. 135, 172, 173.

1909 D, 38.

1910 B, 127, 556.

1912 G, 236, fig. 3.

Palacký, J. 1903 B, 306.

Palmer, T. S. 1904 A, 331, 941 (Homogalax).

Peterson, O. A. 1919 A, 103, 115, 125 (Homo-  
 galax).

Scharff, R. F. 1911 A, 228, 353.

Schlosser, M. 1899 Q, 315.

1902 J, 242.

Scott, W. B. 1913 A, 280, 324.

Stehlin, H. G. 1903 A, 68, 151.

Trouessart, E. L. 1905 A, 632 (Homogalax).

Troxell, E. L. 1922 B, 288 (Homogalax).

Winge, H. 1906 A, 157.

Wood, H. F. 1923 A, 600 (Homogalax).

1927 B, 13.

Woodward, A. S. 1898 B, 322.

Zittel and Schlosser 1911 A, 448.

1923 A, 533, 666 (Systemodon); 544 (Syn.  
 of Orohippus).

**Homogalax bridgerensis** Troxell.

Troxell, E. L. 1922 B, 289, figs. 1-3.

Middle Eocene (Bridger); Wyoming.

**Homogalax primævus** (Wortman).

Hay, O. P. 1902 A, 627.

Loomis, F. B. 1907 B, 357 (Systemodon).

Matthew, W. D. 1909 C, 94 (Systemodon).

Osborn, H. F. 1904 F, 11 (Systemodon).

1907 G, 162, fig. 173 (Systemodon).

Stehlin, H. G. 1903 A, 68 (Systemodon).

Troxell, E. L. 1922 B, 289, 292.

Lower Eocene (Wasatch); Wyoming.

**Homogalax protapirinus** (Wortman).

Hay, O. P. 1902 A, 627.

Loomis, F. B. 1907 B, 357 (Systemodon).

Matthew, W. D. 1909 C, 94 (Systemodon).

Peterson, O. A. 1919 A, 118.

Stehlin, H. G. 1903 A, 68 (Systemodon).

Lower Eocene (Wasatch); Wyoming.

**Homogalax semihians** (Cope).

Hay, O. P. 1902 A, 627.

Loomis, F. B. 1907 B, 357 (Systemodon).  
 Matthew, W. D. 1909 C, 94 (Systemodon).  
 Osborn, H. F. 1907 G, 162, fig. 172 (This species?).  
 Troxell, E. L. 1922 B, 288 (Systemodon).  
 Lower Eocene (Wasatch); Wyoming.

**Homogalax uintensis** Troxell.

Troxell, E. L. 1922 B, 291, fig. 4.  
 Wood, H. E. 1927 B, 32.  
 Upper Eocene (Uinta); Utah.

**ISECTOLOPHIDÆ** Peterson.

Peterson, O. A. 1919 A, 115.

**ISECTOLOPHINÆ** Peterson.

Peterson, O. A. 1919 A, 116, 126.

**PARISECTOLOPHUS** Peterson. Type *Helaletes latidens* Scott and Osborn.

Peterson, O. A. 1919 A, 121.  
 Matthew, W. D. 1926 C, 170, fig. 26.  
 1928 B, 979, fig. 15.

**Parisectolophus latidens** (Scott and Osborn).

Hay, O. P. 1902 A, 627 (Isectolophus).  
 Matthew, W. D. 1909 C, 98 (Isectolophus).  
 Osborn, H. F. 1904 F, 9 (Isectolophus).  
 Peterson, O. A. 1919 A, 121, pl. xlv, figs. 2, 3  
 Schlosser, M. 1899 Q, 315 (Isectolophus).  
 Stehlin, H. G. 1903 A, 66, 71 (Isectolophus).  
 Middle Eocene (Bridger); Wyoming.

**ISECTOLOPHUS** Scott and Osborn. Type *I. annectans* Scott and Osborn.

Hay, O. P. 1902 A, 627.  
 Abel, O. 1922 C, 273.  
 Ameghino, F. 1911 A, 23.  
 Beddard, F. E. 1902 A, 250.  
 Depéret, C. 1902 C, 345.  
 1904 A, 580.  
 1904 B, 37.  
 Earle, C. 1898 B, 115.  
 Gregory, W. K. 1920 A, 195.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 102.  
 1909 D, 304.  
 1915 A, 239.  
 1926 C, 170, fig. 26.  
 1928 B, 979, fig. 15.  
 Matthew and Granger 1925 E, 5.  
 Osborn, H. F. 1910 B, 164, 170, 556.  
 Palacký, J. 1903 B, 306, 311.  
 Palmer, T. S. 1904 A, 352, 941.  
 Peterson, O. A. 1919 A, 104, 109, 116, 118, 121, 124.  
 Scharff, R. F. 1911 A, 353.

Schlosser, M. 1899 Q, 315.  
 Scott, W. B. 1913 A, 291.  
 Stehlin, H. G. 1903 A, 63, 66.  
 Trouessart, E. L. 1905 A, 633.  
 Zittel and Schlosser 1911 A, 448.  
 1923 A, 533, 667, 669.

**Isectolophus annectans** Scott and Osborn.

Hay, O. P. 1902 A, 627.  
 Matthew, W. D. 1909 C, 99.  
 Osborn, H. F. 1904 F, 9.  
 Peterson, O. A. 1919 A, 109, 116, pl. xlv, fig. 1; text-fig. 17.  
 Schlosser, M. 1899 Q, 316.  
 Stehlin, H. G. 1903 A, 63, 66.  
 Upper Eocene (Uinta); Utah.

**Isectolophus scotti** Peterson.

Peterson, O. A. 1919 A, 117, 120, pl. xxxiv, fig. 4.  
 Upper Eocene (Uinta); Utah.

**SCHIZOLOPHODON.** Type *Schizolophodon cuspidens* Peterson.

Peterson, O. A. 1919 A, 115, 122.

**Schizolophodon cuspidens** Peterson.

Peterson, O. A. 1919 A, 122, pl. xlv, fig. 4.  
 Upper Eocene (Uinta); Utah.

**TAPIRIDÆ** Gray.

Gray, J. E. 1821 A, 306 (Taperidæ).  
 Hay, O. P. 1902 A, 626.  
 Abel, O. 1912 F, 232 ("tapire").  
 1913 B, 729, 730, 753.  
 1914 A, 236.  
 1919 A, 854.  
 1920 A, 451 ("tapire").  
 1922 C, 273 ("tapire").  
 Ameghino, F. 1889 A, 1025.  
 1911 A, 23 ("tapiridés").  
 Anderson, R. J. 1912 D, 253.

Arlt, T. 1907 D, 684.  
 1911 A, 222 ("tapire").  
 1912 A, 700.  
 Beddard, F. E. 1902 A, 250.  
 Bonaparte, C. L. 1832 A, 293 (Tapirina).  
 Burmeister, H. 1879 B, 434.  
 Carus, V. 1875 A, 161 (Tapirina).  
 Case, E. C. 1899 B, 167.  
 Cope, E. D. 1880 U, 152.  
 1887 N, 994 (Protapirina).  
 Cuvier, F. 1825 A, 216 ("tapirs").



- Cuvier, G. 1805 A ("tapirs").  
 1825 A, II, 145-175, pls. 1-v ("tapirs").
- Depéret, C. 1902 A, 323 ("tapirs").  
 1902 C, 345 ("tapirs").  
 1904 B, 24 ("tapiridés").  
 1905 A, 1518 ("tapiridés").  
 1906 A, 619 ("tapiridés").  
 1906 B, 1120 ("tapiridés").  
 1908 A, 169, 303.  
 1909 A, 141 ("tapiridés").  
 1911 A, 577 ("tapiridés").  
 1912 A, 708 ("tapiridés").
- Doran, A. H. G. 1878 A, 420, pl. lxi.
- Earle, C. 1898 B, 115 ("tapiroïdes").
- Flower, W. H. 1892 A, 46.
- Frassetto, F. 1903 A, 310.
- Gadow, H. 1916 A, 545 ("tapirs").
- Gaudry, A. 1902 A, 344 ("tapiridés").
- Gervais, P. 1859 A, 102 ("tapiridés").
- Ghigi, A. 1900 B, 100 ("tapiru").
- Gill, T. N. 1885 B, 21.
- Gray, J. E. 1869 A, 252.
- Gregory, W. K. 1927 A, 601 ("tapirs").  
 1927 F, 392 ("tapirs").  
 1927 J, 440, 445, figs. 1, 2 ("tapirs").
- Hay, O. P. 1912 D, 589.  
 1923 A, 5, 203, 312.  
 1924 D, 384.  
 1927 E, 77 ("tapirs").
- Hescheler, K. 1906 A, 31 ("tapirs").
- Hoernes, R. 1886 A, 666.
- Hogben, L. T. 1919 A, 75.
- Huxley, T. H. 1870 F, 542.
- Jacobi, A. 1921 A, 200 ("tapiri").
- Kampfen, P. N. 1905 A, 578.
- Knottnerus-Meyer, T. 1907 A, 5, 97, 102.
- Lavocat, A. 1885 A, 48 ("tapirs").
- Leunis and Ludwig 1883 A, 273 (Tapirina).
- Lobley, J. L. 1908 A, 204.
- Lull, R. S. 1918 C, 136 ("tapirs").
- Lydekker, R. 1903 D, 123 ("tapirs").  
 1907 B, 5.  
 1916 A, 39.
- Matthew, W. D. 1909 C, 136.  
 1909 D, 302.  
 1910 H, 477 ("tapirs").  
 1913 B, 291.  
 1914 B, 387.
- Matthew, W. D. 1914 G, 234.  
 1915 A, 238, fig. 19.  
 1915 K, 449, fig. 17 ("tapirs").  
 1921 D, 214.  
 1926 C, 168, 170, fig. 26 ("tapirs").  
 1928 B, 968, 980 ("tapirs").
- O'Hara, C. C. 1910 A, 92, 127.  
 1920 A, 99.
- Osborn, H. F. 1905 I, 107.  
 1906 C, 776.  
 1907 G, 86, 176, 180 ("tapirs").  
 1909 D, 136.  
 1910 B, 505, 633.  
 1924 K, 275 ("tapirs").
- Palacký, J. 1903 B, 310 ("tapiriden").
- Palmer, T. S. 1904 A, 773, 941.
- Pictet, F. J. 1853 A, 301 ("tapiroïdes").
- Puccioni, N. 1908 A, 49 ("tapiri").
- Reynolds, S. H. 1897 A, 429.
- Scharff, R. F. 1911 A, 228, 352.
- Schlosser, M. 1899 P, 313 ("tapirs").  
 1899 Q, 314 ("tapirs").  
 1911 A, 165 ("tapirs").
- Schwarz, E. 1924 A, 420 ("tapirs").
- Scott, W. B. 1896 D, 57, 59 ("tapirs").  
 1913 A, 201, 319, 691.  
 1916 A, 117 ("tapirs").  
 1917 A, 123, 134 ("tapirs").  
 1923 A, 330 ("tapirs").
- Sellards, E. H. 1913 A, 53.
- Stehlin, H. G. 1903 A, 152 ("tapiriden").  
 1916 B, 1531 ("tapiriden").
- Terra, P. 1911 A, 313.
- Thomas, O. 1914 A, 417 ("tapirs").
- Tornier, G. 1888 A, 303 ("tapiriden").
- Trouessart, E. L. 1892 A, 188.  
 1905 A, 630.
- Vicq-d'Azyr, F. 1792 A, cvii (Tapiri).
- Wallace, A. R. 1876 A, II, 212.
- Wallisch, W. 1906 A, 310 ("tapiren").
- Weber, M. 1904 A, 611, 615, 624.
- Weber and Abel 1928 A, 426, 650, 651, 659.
- Winge, H. 1906 A, 71, 158 (Tapirini).
- Wright, G. F. 1908 A, 34 ("tapirs").
- Wright, R. R. 1883 A, 235.
- Zittel and Schlosser 1911 A, 446.  
 1923 A, 530, 602, 667.

## TAPIRINÆ Gray.

- Gray, J. E. 1867 A, 878.
- Abel, O. 1913 B, 729, 753.  
 1914 A, 236.
- Ardt, T. 1912 A, 746.
- Beddard, F. E. 1902 A, 250.
- Trouessart, E. L. 1905 A, 632.
- Zittel and Schlosser 1911 A, 448.  
 1923 A, 533.

PROTAPIRUS Filhol. Type *P. priscus* Filhol = *P. filholi* Trouessart.

- Hay, O. P. 1902 A, 627.
- Abel, O. 1913 B, 753, fig. 97.
- Ameghino, F. 1911 A, 19.
- Depéret, C. 1904 A, 578.  
 1904 B, 34.  
 1912 A, 708.
- Depéret and Douxami 1902 D, 34.
- Gregory, W. K. 1920 A, 195.
- Haug, E. 1911 A, 1528, 1705.
- Matsumoto, H. 1921 A, 76, 88.
- Matthew, W. D. 1901 B, 370.
- Matthew, W. D. 1909 C, 111.  
 1915 A, 238.  
 1917 A, 578.  
 1923 B, 979, fig. 15.
- Merriam and Sinclair 1903 A, 95.
- Osborn, H. F. 1907 G, 180, figs. 174, 177.  
 1909 D, 63.  
 1910 B, 190, 223, 227, 230, 556.  
 1912 G, 246.
- Peterson, O. A. 1919 A, 125.
- Schlosser, M. 1899 Q, 314.

- Scott, W. B. 1913 A, 257, 323.  
 Sinclair, W. J. 1901 A, 702.  
 Trouessart, E. L. 1905 A, 633.  
 Weber, M. 1904 A, 624.  
 Weber and Abel 1928 A, xxi, 659, fig. 448  
 Winge, H. 1906 A, 157.  
 Zittel and Schlosser 1911 A, 448.  
 1923 A, 533, 671, 672, fig. 657.

**Protapirus obliquidens Wortman and Earle.**

- Hay, O. P. 1902 A, 627.  
 Cook, H. J. 1912 D, 38.  
 Depéret, C. 1904 B, 36.  
 Matthew, W. D. 1909 C, 108.  
 O'Harra, C. C. 1910 A, 93, 129.  
 1920 A, 153.  
 Osborn, H. F. 1904 F, 11.  
 Peterson, O. A. 1919 A, 125.  
 Schlosser, M. 1899 P, 314.  
 1899 Q, 314, 315.  
 Upper Oligocene (Brule); Nebraska, South Dakota.

**Protapirus robustus Sinclair.**

- Sinclair, W. J. 1901 A, 703, fig. 1.  
 Frick, C. 1921 A, 313.  
 Matthew, W. D. 1909 C, 108.  
 Merriam and Sinclair 1907 A, 186, 191, 192.  
 Upper Oligocene (John Day); Oregon.

**TAPIRAVUS Marsh. Type *T. validus* Marsh.**

- Hay, O. P. 1902 A, 628  
 Ameghino, F. 1911 A, 19.  
 Haug, E. 1911 A, 1706.  
 Heulprin, A. 1887 A, 369.  
 Matsumoto, H. 1921 A, 88.  
 Matthew, W. D. 1909 C, 119.  
 1915 A, 239, 313.  
 1923 B, 979, fig. 15.  
 Osborn, H. F. 1909 D, 78, 80.  
 1910 B, 299, 352, 556.  
 Palmer, T. S. 1904 A, 662, 941.  
 Schlosser, M. 1899 P, 314.  
 1899 Q, 315.  
 Schmidt, O. 1886 A, 193, fig. 31.  
 Scott, W. B. 1913 A, 291.  
 Trouessart, E. L. 1905 A, 633.  
 Zittel and Schlosser 1911 A, 448.  
 1923 A, 533.

**TANYOPS Marsh. Type *T. undans* Marsh.**

- Hay, O. P. 1902 A, 628.  
 Palmer, T. S. 1904 A, 661, 941.

**TAPIRUS Brisson. Type *Hippopotamus terrestris* Linnaeus.**

- Hay, O. P. 1902 A, 628.  
 Abel, O. 1912 D, 608 ("tapir").  
 1912 F, 242 ("tapir").  
 1920 A, 451 ("tapir").  
 Adams, C. C. 1905 A, 54 ("tapirs").  
 Adloff, P. 1910 B, 232 ("tapir").  
 Aichel, O. 1917 A, 105, fig. 3.  
 1919 A, 193 ("tapir").

**Protapirus simplex Wortman and Earle.**

- Hay, O. P. 1902 A, 628.  
 Cook, H. J. 1912 D, 37.  
 Matthew, W. D. 1901 B, 369.  
 1909 C, 108.  
 O'Harra, C. C. 1910 A, 93.  
 1920 A, 152.  
 Peterson, O. A. 1919 A, 125.  
 Schlosser, M. 1899 Q, 314, 315.  
 Middle Oligocene (Brule); Nebraska.

**Protapirus validus Hatcher.**

- Hay, O. P. 1902 A, 628.  
 Cook, H. J. 1912 D, 38.  
 Depéret, C. 1904 B, 34.  
 Matthew, W. D. 1909 C, 108.  
 O'Harra, C. C. 1910 A, 93, 129.  
 1920 A, 153, pl. xiv.  
 Osborn, H. F. 1904 F, 11.  
 Peterson, O. A. 1919 A, 125.  
 Schlosser, M. 1899 Q, 314.  
 Scott, W. B. 1913 A, 323, 324, 325, figs. 169-171.  
 Upper Oligocene (Brule); South Dakota, Nebraska.

**Protapirus sp. indet.**

- Merriam and Sinclair 1907 A, 191, 192. Oligocene (John Day); Oregon.

**Tapiravus rarus Marsh.**

- Hay, O. P. 1902 A, 628.  
 Matthew, W. D. 1909 C, 118.  
 Sinclair, W. J. 1901 A, 702.  
 "Lower Pliocene, east of Rocky Mountains."

**Tapiravus validus Marsh.**

- Hay, O. P. 1902 A, 628.  
 Osborn, H. F. 1909 D, 20 [Protapirus (Tapiravus)].  
 Rhoads, S. N. 1903 A, 236.  
 Sinclair, W. J. 1901 A, 702.  
 Oligocene?; New Jersey.

**Tapiravus sp. indet.**

- Matthew, W. D. 1901 B, 445 (This genus?); Colorado.  
 1909 C, 115. Miocene (Middle); Colorado.

**Tanyops undans Marsh.**

- Hay, O. P. 1902 A, 628.  
 "Miocene"; South Dakota.

**Alezais, — 1902 A, 586 ("tapir").**

- Altmann, F. 1925 A, 108.  
 Ameghino, F. 1885 A, 203.  
 1889 A, 1025.  
 1904 A, 8, 113, 119.  
 1905 A, 28.  
 1911 A, 1 ("tapir").  
 1912 B, 172 ("tapirs").

- Anderson, R. J. 1902 C, 785 ("tapirs").  
1909 A, 745.
- Arlt, T. 1907 B, 453.  
1907 D, 684.
- Baird, S. F. 1876 A, 357 ("tapir").
- Bayer, F. 1897 A, 147, fig. 11 ("tapir").
- Beddard, F. E. 1902 A, 250.
- Beyer, H. 1908 A, 99 ("tapyr").
- Boule and Thevenin 1920 A, 75.
- Bradley, O. C. 1904 A, 17.
- Bronn, H. G. 1848 B, 1216.  
1849 A, 706.
- Burmeister, H. 1879 B, 485.
- Case, E. C. 1899 B, 167.
- Chamberlin, T. C. 1919 A, 316 ("tapirs").
- Cleland, J. 1863 B, 301 ("tapir").
- Cope, E. D. 1880 U, 158.  
1895 G, 596.
- Cuvier, F. 1825 A, 216, pl. lxxxviii ("tapirs").
- Cuvier, G. 1804 C, 122.  
1804 D, 132.
- Dall and Harris 1892 A, 284.
- Depéret, C. 1902 B, 344 ("tapir").  
1904 B, 13 ("tapirs").  
1909 A, 141.
- Doran, A. H. G. 1878 A, 420, pl. lxi.
- Eggeling, H. 1904 A, 99.
- Eimer, G. H. T. 1901 A, 262 ("tapir").
- Eudes-Deslongchamps, E. 1842 B, 19, pls. II, III.
- Falconer, H. 1863 A, 63.
- Fischer, E. 1903 A, 695 ("tapir").
- Fischer, J. B. 1829 A, 409.
- Flower, W. H. 1892 A, 48.
- Foot, J. S. 1916 A, 108, pl. xii.
- Frassetto, F. 1903 A, 310.  
1915 A, 64.
- Frech, F. 1907 A, 306 ("tapir").
- Frech and Geinitz 1903 A, 36.
- Gaudry, A. 1902 A, 344 ("tapir").
- Gervais, P. 1852 A, 49.  
1853 B, 35 ("tapir").  
1859 A, 103.
- Ghigi, A. 1900 A, 17.
- Gidley, J. W. 1912 C, 19 ("tapirs").
- Giebel, C. G. 1855 A, 77, pl. xxxiii.  
1883 A, pls. xxxiv, lxviii, lxxv, lxxxii.
- Goldman, E. A. 1913 A, 66.
- Goodsir, J. 1857 A.
- Gregory, W. K. 1912 F, 288.  
1920 A, 194, fig. 171.  
1920 B, 272, figs. 6, 7, 14-16.  
1927 J, 449, figs. 4, 5.
- Hasse and Schwarck 1870 A, 139, figs. 46-48.
- Hay, O. P. 1910 D, 372 ("tapirs").  
1912 B, 12, fig. 9 ("tapir").  
1912 D, 590, text-figs. 36-37.  
1916 E, 54 ("tapirs").  
1918 B, 10.  
1919 A, 311 ("tapirs").  
1928 D, 359.  
1928 E, 389.  
1928 B, 237, 238 ("tapirs").
- Heilprin, A. 1887 A, 28, 369.
- Hoernes, R. 1886 A, 666.
- Holland, W. J. 1912 B, 749.
- Huxley, T. H. 1863 F, 580 ("tapir").
- Ihering, H. 1909 A, 285 ("tapire").
- Jacobi, A. 1921 A, 201, figs. 1, 6.
- Kampfen, P. N. 1905 A, 578, figs. 64, 65.
- Kingsley, J. S. 1925 A, 298, fig. 321.
- Knottnerus-Meyer, T. 1907 A, 5, 102, fig. ("tapir").
- Kostlin, O. 1844 A ("tapir").
- Lankester, E. R. 1908 A, 338.
- Lataste, F. 1887 A, 271 ("tapir").
- Leche, W. 1887 A, pls. xcii, xcvi.  
1900 A, 991.  
1902 A, 43.  
1921 A, 68.
- Le Damany, P. 1906 B, 164 ("tapir").
- Ledouble, A. F. 1906 A, 550 ("tapir").
- Leunis and Ludwig 1883 A, 273.
- Lydekker, R. 1916 A, 41.
- Major, C. J. F. 1880 A, 23 ("tapir").
- Matsumoto, H. 1921 A, 76, 88.
- Matthew, W. D. 1910 G, 155.  
1915 A, 239.  
1917 A, 576 ("tapir").  
1926 C, 166 ("tapir").  
1928 B, 979, fig. 15.
- Meeckel, J. F. 1823 A, 6 ("tapir").  
1825 A ("tapir").
- Osborn, H. F. 1907 G, 180, figs. 172, 174  
1909 D, 87, 89.  
1910 B, 663.
- Owen, R. 1845 B, 604, pl. xcvi, figs. 4, 5.  
1866 B, 449, fig. 301.  
1868 A, 911.
- Palacký, J. 1903 B, 310.
- Palmer, T. S. 1904 A, 663, 941.
- Pander and Alton 1821 B, 16, pl. x ("tapir").
- Paulli, S. 1900 A, 181, figs. 1, 2.
- Pictet, F. J. 1853 A, 301.
- Retzius, A. 1849 A, 655.
- Reynolds, S. H. 1897 A, 471, 487, 501, 508, 524, figs. 106, 110.
- Rosenberg, A. 1873 A, 135 ("tapir").
- Scharff, R. F. 1911 A, 153, 352.
- Schlösser, M. 1902 J, 214.
- Schmidt, O. 1886 A, 190.
- Scott, W. B. 1913 A, 691.
- Sefve, I. 1914 A, 247.
- Sellards, E. H. 1914 A, 162.
- Spencer, J. W. 1898 A, 27 ("tapir").
- Stehlin, H. G. 1903 A, 20, 62, 152 ("tapir").  
1905 A, 569, figs. 46, 49, 50, 53.
- Taschenberg, O. 1899 A, 4694.
- Terra, P. 1911 A, 314.
- Tomes, C. S. 1878 A, 34 ("tapir").
- Trouessart, E. L. 1905 A, 634.
- Turner, H. N. 1850 B, 102 ("tapir").
- Van den Broeck, A. J. P. 1912 A, 782.
- Wallace, A. R. 1876 A, I, 502.
- Weber, M. 1904 A, 611, 624.
- Weber and Abel 1928 A, 637, 640, 652, 659, figs. 434, 436, 442.
- Weber and Burlet 1927 A, figs. 49, 114, 194.
- Wild, B. 1868 A, 422, pl. xi, figs. 2, 8.  
1872 B, 320.
- Wilson, T. 1901 A, 315 ("tapir").
- Winge, H. 1906 A, 158.
- Woodward, A. S. 1898 B, 321.
- Wright, G. F. 1908 B, 187 ("tapir").
- Wright, R. R. 1883 A, 235, figs. 122-125.

- Zietzschmann, O. 1917 A, 440, pl. xxv.  
 Zittel and Schlosser 1911 A, 448  
 1923 A, 531, 533, 681, fig. 655.

### **Tapirus haysii** Leidy.

- Hay, O. P. 1902 A, 628.  
 Abel, O. 1926 B, 81 (This species?).  
 Allen, G. M. 1926 A, 453.  
 Baker, F. C. 1920 A, 473.  
 Boule and Thevenin 1920 A, 77.  
 Cope, E. D. 1867 F, 138 ("tapir").  
 1895 G, 597.  
 Diener, C. 1912 A, 216.  
 Foster, J. W. 1869 A, 254.  
 Frech and Gemitz 1903 A, 36 (T. haysii).  
 Frick, C. 1921 A, 813.  
 Gidley, J. W. 1911 A, 436.  
 1913 B, 96 (This species?).  
 1927 E, 274.  
 Hay, O. P. 1912 D, 590, pl. ii; text-figs. 38, 39  
 1917 E, 45 (This species?).  
 1923 A, 497.  
 1924 D, 134, 155, 249.  
 1927 D, 313.  
 1928 C, 425, 428.  
 Lee, W. T. 1907 B, 215 (T. haysii?).  
 Leidy, J. 1859 J, 181 ("larger tapir").  
 1869 A, 391.  
 Loomis, F. B. 1924 C, 506  
 MacCurdy, G. G. 1916 A, 61 (This species?).  
 Manigault, G. E. 1887 A, 130 ("tapir").  
 Mercer, H. C. 1894 B, 356.  
 1897 A, 444 ("tapir").  
 Merriam, J. C. 1912 C, 221.  
 1913 A, 171.  
 Osborn, H. F. 1910 B, 469, 484.  
 Rhoads, S. N. 1903 A, 236.  
 Richardson, G. B. 1907 A, 32 (T. haysii?).  
 1909 A, 44, fig. 8 (T. haysii?).  
 Ruschenberger and Tryon 1879 A, 89.  
 Scharff, R. F. 1911 A, 352.  
 Schlosser, M. 1902 H, 142.  
 Schmidt, E. 1872 A, 251, 254 (T. americanus.  
 This species?).  
 Scott, W. B. 1913 A, 201, 322.  
 Sellards, E. H. 1916 B, 104 (This species?).  
 1916 C, 139, 149 (This species?).  
 1916 D, 616 (This species?).  
 1918 A, 59.  
 Shumek, B. 1902 A, 285.  
 Simpson, G. G. 1928 H, 2 (This species?).  
 Trouessart, E. L. 1905 A, 635 (Tapirella haysii).  
 Tuomey, M. 1848 A, 165, 166 ("tapir").  
 Wright, G. F. 1911 A, 282 ("tapir." This  
 species?).  
 Pleistocene (Early and Middle); Indiana,  
 Virginia, South Carolina, Georgia, Florida,  
 Mississippi, Tennessee, Kentucky, Texas?, Cali-  
 fornia?.

### **Tapirus haysii californicus** J. C. Merriam.

- Merriam, J. C. 1913 A, 170, figs. 1, 2.  
 Frick, C. 1921 A, 811.  
 Hay, O. P. 1927 D, 76, 77.  
 Lydekker, R. 1914 A, 636.

- Sellards, E. H. 1918 A, 59, 65.  
 Pleistocene (Auriferous gravels); California.  
 Pliocene (late) or Pleistocene (early); Oregon.

### **Tapirus merriami** Frick.

- Frick, C. 1921 A, 811, figs. 26-28.  
 Hay, O. P. 1927 D, 76, 162.  
 Early Pleistocene (Bautista); California.

### **Tapirus tarijensis** Ameghino.

- Ameghino, F. 1902 C, 247, pl. v, figs. 22a, 22b.  
 Freudenberg, W. 1922 A, 5 (This species?).  
 Trouessart, E. L. 1905 A, 634.  
 Pleistocene; Argentina, Mexico?.

### **Tapirus tennesseæ** Hay.

- Hay, O. P. 1920 B, 88, pl. iii, figs. 4-11.  
 1923 A, 209, 395.  
 Pleistocene (Middle); Tennessee.

### **Tapirus terrestris** (Linnaeus).

- Hay, O. P. 1902 A, 628.  
 Agassiz, L. 1859 B, 186 ("tapir").  
 Baker, F. C. 1920 A, 274.  
 Boule and Thevenin 1920 A, 75.  
 Carpenter, W. M. 1842 A, 390, fig. ("tapir").  
 Cope, E. D. 1867 F, 138 ("tapir").  
 Deussen, A. 1924 A, 108.  
 Falconer, H. 1863 A, 61 (T. americanus).  
 Fischer, J. B. 1829 A, 409 (T. americanum).  
 Foster, J. W. 1869 A, 254 (T. americanus).  
 Haug, E. 1911 A, 1836 (T. americanus).  
 Hay, O. P. 1912 D, 593, text-fig. 37a.  
 1920 B, 89.  
 1923 A, 497.  
 1924 D, 155, 156 (T. americanus, T. terres-  
 tris).  
 1928 C, 428.  
 Hilgard, E. W. 1860 A, 196 (T. americanus).  
 Holland, J. W. 1905 A, 231 (T. americanus?).  
 Holmes, F. S. 1859 A, 184 ("tapir").  
 1860 A, iv, vi, vii ("tapir").  
 Leidy, J. 1859 J, 181 (T. americanus).  
 Lydekker, R. 1916 A, 41.  
 Matson and Clapp 1909 A, 136 (T. americanus).  
 Merriam, J. C. 1913 A, 171.  
 1917 A, 439.  
 Osborn, H. F. 1910 B, 633 ("Tapirus").  
 Peterson, O. A. 1926 A, 273 (This species?).  
 Ruschenberger and Tryon 1879 A, 11, 89 (T.  
 americanus).  
 Scott, W. B. 1913 A, 691.  
 Sellards, E. H. 1916 B, 94.  
 Shumek, B. 1902 A, 285 (T. americanus).  
 Spencer, J. W. 1895 A, 137 (T. americanus).  
 Whittlesey, C. 1866 A, 16 ("pachyderm").  
 Recent; northern South America.  
 It is doubtful that the tapir remains which  
 have been found in many localities in North  
 America and identified as *Tapirus terrestris*  
 and *T. americanus* really belong there.

### **Tapirus veroensis** Sellards.

- Sellards, E. H. 1918 A, 57, pls. i-iv.  
 Hay, O. P. 1920 B, 89.  
 1923 A, 497.  
 1927 C, 281 ("tapirs").

Sellards, E. H. 1916 F, 9 (*T. haysi*?).

1917 E, 198 ("*tapir*").

Pleistocene (Early); Florida.

### **Tapirus sp. indet.**

Agassiz, L. 1851 B, 179 ("*pachyderm*"). Ohio.  
Bancroft, H. H. 1875 A, 701. California.

Chamberlin, R. T. 1916 A, 35. Pleistocene, Florida.

1917 A, 675. Pleistocene; Florida.

Freudenberg, W. 1910 A, 6 (198) ("*tapir*")  
Pleistocene; Mexico.

1921 A, 17, 38. Pleistocene; Mexico.

Frick, C. 1926 A, 106 (This genus?). Miocene  
(Pawnee Creek); Colorado.

Gidley, J. W. 1928 B, 16 ("*tapir*"). Pleisto-  
cene; Florida.

Hay, O. P. 1923 A, 497

1924 D, 384. Pleistocene; Louisiana, Okla-  
homa, Texas.

Hay, O. P. 1927 D, 313. Pleistocene; California.  
Holmes, W. H. 1901 A, 423. Pleistocene; Cali-  
fornia.

Loomis, F. B. 1925 D, 436 ("*tapir*"). Pleisto-  
cene; Florida.

1926 B, 262. Pleistocene; Florida.

Mercer, H. C. 1896 A. Pleistocene; Tennessee.

Moore, C. 1905 A, 34. Pleistocene; Tennessee.

Osborn, H. F. 1925 D, 531 (This genus?). Pleis-  
tocene (La Brea); California.

Sellards, E. H. 1916 E, 15, 16. Pleistocene;  
Florida.

1917 A, 250. Pleistocene; Florida.

Sinclair, W. J. 1903 A, 711.

1904 B, 149.

1908 A, 112.

Stock, C. 1925 A, 30 (This genus??). Pleisto-  
cene (La Brea); California.

Troxell, E. L. 1917 C, 212.

Whitney, J. D. 1865 A, 252 ("*tapir*").

### *Superfamily RHINOCEROTOIDÆ, new name.*

The writers, as quoted, employ the form

Rhinocerotidea.

Hay, O. P. 1902 A, 638.

Abel, O. 1910 E, 3.

Case, E. C. 1898 C, 833.

Cope, E. D. 1891 N, 86 (Rhinocerotidea).

Cossmann, M. 1899 A, 81.

Gidley, J. W. 1912 B, 179.

Gill, T. 1872 B, 12, 85.

Gregory, W. K. 1920 A, 247.

Matthew, W. D. 1926 C, 170, fig. 26 (Rhino-  
cerotoida).

Nat. Sci. 1898 A, 153.

O'Harra, C. C. 1910 A, 88.

1920 A, 91.

Osborn, H. F. 1905 H, 211, fig. 3.

1909 D, 135.

1910 B, 557.

Ringström, T. 1924 A, 150.

Schlosser, M. 1901 B, 300.

Weber, M. 1904 A, 615, 625.

Weber and Abel 1928 A, 426, 661, 666.

Weber and Burlet 1927 A, xv.

Winge, H. 1906 A, 71, 159, 162 (Rhinocerotidæ).

Wood, H. E. 1927 B, 6, 7.

### HYRACODONTIDÆ Cope.

Cope, E. D. 1879 C, 228.

Hay, O. P. 1902 A, 638.

Abel, O. 1910 E, 3.

1913 B, 730, 753a (Hyracodontinæ).

Adloff, P. 1906 A, 115.

Case, E. C. 1898 C, 835 ("*hyracodonts*").

Cooper, C. F. 1924 B, 384.

Cossmann, M. 1899 A, 81.

Depéret, C. 1912 A, 708 ("*hyracodontidés*").

Dollo, L. 1885 C, 269.

Lydekker, R. 1898 C, 87.

Matthew, W. D. 1901 B, 371.

1909 C, 99, 102, 104, 105, 108, 111.

1909 D, 301.

1925 F, 7.

1926 C, 168, 170, fig. 26 ("*hyracodonts*").

1928 B, 968 ("*hyracodonts*").

Matthew and Granger 1925 F, 7.

O'Harra, C. C. 1910 A, 81, 91, 127.

1920 A, 92.

Nat. Sci. 1898 A, 153.

Osborn, H. F. 1902 A, 86 ("*hyracodonts*").

1902 E, 359.

Osborn, H. F. 1905 H, 211, fig. 3.

1905 I, 107.

1909 D, 127.

1910 B, 135, 156, 213, 223, 557.

Palmer, T. S. 1904 A, 747, 938.

Pavlov, M. 1915 A, 16.

Ringström, T. 1924 A, 151.

Roman, F. 1912 A, 77 ("*hyracodontidés*").

Schlosser, M. 1898 C, 375.

1901 B, 301, 303.

Scott, W. B. 1913 A, 291, 340.

Seeley, H. G. 1886 A, 474 (Hyracodontidæ.  
Triplopodidæ).

Sinclair, W. J. 1922 A, 654 ("*hyracodonts*").

Troxell, E. L. 1922 E, 38.

Weber, M. 1904 A, 615, 625.

Weber and Abel 1928 A, 426, 651, 662.

Winge, H. 1906 A, 71, 160 (Hyracodontini).

Wood, H. E. 1926 A, 238 ("*hyracodonts*").

1927 B, 6, 81.

Zittel and Schlosser 1911 A, 450.

1923 A, 535 (Hyracodontinæ).

### HYRACHYINÆ Osborn.

Osborn, H. F. 1892, in Osborn and Wortman  
1892 A, 93.

Hay, O. P. 1902 A, 638.

Osborn, H. F. 1902 E, 360.

1910 B, 557.

Palmer, T. S. 1904 A, 747, 938.

Wood, H. E. 1927 B, 6, 8, 22, 79.

HYRACHYUS Leidy. Type *H. agrestis* Leidy.

- Leidy, J. 1871 C, 327.  
 Hay, O. P. 1902 A, 638.  
 Abel, O. 1910 E, 3, 25, 35.  
 Ameghino, F. 1904 A, 69 (*Hyrachius*).  
 Beddard, F. E. 1902 A, 262.  
 Cooper, C. F. 1924 B, 374.  
 Cope, E. D. 1880 U, 154.  
 Depéret, C. 1904 A, 577, 580.  
 1904 B, 16.  
 Earle, C. 1898 B, 116.  
 Flower, W. H. 1873 B, 99.  
 Gaudry, A. 1891 C, 40 (*Hyrachius*).  
 1896 A, 180.  
 1898 A, 128.  
 Granger, W. 1909 A, 22.  
 1910 A, 245.  
 Gregory, W. K. 1906 A, 13.  
 1912 F, 288.  
 1920 A, 194, fig. 169.  
 Haug, E. 1911 A, 1528 (*Hyrachius*).  
 Hoernes, R. 1886 A, 666.  
 Matthew, W. D. 1909 C, 102.  
 1915 K, 450.  
 1917 A, 576.  
 1924 E, 743.  
 1926 C, 168, 170, fig. 26.  
 1928 B, 967, 979, fig. 15.  
 Osborn, H. F. 1898 V, 206.  
 1905 L, 568.  
 1907 G, 162, figs. 135, 177, 178, 180.  
 1909 D, 49.  
 1910 B, 130, 135, 162, 164, 557, fig. 61.  
 1912 G, 236, fig. 3.  
 1919 B, 553.  
 1923 F, 214.  
 Palacký, J. 1903 B, 307.  
 Palmer, T. S. 1904 A, 343, 938.  
 Pavlow, M. 1915 A, 16 (*Hyrachius*).  
 Peterson, O. A. 1919 A, 128, 129, 137.  
 Schlosser, M. 1899 P, 313.  
 1900 H, 461.  
 1901 B, 301.  
 Schmidt, O. 1886 A, 193.  
 Schuchert and Levene 1927 A, 334, fig.  
 Scott, W. B. 1913 A, 683, figs. 182, 183.  
 Seeley, H. G. 1886 A, 476.  
 Stehlin, H. G. 1903 A, 63, 64.  
 Terra, P. 1911 A, 314, fig. 140.  
 Trouessart, E. L. 1905 A, 623.  
 Troxell, E. L. 1922 D, 34.  
 1922 E, 38.  
 1923 G, 134.  
 Wallace, A. R. 1876 A, i, 136.  
 Weber and Abel 1928 A, 660, 662, fig. 448.  
 Winge, H. 1906 A, 160.  
 Wood, H. E. 1927 B, 8, 11, 30.  
 Zittel and Schlosser 1911 A, 451.  
 1923 A, 425, 536, 668, 668, 669, figs. 527, 660.

***Hyrachyus affinis* (Marsh).**

- Hay, O. P. 1902 A, 638.  
 Troxell, E. L. 1922 D, 32, 33.  
 1922 E, 42, 43, 48, fig. 3.  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus affinis gracilis* Troxell.**

- Troxell, E. L. 1922 E, 43, 48, pl. i.  
 Marsh, O. C. 1922, in Troxell, E. L. 1922 E, 44  
 (H. bairdi).  
 Troxell, E. L. 1922 D, 33.  
 Wood, H. E. 1927 B, tab. vii.  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus agrarius* Leidy.**

- Leidy, J. 1871 C, 357.  
 Hay, O. P. 1902 A, 638.  
 Abel, O. 1910 E.  
 1912 F, 639.  
 1924 B, 20.  
 Beddard, F. E. 1902 A, 262.  
 Depéret, C. 1904 B, 21, fig. 5.  
 Gaudry, A. 1896 A, 181, fig. 175.  
 Matthew, W. D. 1909 C, 97.  
 Merrill, G. P. 1907 A, 42.  
 Osborn, H. F. 1904 F, 24.  
 Peterson, O. A. 1919 A, 128.  
 Schlosser, M. 1898 C, 375.  
 Toulou, F. 1902 A, 24.  
 Troxell, E. L. 1922 E, 39.  
 Weber and Abel 1928 A, 662, fig. 450.  
 Williams, H. S. 1897 A, 681, fig. ("Hyrachyus").  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus agrestis* Leidy.**

- Leidy, J. 1871 C, 357.  
 Hay, O. P. 1902 A, 638 (H. agrarius, in part).  
 Merrill, G. P. 1907 A, 42.  
 Troxell, E. L. 1922 E, 39, 40.  
 This species was evidently intended to be the  
 type of the genus. *H. agrarius* may be a  
 synonym.  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus? bairdianus* (Marsh).**

- Hay, O. P. 1902 A, 638 (H. agrarius, in part).  
 Matthew, W. D. 1909 C, 97 (This genus?).  
 Troxell, E. L. 1922 E, 40, 48, figs. 1, 2.  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus eximius* Leidy.**

- Hay, O. P. 1902 A, 639.  
 Abel, O. 1922 C, 273, fig. 230.  
 Leuthardt, F. 1891 A, 113, pl. v, fig. 3 (*Hyrachius*).  
 Marsh, O. C. 1922, in Troxell, E. L. 1922 E, 46.  
 Matthew, W. D. 1909 C, 97.  
 Scott, W. B. 1913 A, 271, 344, figs. 140, 182.  
 Toulou, F. 1902 A, 45.  
 Wood, H. E. 1927 B, tab. vii.  
 Middle Eocene (Bridger); Wyoming.

***Hyrachyus grandis* Peterson.**

- Peterson, O. A. 1919 A, 129, figs. 18, 19 (H. grande).  
 Upper Eocene (Uinta); Utah.

***Hyrachyus imperialis* Osborn, Scott and Speir.**

- Hay, O. P. 1902 A, 639.

Matthew, W. D. 1909 C, 97.  
Middle Eocene (Bridger); Wyoming.

**Hyrachyus implicatus** Cope.

Hay, O. P. 1902 A, 639.

Matthew, W. D. 1909 C, 97 (H. intermedius, H. crassidens).

Peterson, O. A. 1919 A, 138.  
Middle Eocene (Bridger); Wyoming.

**Hyrachyus modestus** Leidy.

Hay, O. P. 1902 A, 639.

Matthew, W. D. 1909 C, 98 (Isectolophus?).

Merrill, G. P. 1907 A, 42 (Hyrachyus); 44 (Lophiodon).

Troxell, E. L. 1922 E, 42 (syn.? of H. affinis).  
Middle Eocene (Bridger?), Wyoming.

**Hyrachyus paradoxus** Osborn, Scott and Speir.

Hay, O. P. 1902 A, 639.

Matthew, W. D. 1909 C, 97 (This genus?).  
Middle Eocene (Bridger?); Wyoming.

**METAHYRACHYUS** Troxell.

Troxell, E. L. 1922 D, 31, 33.  
1922 E, 38.

Weber and Abel 1928 A, 663.

Wood, H. E. 1927 B, 80.

**COLONOCERAS** Marsh.

Hay, O. P. 1902 A, 639.

Dollo, L. 1885 C, 295 (Colonoceras).

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 102.  
1926 C, 170, fig. 26.

Osborn, H. F. 1910 B, 557.

Palmer, T. S. 1904 A, 196, 938.

Peterson, O. A. 1919 A, 128.

Schlosser, M. 1898 C, 376.  
1901 B, 301.

Scott, W. B. 1913 A, 272, 346, 350.

Trouessart, E. L. 1905 A, 623.

**HYRACODONTINÆ** Osborn and Wortman.

Osborn and Wortman 1892 A, 93 (Hyracodontinæ, Triplopodidæ).

Hay, O. P. 1902 A, 639 (Triplopodidæ); 640 (Hyracodontinæ).

Abel, O. 1914 A, 238.  
1919 A, 855.

Arlt, T. 1907 D, 260.  
1912 A, 700.

Cope, E. D. 1881 G, 379 (Triplopodidæ).  
1881 O, 340 (Triplopodidæ).

Depéret, C. 1904 B, 21 ("hyracodontidés").  
1912 B, 770 ("hyracodontidés").

**Hyrachyus princeps** Marsh.

Hay, O. P. 1902 A, 639.

Marsh, O. C. in Troxell, E. L. 1922 E, 46, 48.

Matthew, W. D. 1909 C, 97.

Peterson, O. A. 1919 A, 129, fig. 19.

Troxell, E. L. 1922 D, 36.

1922 E, 46, fig. 5  
Middle Eocene (Bridger); Wyoming.

**Hyrachyus priscus** Douglass.

Douglass, E. 1903 A, 146, 156, fig. 2 (This genus?).

Matthew, W. D. 1909 C, 99.

Upper Eocene (Uinta); Montana.

**Hyrachyus** sp. indet.

Douglass, E. 1903 A, 158, fig. 3. Eocene; Montana.

Hills, R. C. 1889 A, 221. Eocene (Huerfano); Colorado.

Matthew, W. D. 1909 C, 97. Middle Eocene (Bridger); Colorado: Upper Eocene (Uinta); Wyoming, Utah.

Wood, H. E. 1927 B, tab. vii.

Type *M. bicornutus* Troxell.

**Metahyrachyus bicornutus** Troxell.

Troxell, E. L. 1922 D, 31, 33, figs. 4, 5.  
Middle Eocene (Bridger); Wyoming.

Type *C. agrestis* Marsh.

Weber and Abel 1928 A, 663.

Wood, H. E. 1927 B, 80.

**Colonoceras agrestis** Marsh.

Hay, O. P. 1902 A, 639.

Gregory, W. K. 1920 A, 195.

Matthew, W. D. 1909 C, 97.

Peterson, O. A. 1919 A, 128.

Troxell, E. L. 1922 D, 31, figs. 1-3.

Weber and Abel 1928 A, 663.

Wood, H. E. 1927 B, 78.  
Middle Eocene (Bridger); Wyoming.

**PROTHYRACODON** Scott and Osborn. Type *Prothyraodon intermedius* Scott and Osborn.

Scott and Osborn 1887 A, 260.

Hay, O. P. 1902 A, 640 (Triplopus, in part).

Matthew and Granger 1925 C, 6.

Peterson, O. A. 1919 A, 131.

Weber and Abel 1928 A, 664.

Wood, H. E. 1927 B, 22.

**Prothyracodon obliquidens** Scott and Osborn.

Hay, O. P. 1902 A, 640 (Triplopus).  
Matthew and Granger 1925 E, 7.

Peterson, O. A. 1919 A, 131, pl. xlvii, figs. 1-9.  
Wood, H. E. 1927 B, 23, 35 (P. obliquidens, P. intermedium); tabs. 1b, 11, v, vii.  
Upper Eocene (Umta); Utah.

**TRIPLOPUS** Cope. Type *T. cubitalis* Cope.

Hay, O. P. 1902 A, 640.  
Abel, O. 1910 E, 25.  
Beddard, F. E. 1902 A, 262.  
Granger, W. 1909 A, 22.  
Haug, E. 1911 A, 1528.  
Matthew, W. D. 1909 C, 102.  
1915 A, 240.  
1926 C, 170, fig. 26.  
1928 B, 979, fig. 15.  
Matthew and Granger 1926 A, 3.  
Osborn, H. F. 1910 B, 166, 168, 557.  
1913 B, 261.  
Palmer, T. S. 1904 A, 693, 938.  
Schlosser, M. 1900 H, 462.  
1901 B, 301.  
Scott, W. B. 1913 A, 266, 272, 345.  
Seeley, H. G. 1886 A, 476.  
Trouessart, E. L. 1905 A, 623.  
Weber, M. 1904 A, 625.  
Weber and Abel 1928 A, 662.  
Winge, H. 1906 A, 160.

Wood, H. E. 1927 B, 12.  
Wright, R. R. 1883 A, 245.  
Zittel and Schlosser 1911 A, 451.  
1923 A, 536, 669.

**Triplopus cubitalis** Cope.

Hay, O. P. 1902 A, 640.  
Granger, W. 1909 A, 22.  
Gregory, W. K. 1920 A, 195.  
Matthew, W. D. 1909 C, 97.  
Osborn, H. F. 1913 B, 261.  
Peterson, O. A. 1919 A, 132.  
Scott, W. B. 1913 A, 343, fig. 181.  
Weber and Abel 1928 A, 663, fig. 451.  
Wood, H. E. 1927 B, 13.  
Middle Eocene (Washakie); Wyoming.

**Triplopus grangeri** Wood.

Wood, H. E. 1927 B, 16, pls. ii, iv, tabs. 1a, 1b, ii.  
Upper Eocene (Umta); Utah.

**EPITRIPLOPUS** Wood. Type *Prothyracodon uintense* Peterson.

Wood, H. E. 1927 B, 19, pl. iii, fig. 9.

**Epitriplopus uintensis** (Peterson).

Peterson, O. A. 1919 A, 134, pl. xxxvi, fig. 1;  
pl. xlv; pl. xlvii, figs. 10-16 (Prothyracodon).

Matthew and Granger 1925 E, 7 (Prothyracodon).  
Wood, H. E. 1927 B, 19, pl. iii, fig. 9, tabs. 1b, ii.  
Upper Eocene (Umta); Utah.

**ANCHISODON** Cope. Type *A. quadriplicatus* Cope.

Hay, O. P. 1902 A, 640.  
Palmer, T. S. 1904 A, 102, 938.  
Trouessart, E. L. 1905 A, 624.  
Wood, H. E. 1927 B, 68.

**Anchisodon quadriplicatus** Cope.

Hay, O. P. 1902 A, 640.  
Matthew, W. D. 1909 C, 105.  
Wood, H. E. 1927 B, 68 (Subhyracodon).  
Middle Oligocene (Cedar Creek); Colorado.

**HYRACODON** Leidy. Type *H. nebraskensis* Leidy.

Hay, O. P. 1902 A, 640.  
Abel, O. 1910 E, 3, 25.  
1926 A, 225.  
Anonymous 1898 B, 374.  
Ardt, T. 1907 D, 260.  
Cope, E. D. 1880 U, 152, 156.  
Depéret, C. 1904 B, 37.  
Douglass, E. 1905 A, 211.  
1909 C, 283.  
Flower, W. H. 1873 B, 100.  
Gaudry, A. 1896 A, 178.  
Gregory, W. K. 1920 A, 196, fig. 172.  
Haug, E. 1911 A, 1528.  
Heilmann, G. 1926 A, 160.  
Heilprin, A. 1887 A, 368.  
Knipe, H. R. 1912 A, 142, fig.  
Knowlton, F. H. 1922 A, 21.  
Koken, E. 1901 B, 223.  
Lobley, J. L. 1908 A, 212.  
Loomis, F. B. 1928 A, 142.  
Matthew, W. D. 1901 B, 369, 370, 373.  
1909 C, 111.

Matthew, W. D. 1915 A, 240.  
1924 E, 748.  
1928 B, 979, fig. 15.  
Matthew and Granger 1925 E, 6.  
Nat. Sci. 1898 A, 158.  
Osborn, H. F. 1910 B, 214, 220, 557, fig. 101.  
Palmer, T. S. 1904 A, 343, 913.  
Peterson, O. A. 1919 A, 132, 138.  
Schlosser, M. 1898 C, 375.  
1900 H, 460.  
Scott, W. B. 1913 A, 252, 255, 266, 341, fig. 133.  
Sinclair, W. J. 1922 A, 654 ("hyracodons").  
1922 C, 62.  
1924 A, 119.  
Stehlin, H. G. 1905 A, 576.  
Torra, P. 1911 A, 314.  
Trouessart, E. L. 1905 A, 624.  
Troxell, E. L. 1921 E, 34.  
1922 D, 85.  
1922 E, 39.  
Wallace, A. R. 1876 A, i, 136; ii, 214, 248.  
Weber, M. 1904 A, 351, 625.



Weber and Abel 1928 A, 74, 662.

Winge, H. 1906 A, 160.

Wood, H. E. 1927 B, 8, 11, 26.

Zittel and Schlosser 1911 A, 451.

1923 A, 536, 671, fig. 661.

### **Hyracodon apertus** Sinclair.

Sinclair, W. J. 1922 C, 73, fig. 3.

Abel, O. 1926 A, 228-245 (H. nebrascensis apertus).

Sinclair, W. J. 1924 A, 102.

Wood, H. E. 1927 B, 79, tab. vu.

Oligocene (Brule); South Dakota.

### **Hyracodon arcidens** Cope.

Hay, O. P. 1902 A, 640.

Abel, O. 1914 A, 242, fig. 209 (H. priscidens).

1926 A, 227, 233 (H. priscidens); 227, 233, 236, 238 (H. arcidens).

Cope and Matthew 1915 A, pl. cu.

Lambe, L. M. 1905 B, 37, pl. i (H. priscidens).

1908 A, 10, 39, pl. iv, figs. 1-4 (H. priscidens).

Matthew, W. D. 1901 B, 357.

1909 C, 104 (H. priscidens); 105 (H. arcidens).

Sinclair, W. J. 1922 C, 67, fig. 1 (H. arcidens minus, H. priscidens, H. selenidens as syns.).

1924 A, 102, 120.

Troxell, E. L. 1921 E, 35 (H. arcidens); 36, fig. 1 (H. arcidens minus); 37, figs. 2, 3 (H. selenidens).

Wood, H. E. 1927 B, 27, 78.

Oligocene; Colorado, South Dakota, Assiniboia.

### **Hyracodon leidyanus** Troxell.

Troxell, E. L. 1921 E, 38, figs. 4, 5.

Abel, O. 1926 A, 228-245, figs. 2, 3 (H. nebrascensis leidyanus).

Sinclair, W. J. 1922 C, 74, figs. 4, 5.

1924 A, 120.

Troxell, E. L. 1922 D, 35.

Wood, H. E. 1927 B, 27, 79.

Middle or Lower Oligocene; South Dakota.

### **Hyracodon major** Scott and Osborn.

Hay, O. P. 1902 A, 641.

Cook, H. J. 1912 D, 36.

Matthew, W. D. 1909 C, 105.

O'Harra, C. C. 1920 A, 152.

Sinclair, W. J. 1922 C, 77 ("indeterminate").

Troxell, E. L. 1921 E, 35.

Oligocene (White River); South Dakota.

### **Hyracodon nebrascensis** Leidy.

Hay, O. P. 1902 A, 641.

Abel, O. 1913 B, 753a, fig. 98 (H. nebrascense).

1914 A, 237, figs. 202, 203 (H. nebrascense).

1926 A, 225, fig. 1 (H. nebrascensis); 227-245 (H. nebrascensis selenidens).

Beddard, F. E. 1902 A, 260, fig. 134 (H. nebrascensis).

Cook, H. J. 1912 D, 136 (H. nebrascensis).

Darton, N. H. 1901 A, 543 (H. nebrascensis).

1905 A, 45, 173 (H. nebrascensis).

Darton and Siebenthal 1910 A, 11 (H. nebrascensis).

Gervais, P. 1859 A, 360 (Rhinosceros).

Giebel, C. G. 1883 A, pl. xli (Rhinosceros).

Lambe, L. M. 1904 C, 28, 38, 51 (H. nebrascense).

1905 B, 37 (H. nebrascensis).

1908 A, 10, 39, 42.

Matthew, W. D. 1901 B, 357 (H. nebrascensis).

1903 B, 219 (This species?).

1909 C, 105 (H. nebrascensis).

Merrill, G. P. 1907 A, 20 (Aceratherium); 42 (Hyracodon); 60 (Rhinosceros).

O'Harra, C. C. 1920 A, 91, 93, pls. xiv, xxxi; text-fig. 36 (H. nebrascensis).

Osborn, H. F. 1904 F, 42.

Ruschenberger and Tryon 1879 A, 12 (H. nebrascensis).

Scott, W. B. 1913 A, 341, 343, figs. 180, 181.

Sinclair, W. J. 1922 C, 69, fig. 2 (H. nebrascensis).

1924 A, 102 (H. nebrascensis).

Stehlin, H. G. 1905 A, 576.

Trouessart, E. L. 1905 A, 624 (H. nebrascensis).

Troxell, E. L. 1921 E, 34, 35 (H. nebrascensis).

Weber and Abel 1928 A, 663, figs. 449, 451, 452 (H. nebrascensis).

Wood, H. E. 1927 B, 27, 79.

Zittel and Schlosser 1911 A, 451, fig. 622 (H. nebrascensis).

Middle Oligocene (Lower Brule); South Dakota.

### **Hyracodon petersoni** Wood.

Wood, H. E. 1927 B, 79, tab. 1b.

Abel, O. 1926 A, 245 (Syn. of H. nebrascensis selenidens).

Lower Oligocene (Chadron); Nebraska.

### **Hyracodon? planiceps** Scott and Osborn.

Hay, O. P. 1902 A, 641.

Cook, H. J. 1912 D, 37 (This genus?).

Lambe, L. M. 1905 B, 40.

1908 A, 10, 42.

Matthew, W. D. 1909 C, 105 (This genus and family?).

O'Harra, C. C. 1920 A, 152.

Sinclair, W. J. 1922 C, 76 (This genus?).

Troxell, E. L. 1921 E, 36.

Middle Oligocene (Lower Brule); Nebraska?

### **Hyracodon** sp. indet.

Cook, H. J. 1912 D, 34. Oligocene (Chadron); Nebraska: 38, Oligocene (Brule); Nebraska.

Lambe, L. M. 1905 D, 368 A. Oligocene (Cypress Hills); Canada.

Matthew, W. D. 1909 C, 108. Oligocene (Brule); Colorado and region of South Dakota and Nebraska.

Sinclair, W. J. 1922 C, 75, 76, figs. 6, 7.

1924 A, 101. Oligocene (White River); South Dakota.

## AMYNODONTIDÆ Scott and Osborn.

- Hay, O. P. 1902 A, 641.  
 Abel, O. 1910 E, 3.  
     1913 B, 730, 753a (Amynodontinæ).  
     1914 A, 239 (Amynodontinæ).  
     1919 A, 856 (Amynodontinæ).  
 Adloff, P. 1906 A, 115 (Amynodontinæ).  
 Ameghino, F. 1906 A, 324.  
 Arldt, T. 1907 D, 260 (Amynodontinæ).  
     1912 A, 700 (Amynodontinæ).  
 Beddard, F. E. 1902 A, 263 ("amynodonts").  
 Case, E. C. 1898 C, 835 ("amynodonts").  
 Cooper, C. F. 1924 B, 384.  
 Cossmann, M. 1899 A, 81.  
 Depéret, C. 1912 A, 708 ("amynodontidés").  
 Gregory, W. K. 1912 F, 294.  
 Lydekker, R. 1898 C, 87.  
 Matthew, W. D. 1909 C, 99, 102, 104, 105, 111.  
     1926 C, 170, fig. 26 ("amynodonts").  
     1928 B, 968 ("amynodonts").
- Nat. Sci. 1898 A, 158.  
 O'Harra, C. C. 1910 A, 89.  
 Osborn, H. F. 1905 I, 107.  
     1909 D, 54, 57, 60-63.  
     1910 B, 557, 606 (Amynodontinæ).  
 Palacký, J. 1903 B, 306 ("amynodontiden").  
 Peterson, O. A. 1919 A, 128, 130 (Amynodontinæ).  
 Roman and Joleaud 1909 A, 39, 43.  
 Schlosser, M. 1898 C, 376.  
     1901 B, 301, 303.  
 Scott, W. B. 1913 A, 346, 675 (Amynodontinæ).  
 Trouessart, E. L. 1905 A, 624 (Amynodontinæ).  
 Troxell, E. L. 1921 D, 21.  
 Weber, M. 1904 A, 615, 625.  
 Weber and Abel 1928 A, 426, 651, 664.  
 Winge, H. 1906 A, 71, 158.  
 Wood, H. E. 1927 B, 6, 8, 79, 81, 83.  
 Zittel and Schlosser 1911 A, 451 (Amynodontinæ).  
     1923 A, 536, 669 (Amynodontinæ).

AMYNODON Marsh. Type *Diceratherium advenum* Marsh.

- Hay, O. P. 1902 A, 641.  
 Arldt, T. 1907 D, 260.  
 Cooper, C. F. 1922 B, 619.  
 Depéret, C. 1904 A, 578.  
 Gaudry, A. 1896 A, 181.  
 Granger, W. 1909 A, 22.  
     1910 A, 235.  
 Gregory, W. K. 1920 B, 280, fig. 24.  
 Heilprin, A. 1887 A, 368.  
 Kampfen, P. N. 1905 A, 577.  
 Matthew, W. D. 1907 D, 6.  
     1909 C, 102.  
     1915 A, 240.  
     1924 E, 748.  
     1926 C, 169, fig. 26 ("amynodonts").  
     1928 B, 967, 979, fig. 15.  
 Osborn, H. F. 1909 D, 83.  
     1910 B, 166, 170, 557.  
     1912 G, 241, fig. 6.  
 Palacký, J. 1903 B, 307.  
 Palmer, T. S. 1904 A, 99, 386.  
 Pavlow, M. 1915 A, 16.  
 Peterson, O. A. 1919 A, 130.  
 Roman, F. 1912 A, 9.  
 Roman and Joleaud 1909 A, 39.  
 Schlosser, M. 1901 B, 301.  
 Scott, W. B. 1913 A, 266, 272, 348, 675.  
 Stehlen, H. G. 1903 A, 74.  
     1905 A, 576.  
 Terra, P. 1911 A, 314.  
 Trouessart, E. L. 1905 A, 624.  
 Troxell, E. L. 1921 D, 21.  
     1922 E, 38.  
 Weber, M. 1904 A, 625.  
 Weber and Abel 1928 A, 664, 666.  
 Winge, H. 1906 A, 158.  
 Wood, H. E. 1927 B, 8.
- Zittel and Schlosser 1911 A, 451.  
     1923 A, 536, 668.
- Amynodon advenus** Marsh.  
 Hay, O. P. 1902 A, 641.  
 Depéret and Douxami 1902 D, 26 (*Diceratherium*).  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1919 A, 130.  
 Troxell, E. L. 1921 D, 21, 32, fig. 7.  
     Upper Eocene (Uinta); Utah.
- Amynodon antiquus** (Scott and Osborn).  
 Hay, O. P. 1902 A, 641.  
 Granger, W. 1910 A, 240 (This species?).  
 Matthew, W. D. 1909 C, 99.  
 Troxell, E. L. 1921 D, 21, 22.  
     Upper Eocene (Uinta); Wyoming.
- Amynodon erectus** Troxell.  
 Troxell, E. L. 1921 D, 22, 28, figs. 3-6.  
     1922 D, 37.  
     Upper Eocene (Uinta); Utah.
- Amynodon intermedius** Osborn.  
 Hay, O. P. 1902 A, 642.  
 Matthew, W. D. 1909 C, 99.  
 Osborn, H. F. 1904 F, 83.  
     1912 G, 245.  
 Peterson, O. A. 1919 A, 131.  
 Troxell, E. L. 1921 D, 21, 22.  
     Upper Eocene (Uinta); Utah.
- Amynodon** sp. indet.  
 Matthew, W. D. 1909 C, 99. Upper Eocene (Uinta); Wyoming, Utah, Montana.

METAMYNODON Scott and Osborn. Type *M. planifrons* Scott and Osborn.

- Hay, O. P. 1902 A, 642.  
 Abel, O. 1914 A, 240.  
 Ameghino, F. 1906 A, 325.  
 Anonymous 1898 B, 374.  
 Arldt, T. 1907 D, 260.
- Cooper, C. F. 1922 B, 617, figs. 1, 2.  
 Gregory, W. K. 1912 F, 286.  
     1920 A, 197, fig. 175.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1901 B, 369.

Matthew, W. D. 1909 C, 111.

1915 A, 240.

1924 E, 748.

1926 C, 170, fig. 26.

1928 B, 979, fig. 15.

Nat. Sci. 1898 A, 158.

Osborn, H. F. 1899 K, 273.

1909 D, 62, 65.

1910 B, 623.

1912 G, 243, fig. 8.

1923 G, 2.

Palmer, T. S. 1904 A, 418, 936.

Roman and Joleaud 1909 A, 39, 43

Schlosser, M. 1901 B, 301.

Schuchert, C. 1910 A, 599.

Scott, W. B. 1913 A, 255, 346, 348, 352.

Sinclair, W. J. 1921 A, 465.

1924 A, 97.

Stehlin, H. G. 1905 A, 576.

Trouessart, E. L. 1905 A, 624.

Troxell, E. L. 1921 D, 21.

Wanless, H. R. 1923 A, 246, 259.

Weber, M. 1904 A, 625.

Zittel and Schlosser 1911 A, 451.

1923 A, 536, 670.

### **Metamynodon planifrons** Scott and Osborn.

Hay, O. P. 1902 A, 642.

Abel, O. 1913 B, 753a, fig. 99.

1914 A, 238, fig. 204.

1919 A, 856, fig. 649.

Ameghino, F. 1906 A, 326, fig. 150.

Beddard, F. E. 1902 A, 263, fig. 136.

Cook, H. J. 1912 D, 37.

Gregory, W. K. 1920 B, figs. 22, 23.

Matthew, W. D. 1909 C, 105.

O'Harra, C. C. 1910 A, 89, pl. xxix, xxx.

1920 A, 92, 152, pl. xxix; text-fig. 37.

Osborn, H. F. 1904 F, 23, 40.

1910 B, 220, fig. 108.

Osborn, R. C. 1903 A, 653.

Roman and Joleaud 1909 A, 39, text-fig. 7.

Schlosser, M. 1898 C, 376.

Scott, W. B. 1913 A, 347, fig. 184.

Trouessart, E. L. 1905 A, 624.

Troxell, E. L. 1921 D, 21.

Weber and Abel 1928 A, 664, fig. 454.

Williams, H. S. 1897 A, 681, fig. ("Metamynodon").

Wood, H. E. 1927 B, tab. vii.

Zittel and Schlosser 1911 A, 451, fig. 623.

1923 A, 536, fig. 662.

Middle Oligocene (Brule); South Dakota, Nebraska.

### **Metamynodon rex** Troxell.

Troxell, E. L. 1921 D, 24, figs. 1, 2.

Lower Oligocene (Oreodon beds); South Dakota.

### **Metamynodon** sp. indet.

Cook, H. J. 1912 D, 34. Oligocene (Chadron); Nebraska.

Douglass, E. 1903 A, 159. Oligocene; Montana.

Matthew, W. D. 1909 C, 99 (This genus?). Eocene; Montana: 104 Oligocene (Chadron); South Dakota.

Wanless, H. R. 1923 A, 221, 259. Oligocene (White River); Nebraska.

## **RHINOCEROTIDÆ** Owen.

Owen, R. 1845 B, 587.

Hay, O. P. 1902 A, 642 (Rhinoceerotidæ); 647 (Rhinoceerotinae).

Abel, O. 1910 B ("nashörner").

1910 E.

1912 F, 697 ("rhinoceerotiden").

1913 B, 730, 753 (Rhinoceerotidæ).

1914 A, 237 (Rhinoceerotidæ); 241 (Rhinoceerotinae).

1919 A, 855.

1920 A, 451.

Adloff, P. 1906 A, 115 (Rhinoceerotidæ).

Ameghino, F. 1889 A, 1024 (Rhinoceerotidæ).

Anonymous 1898 B, 374 ("rhinoceerotes").

Ardt, T. 1907 D, 679 (Rhinoceerotidæ); 260 (Rhinoceerotinae).

Bach, F. 1909 A, 761 ("rhinoceerotiden").

Baer, E. K. 1866 A, 689 (R. tichorinus).

Beddard, F. E. 1902 A, 253.

Behlen, H. 1906 A, 195 ("rhinoceeriden").

Boas, J. E. V. 1884 B, 392 ("rhinoceerases").

Breunig, S. 1924 A, 5-46.

Carus and Engelmann 1861 A, 1795 (Rhinoceerotes).

Cooper, C. F. 1924 B, 275 ("rhinoceerases").

Cossmann, M. 1899 A, 81.

Cuvier, F. 1825 A, 219 ("rhinoceerotes").

Cuvier, G. 1825 A, ix, 1-93, pls. i-xviii ("rhinoceerotes").

Depéret, C. 1902 A, 323 ("rhinoceerotes").

1902 C, 345 ("rhinoceerotes").

Depéret, C. 1904 B, 24 ("rhinoceeridés").

1905 A, 1518 ("rhinoceeridés").

1906 A, 620 ("rhinoceeridés").

1906 B, 1120, 1122 ("rhinoceeridés").

1907 B ("rhinoceerotes").

1908 A, 303.

1912 A, 707 ("rhinoceeridés").

Dollo, L. 1885 C, 295.

Doran, A. H. G. 1878 A, 419, pl. lxi.

Flower, W. II. 1892 A, 53.

Gaudry, A. 1891 C, 126.

Gervais, P. 1852 A, 43 (Rhinoceerotes).

1859 A, 87 ("rhinoceeridés").

Giebel, C. G. 1848 B, 23 (Rhinoceerotes).

1849 A, 76.

1883 A ("rhinoceeroten").

Gray, J. E. 1821 A, 306 (Rhinoceerotidæ).

1869 A, 295-344.

Gregory, W. K. 1912 F, 294.

1927 A, 601 ("rhinoceerotes").

Hay, O. P. 1923 A, 5, 211.

1927 E, 77 ("rhinoceerotes").

Hayden, F. V. 1871 A, 106 ("rhinoceerotes").

Hoernes, R. 1886 A, 669.

Hogben, L. T. 1919 A, 75.

Huxley, T. H. 1863 F, 579, 580 ("rhinoceerotes").

1870 F, 532.

Jacobi, A. 1921 A, 200, 211 ("nashörner").

Kampfen, P. N. 1905 A, 573, figs. 61-63.

Kingsley, J. S. 1925 A, 293 (Rhinoceerotes).

- Köstlin, O. 1844 A (Rhinoceros).  
 Knottnerus-Meyer, T. 1907 A, 4.  
 Lankester, E. R. 1905 A, 142 ("rhinoceroses").  
 Lee, Stone, Gale 1915 A, 27 ("rhinoceroses").  
 Leunis and Ludwig 1883 A, 272 (Nasicornia).  
 Lobley, J. L. 1908 A, 204.  
 Lull, R. S. 1918 C, 136 ("rhinoceroses").  
 Lydekker, R. 1898 C, 87.  
 1907 B, 5.  
 1916 A, 46.  
 Major, C. J. F. 1880 A.  
 Matson and Sanford 1913 A, 146 ("rhinoceroses").  
 Matthew, W. D. 1909 C, 135.  
 1914 G, 235 (Rhinocerotidae).  
 1915 A, 240, fig. 40.  
 1915 K, 449, fig. 17 ("rhinoceroses").  
 1916 C, 522 ("rhinoceroses").  
 1918 A, 207.  
 1921 D, 215 ("rhinoceroses").  
 1924 E, 745 ("rhinoceroses").  
 1926 C, 163, 170, fig. 26 ("rhinoceroses").  
 1928 B, 967, 979 ("rhinoceroses").  
 Meckel, J. F. 1825 A ("nashörner").  
 Nat. Sci. 1898 A, 159.  
 Nitsche, H. 1898 A, 73, pl. xii, figs. 8-11 (Rhinoceros).  
 Nopcsa, F. 1923 H, 165 ("rhinocerotiden").  
 1926 A, 645 (Rhinocerosinae).  
 O'Harra, C. C. 1910 A, 89.  
 Osborn, H. F. 1902 A, 79 ("rhinoceroses").  
 1902 G, 357 ("rhinoceroses").  
 1905 D, 315 ("rhinoceroses").  
 1905 H, 211, fig. 3.  
 1905 I, 107.  
 1907 G, 73, 76, 86, 176, 181-183 ("rhinoceroses").  
 1909 D, 135.  
 1910 B, 630.  
 1910 C, 80 ("rhinoceroses").  
 1915 D, 284 ("rhinoceroses").  
 1918 C, 133 ("rhinoceroses").  
 1926 A, 188 ("rhinoceroses").  
 1926 C, 341 ("rhinoceroses").  
 Owen, R. 1845 B, 587.  
 1848 B, 202, pl. ii, fig. 17.  
 Palmer, T. S. 1904 A, 768, 939.  
 Pander and Alton 1821 B, 13, pls. viii, ix (Rhinoceros).  
 Paulli, S. 1900 A, 184, pl. vii; text-figs. 3-5 (Rhinoceros).  
 Pavlow, M. 1913 A, 46.  
 Peterson, O. A. 1919 A, 128.  
 Pictet, F. J. 1853 A, 294 ("rhinocerotides").  
 Pohle, R. 1904 A, 580 ("nashorn").  
 Reynolds, S. H. 1897 A, 553, fig. 110 ("rhinoceros").  
 Ringstrom, T. 1924 A.  
 Sauvage, H. E. 1882 A, 105.  
 Scharff, R. F. 1911 A, 229.  
 Schlosser, M. 1902 J, 257 ("rhinocerotiden").  
 1903 C, 555 ("rhinocerotiden").  
 1903 I, 49, 63, 179.  
 Schmidt, O. 1886 A, 195 (Rhinocerotidae).  
 Schwarz, E. 1924 A, 420 ("rhinoceroses").  
 Scott, W. B. 1913 A, 291, 326, 350, 689.  
 1916 A, 117 ("rhinoceroses").  
 1917 A, 181 ("rhinoceroses").  
 1924 A, 438 ("rhinoceroses").  
 Sellards, E. H. 1915 C, 8 ("rhinoceroses").  
 Stehlin, H. G. 1905 A, 576 ("rhinocerotiden").  
 Steinmann, G. 1907 A, 488.  
 Stromer, E. 1902 B, 561 ("rhinocerotiden").  
 1916 A, 402.  
 Taschenberg, O. 1899 A, 4669.  
 Terra, P. 1911 A, 314.  
 Thomas, O. 1888 A, 451 ("rhinoceroses").  
 Tornier, G. 1888 A, 303 ("rhinocerotiden").  
 Toula, F. 1902 A.  
 Trouessart, E. L. 1905 A, 623.  
 Troxell, E. L. 1922 E, 38.  
 1923 G, 134 ("rhinoceroses").  
 Virchow, H. 1910 H, 848, figs. 1-9 (Biceros).  
 Wallace, A. R. 1876 A, i, 136; ii, 213.  
 Weber, M. 1904 A, 611, 615, 626.  
 Weber and Abel 1928 A, 426, 651, 652, 666.  
 Wilckens, O. 1911 A, 708 ("rhinocerotiden").  
 Winge, H. 1906 A, 71, 159, 162 (Rhinocerotini).  
 Wood, H. E. 1927 B, 9, 82.  
 Woodward, A. S. 1917 D, lxi ("rhinoceroses").  
 1923 C, 27, 29 (Rhinocerotidae).  
 Woodward, H. 1904 B, 160.  
 Wright, R. R. 1883 A, 239 (Rhinocerotidae).  
 Wüst, E. 1922 A, 641, 680 ("nashörner").  
 Zittel and Schlosser 1911 A, 449 (Rhinocerotidae); 451 (Rhinocerotinae).  
 1923 A, 534, 602 (Rhinocerotidae); 536 (Rhinocerotinae).

## CAENOPINÆ Breung.

Breung, S. 1924 A, 16, 20, 36.

Weber and Abel 1928 A, 667.

EOTRIGONIAS Wood. Type *E. rhinocerinus* Wood.

Wood, H. E. 1927 B, 28, 48, 77.

Weber and Abel 1928 A, 668.

*Eotrigonias petersoni* Wood.

Wood, H. E. 1927 B, 29, pl. iv, fig. 16, tab. ia.

Middle Eocene (Washakie); Wyoming.

*Eotrigonias rhinocerinus* Wood.

Wood, H. E. 1927 B, 32, 77, pl. iv, figs. 17-19, tab. ia, ii.

Upper Eocene (Uinta); Wyoming.

TRIGONIAS Lucas. Type *T. osborni* Lucas.

Hay, O. P. 1902 A, 642.

Abel, O. 1910 E.

1914 A, 241.

Breung, S. 1924 A, 20.

Gregory and Cook 1926 A, 59.

Gregory and Cook 1928 A, 1-32, text-figs. 1-5.

Hatcher, J. B. 1901 A, 135.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 111.

1915 A, 240.

Matthew, W. D. 1915 K, 420.

1917 A, 576.

1926 C, 170, fig. 26.

1928 B, 980.

Matthew and Granger 1923 A, 6.

Osborn, H. F. 1905 H, 218.

1910 B, 213, 557.

1923 F, 214.

Palmer, T. S. 1904 A, 691, 940.

Peterson, O. A. 1920 A, 456.

Scott, W. B. 1913 A, 336, 337, 338, 351.

Trouessart, E. L. 1905 A, 625.

Troxell, E. L. 1921 F, 42.

1922 D, 31.

1922 E, 38.

Wood, H. E. 1926 A, 239.

1927 B, 10, 11, 38, 48, 77.

Zittel and Schlosser 1911 A, 452.

1923 A, 537.

### **Trigonias gregoryi Wood.**

Wood, H. E. 1927 B, 48, pls. vi, vii, tabs.

iiia, iiib, iva.

Oligocene (Titanotherium); South Dakota.

### **Trigonias hypostylus Gregory and Cook.**

Gregory and Cook 1928 A, 15, 21, 22, 25, 27, 29, pl. v; text-fig. 4.

Oligocene (Chadron); Colorado.

### **Trigonias osborni Lucas.**

Hay, O. P. 1902 A, 642.

Abel, O. 1910 E, 39.

Cockerell, T. D. A. 1923 D, 273, figs. 1-5.

Cook, H. J. 1912 D, 34.

Cossmann, M. 1901 A, 2.

Gregory and Cook 1928 A, 30, 31.

Hatcher, J. B. 1901 A, 135, pls. i-iv.

Matthew, W. D. 1901 B, 369.

1909 C, 104.

Merrill, G. P. 1907 A, 62.

O'Harra, C. C. 1910 A, 90.

1920 A, 96, 149.

Scott, W. B. 1913 A, 337, 339, figs. 176, 177, 179.

Trouessart, E. L. 1905 A, 625.

Troxell, E. L. 1921 F, 42.

Weber and Abel 1928 A, 664, 668, fig. 453.

Wood, H. E. 1927 B, 10, 33, 39, 53, 77, pl. v, figs. 20-28, tabs.

Oligocene (Chadron); Nebraska, Colorado.

### **SUBHYRACODON Brandt. Type *Aceratherium occidentale* (Leidy).**

Brandt, J. F. 1878 A, 30.

Cope and Matthew 1915 A, pls. civ, cv.

Matthew, W. D. 1909 C, 104, 105.

1928 B, 980.

Palmer, T. S. 1904 A, 653.

Wood, H. E. 1927 B, 59.

### **Subhyracodon copei (Osborn).**

Unless otherwise indicated the writers, as cited, use for this species the name *Cænopus*.

Hay, O. P. 1902 A, 643.

Abel, O. 1910 E.

Breunig, S. 1924 A, 21.

### **Trigonias osborni figginsi Gregory and Cook.**

Gregory and Cook 1928 A, 10, 14, 18, 21, 22-27, 30, 31, pls. i-iv; text-figs. 4, 5 (T. o. var. figginsi).

Oligocene (Chadron); Colorado.

### **Trigonias osborni secundus Gregory and Cook.**

Gregory and Cook 1928 A, 15, 18-27, 29, text-figs. 4, 5.

Oligocene (Chadron); Colorado.

### **Trigonias paucidens Wood.**

Wood, H. E. 1927 B, 51, 53, pls. vi, vii, tabs. iiia, mb.

Gregory and Cook 1928 A, 31.

Oligocene (Titanotherium); South Dakota.

### **Trigonias precopei Gregory and Cook.**

Gregory and Cook 1928 A, 15, 18, 21-27, 29, 31, pl. vi; text-figs. 4, 5.

Oligocene (Chadron); Colorado.

### **Trigonias preoccidentalis Gregory and Cook.**

Gregory and Cook 1928 A, 16, 18-27, 29, 31, pl. vi; text-fig. 4.

Oligocene (Chadron); Colorado.

### **Trigonias taylori Gregory and Cook.**

Gregory and Cook 1928 A, 17-18, 20-27, 29-31, pl. v; text-fig. 5.

Oligocene (Chadron); Colorado.

### **Trigonias wellsii Wood.**

Wood, H. E. 1927 B, 46, pls. vi, vii, tabs. iiia, iiib.

Gregory and Cook 1928 A, 31.

Oligocene (Titanotherium); South Dakota.

### **Trigonias sp. indet.**

Gregory and Cook 1927 A, 235. Oligocene (Lower); Colorado.

Matthew, W. D. 1909 C, 104. Oligocene (Chadron); South Dakota.

Figgins, J. D. 1921 A, 19.

1922 A, 18. Oligocene; Colorado.

1925 A, 19. Oligocene; Colorado.

Wood, H. E. 1927 B, 46, tabs. iiia, iiib. Oligocene (Titanotherium); South Dakota.

Cook, H. J. 1912 D, 37.

Gregory and Cook 1928 A, 16, 31 [*Cænopus* (Subhyracodon)].

Hatcher, J. B. 1901 A, 144 (*Aceratherium*).

Matthew, W. D. 1909 C, 105 (*Cænopus*, Subhyracodon).

O'Harra, C. C. 1910 A, 90.

1920 A, 153.

Peterson, O. A. 1920 A, 402.

Roman, F. 1912 A, 10 (*Cænopus*); 23 (*Acerotherium*).

Schlosser, M. 1901 B, 308 (*Acerotherium*).

1903 C, 556.

Sinclair, W. J. 1924 A, 120.  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 F, 43  
 Wood, H. E. 1927 B, 56, 61, tab. va.  
 Oligocene (Chadron); South Dakota:  
 (Brule); Nebraska.

### **Subhyracodon gidleyi** Wood.

Wood, H. E. 1927 B, 65, tab. va.  
 "White River Tertiary."

### **Subhyracodon metalophus** (Troxell).

Troxell, E. L. 1921 F, 47, fig. 4 (Cænopus  
 tridactylus metalophus).  
 Gregory and Cook 1928 A, 31.  
 Osborn, H. F. 1898 I, 153, 157, pl. xiii, fig. 1  
 (Aceratherium occidentale).  
 Troxell, E. L. 1922 D, 35 (Cænopus tridac-  
 tylus metalophus).  
 Wood, H. E. 1927 B, 67, tab., vb (S. metalo-  
 phum).  
 Oligocene (Middle?); Nebraska.

### **Subhyracodon occidentalis** (Leidy).

Unless otherwise indicated the authors as  
 cited use for this species the generic name  
*Cænopus*.

Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E.  
 Breunig, S. 1924 A, 18, 21.  
 Cook, H. J. 1912 D, 37.  
 Cooper, C. F. 1924 B, 393.  
 Darton, N. H. 1905 A, 173 (Aceratherium).  
 Depéret, C. 1904 B, 18, fig. 3 (Acerotherium).

**LEPTACERATHERIUM** Osborn. Type *Aceratherium trigonodum* Osborn and Wortman.

Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E.  
 Anonymous 1898 B, 374.  
 Breunig, S. 1924 A, 20.  
 Cossmann, M. 1899 A, 82.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 111.  
 Schlosser, M. 1901 B, 308.  
 1902 J, 257.  
 Toula, F. 1902 A, 25.  
 Trouessart, E. L. 1905 A, 625.  
 Zittel and Schlosser 1911 A, 452.  
 1923 A, 537.

### **Leptaceratherium trigonodum** (Osborn and Wortman).

Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E.  
 Breunig, S. 1924 A, 20.  
 Cook, H. J. 1912 D, 34, 37 (L. trigonogum).  
 Hatcher, J. B. 1901 A, 143.

Gervais, P. 1859 A, 360 (Rhinoceros). \*  
 Giebel, C. G. 1883 A, pl. xlii (Rhinoceros).  
 Gregory and Cook 1928 A, 31.  
 Hatcher, J. B. 1901 A, 144 (Aceratherium).  
 Lambe, L. M. 1904 C, 28, 38, 51 (Aceratherium).  
 1905 D, 368 A (Aceratherium).  
 1908 A, 10, 44, pl. iv, fig. 7 (Aceratherium).  
 Matthew, W. D. 1909 C, 105 (Cænopus = Sub-  
 hyracodon).  
 Merrill, G. P. 1907 A, 21 (Aceratherium); 60  
 (Rhinoceros).  
 O'Harra, C. C. 1910 A, 90.  
 1920 A, 152, pl. xv.  
 Osborn, H. F. 1904 F, 31.  
 1905 I, 91 (Aceratherium).  
 1910 B, 196.  
 1923 F, 214 (Aceratherium).  
 Pavlow, M. 1915 A, 16.  
 Peterson, O. A. 1920 A, 401, 402.  
 Roman, F. 1912 A, 11, 14, 46, 52 (Acerotherium).  
 Ruschenberger and Tryon 1879 A, 12 (Acer-  
 atherium).  
 Schlosser, M. 1898 C, 376 (Aceratherium).  
 1901 B, 309 (Aceratherium).  
 Scott, W. B. 1913 A, 335.  
 Sinclair, W. J. 1924 A, 102, 120.  
 Stock, C. 1920 A, 271.  
 Toula, F. 1902 A, 25 (Aceratherium).  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 A, 475 (Rhinoceros).  
 1921 F, 43.  
 Wood, H. E. 1927 B, 59, 63, 78, tab. va.  
 Middle Oligocene (Brule); Colorado, Ne-  
 braska.

Matthew, W. D. 1909 C, 104, 105.  
 O'Harra, C. C. 1910 A, 90.  
 1920 A, 149, 152.  
 Peterson, O. A. 1919 A, 128.  
 Portis, A. 1899 A, 123.  
 Roman, F. 1912 A, 23, 38.  
 Schlosser, M. 1901 B, 308.  
 Toula, F. 1902 A, 24.  
 Troxell, E. L. 1921 F, 43 [Cænopus (Leptacéra-  
 thium)].  
 Wood, H. E. 1927 B, 59, 78, tabs. va, vi.  
 Lower Oligocene (Chadron); South Dakota:  
 (Brule); Nebraska.

### **Leptaceratherium trigonodum allum** (Troxell).

Troxell, E. L. 1921 F, 44, figs. 1, 2 (Cænopus).  
 Wood, H. E. 1927 B, 65, tab. vi (Syn. of Sub-  
 hyracodon occidentalis).  
 Oligocene (White River); Nebraska.

**CÆNOPUS** Cope. Type *Aceratherium mite* Cope.

Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E.  
 Arldt, T. 1907 D, 203, 260.  
 Beddard, F. E. 1902 A, 262.  
 Breunig, S. 1924 A, 21.  
 Cook, H. J. 1909 C, 245, 246 (Cænopus).  
 Dollo, L. 1885 C, 295 (Cænopus).

Fairchild, H. L. 1894 A, 209 (Cænopus).  
 Gregory, W. K. 1920 A, 196, fig. 173.  
 Gregory and Cook 1928 A, 6, fig. 1.  
 Haug, E. 1911 A, 1528, 1705.  
 Kampfen, P. N. 1905 A, 577 (Aceratherium).  
 Matthew, W. D. 1909 C, 111, 119.  
 1915 A, 240.

- Matthew, W. D. 1917 A, 576.  
 1924 E, 748.  
 1926 C, 170, fig. 26.  
 1928 B, 979, 980, fig. 15.
- Matthew and Cook 1909 A, 366, 380.  
 Matthew and Granger 1923 A, 6.  
 O'Harra, C. C. 1910 A, 91.  
 Osborn, H. F. 1907 G, 182, fig. 179.  
 1910 B, 213, 220, 351, 557.  
 Palmer, T. S. 1904 A, 150, 939.  
 Peterson, O. A. 1920 A (Cænopus, Cænopus).  
 Ringström, T. 1924 A, 114.  
 Rogers, A. F. 1924 A, 545.  
 Schlosser, M. 1901 B, 308 (Aceratherium).  
 Scott, W. B. 1913 A, 677, figs. 133, 178.  
 Sinclair, W. J. 1924 A, 120.  
 Thorpe, M. R. 1923 E, 241.  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 F, 42.  
 1922 D, 31.  
 1922 E, 38.  
 1923 G, 134.
- Wood, H. E. 1926 A, 239.  
 1927 B, 55, 77 (Cænopus); 72 (Amphicænopus, type *C. platycephalus*).
- Wright, R. R. 1883 A, 245.  
 Zittel and Schlosser 1911 A, 452 (Syn. of *Aceratherium*).  
 1923 A, 537, 673 (Syn. of *Aceratherium*).
- Cænopus dakotensis** Peterson.  
*Peterson, O. A.* 1920 A, 402.  
 Osborn, H. F. 1898 I, 139, fig. 39 (*Aceratherium mite*?).  
 Troxell, E. L. 1921 F, 42 (Syn. of *C. tridactylus*).  
 Wood, H. E. 1927 B, 55, 57, tab. vi.  
 Oligocene (Protoceras); South Dakota.
- Cænopus exiguus** Lambe.  
*Lambe, L. M.* 1908 A, 10, 44, pl. v, figs. 3-5 (*Aceratherium*).  
 Oligocene (Cypress Hills); Saskatchewan.
- Cænopus mitis** Cope.  
 Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E.  
 Breunig, S. 1924 A, 21 (*C. mite*).  
 Cook, H. J. 1912 D, 34 (*C. miti*).  
 Cope and Matthew 1915 A, pl. civ, figs. 1, 2 (*Aceratherium occidentale*; *Cænopus*=*Subhyracodon*); pl. cv, figs. 1-5 (*Aceratherium*; *Cænopus*=*Subhyracodon*).  
 Gregory and Cook 1928 A, 31.  
 Hatcher, J. B. 1901 A, 143 (*Aceratherium*).  
 Lambe, L. M. 1904 C, 28, 38, 51 (Syn. of *Aceratherium pumilum*).  
 1905 D, 368 A (*Aceratherium*).  
 1908 A, 10, 43, pl. iv, fig. 5 (*Aceratherium*).  
 Matthew, W. D. 1909 C, 104.  
 O'Harra, C. C. 1910 A, 90.  
 1920 A, 96.  
 Peterson, O. A. 1906 D, 283 (*Aceratherium*).  
 1919 A, 128 (*C. mite*).  
 1920 A, 435 (*Cænopus, Cænopus*).  
 Pilgrim, G. E. 1912 A, 27 (*Aceratherium*).  
 Schlosser, M. 1898 C, 376 (*Aceratherium*).
- Schlosser, M. 1901 B, 308 (*Aceratherium*).  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 F, 42.  
 1921 H, 206.
- Wood, H. E. 1927 B, 56; 60, tabs. va, vi, vii (Syn. in part of *Subhyracodon trigonodus*); 61 (Syn. in part of *Cænopus copei*).  
 Lower Oligocene; Colorado, Canada
- Cænopus persistens** Osborn.  
*Osborn, H. F.* 1904 D, 318, fig. 16.  
 Matthew, W. D. 1909 C, 114.  
 Wood, H. E. 1927 B, 55, 72 (*Diceratherium*?).  
 Zittel and Schlosser 1923 A, 537 (*Aceratherium*).  
 Middle Miocene (Pawnee Creek); Colorado.
- Cænopus platycephalus** Osborn and Wortman.  
 Hay, O. P. 1902 A, 645 (*Aceratherium*).  
 Abel, O. 1910 E, 31, 39 (*Aceratherium*).  
 Breunig, S. 1924 A, 21, fig. 8.  
 Cook, H. J. 1912 D, 34 (This species?); 38 (*C. platycephalus*).  
 Cooper, C. F. 1924 B, 293, 380, 393 (*Aceratherium*).  
 Gregory and Cook 1928 A, 31 (*Amphicænopus*).  
 Hatcher, J. B. 1901 A, 143 (*Aceratherium*).  
 Matthew, W. D. 1909 C, 104, 108 (This species?).  
 O'Harra, C. C. 1910 A, 90.  
 1920 A, 149.  
 Peterson, O. A. 1919 A, 120.  
 Pilgrim, G. E. 1912 A, 27 (*Aceratherium*).  
 Portis, A. 1899 A, 123 (*Aceratherium*).  
 Roman, F. 1912 A, 50 (*Acerotherium*).  
 Schlosser, M. 1900 H, 460 (*Aceratherium*).  
 1901 B, 308 (*Aceratherium*).  
 Toula, F. 1902 A, 24 (*Aceratherium*).  
 Trouessart, E. L. 1905 A, 627 (*Aceratherium*).  
 Troxell, E. L. 1921 F, 43.  
 1922 D, 34.
- Wood, H. E. 1926 A, 239.  
 1927 B, 73, 75, tabs. v, vi (*Amphicænopus*).  
 Zittel and Schlosser 1911 A, 453, fig. 627 (*Aceratherium*).  
 1923 A, 538, fig. 666 (*Aceratherium*).  
 Oligocene (Chadron); South Dakota: (Brule); Nebraska.
- Cænopus platycephalus nanolophus** Troxell.  
*Troxell, E. L.* 1921 F, 46, fig. 3.  
 Gregory and Cook 1928 A, 14.  
 Troxell, E. L. 1922 D, 38.  
 Wood, H. E. 1927 B, 39 (Syn.? of *Trigonias osborni*); tabs. iiii, iiib (T. "*nanolophus*").  
 Middle or Upper Oligocene; Colorado.
- Cænopus premitis** Gregory and Cook.  
*Gregory and Cook* 1928 A, 18-19, 21-23, 25-27.  
 29-31, pl. iv; text-fig. 5 (This genus?).  
 Oligocene (Chadron); Colorado.
- Cænopus simplicidens** Cope.  
 Hay, O. P. 1902 A, 643.  
 Cook, H. J. 1912 D, 37.  
 Cooper, C. F. 1924 B, 385 (*Aceratherium*).

- Matthew, W. D. 1909 C, 105 (*Cænopus*, Subhyracodon).  
 Schlosser, M. 1901 B, 308 (*Aceratherium*).  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 F, 42.  
 Wood, H. E. 1927 B, 76, tab. vb (*Amphicænopus?*).  
 Middle Oligocene (Lower Brule); South Dakota.

### *Cænopus tridactylus* Osborn.

- Hay, O. P. 1902 A, 643.  
 Abel, O. 1910 E, 7, 31.  
 1913 B, 753a, fig. 100 (*Aceratherium*).  
 1914 A, 241, fig. 208 (*Aceratherium*).  
 1919 A, 859, fig. 652 (*Leptaceratherium*).  
 Beddard, F. E. 1902 A, 259 (*Aceratherium*).  
 Breunig, S. 1924 A, 21, fig. 8.  
 Cook, H. J. 1912 D, 38.  
 Cooper, C. F. 1924 B, 380, 393 (*Aceratherium*).  
 Depéret and Douxami 1902 D, 26 (*Aceratherium*).  
 Douglass, E. 1908 A, 265 (*Aceratherium*).  
 1909 C, 231, 235 (*Aceratherium*).  
 Hatcher, J. B. 1901 A, 144 (*Diceratherium*).  
 Loomis, F. B. 1908 A, 52 (*Aceratherium*).  
 Matthew, W. D. 1909 C, 108.  
 O'Hara, C. C. 1910 A, 90, pl. xxviii.  
 1920 A, 92, 153, figs. 35, 38.  
 Osborn, H. F. 1899 K, 272, fig. 1 (*Aceratherium*).  
 1904 F, 30, 39  
 1910 B, 227.  
 1923 F, 214 (*Aceratherium*).  
 Peterson, O. A. 1920 A, 402.  
 Repelin, J. 1916 A, 982 (*Aceratherium*).  
 Roman, F. 1912 A, 40, 52 (*Acerotherium*).  
 Schlosser, M. 1898 C, 376 (*Aceratherium*).  
 1900 E, 140 (*Diceratherium proavium*).  
 1901 B, 309 (*Aceratherium*).

### DICERATHERIINÆ Osborn.

- Osborn, H. F. in Osborn and Wortman 1892 A, 92.  
 Hay, O. P. 1902 A, 642.  
 Abel, O. 1910 E, 7.  
 Breunig, S. 1924 A, 17, 36.  
 Cook, H. J. 1912 A, 31 ("diceratheres").  
 Dollo, L. 1885 C, 295.  
 Lydekker, R. 1898 C, 88.

### DICERATHERIUM Marsh.

- Hay, O. P. 1902 A, 644.  
 Abel, O. 1910 E, 6.  
 1913 B, 753b.  
 1914 A, 242.  
 1926 B, 373, 442.  
 Arldt, T. 1907 D, 650.  
 Baird, S. F. 1876 A, 336.  
 Barbour, E. H. 1906 C, 780.  
 1906 D, 213.  
 Beddard, F. E. 1902 A, 259.  
 Condon, T. 1902 A, 118, pls. xiii-xv (*Rhinoceros*).  
 1910 A, 99, pls. xiii-xv ("rhinoceros").  
 Cook, H. J. 1909 C, 245 (*Metacænopus*; type *Aceratherium egregius* Cook).  
 Cooper, C. F. 1924 B, 372.

- Scott, W. B. 1913 A, 256, 335, figs. 135, 174.  
 Toulou, F. 1902 A, 25 (*Aceratherium*).  
 Trouessart, E. L. 1905 A, 625.  
 Troxell, E. L. 1921 F, 44.  
 1921 H, 207.  
 Wood, H. E. 1927 B, 11, 69, tabs. vb-vii (*Subhyracodon*); 69, tab. vb (*S. proavium*).  
 Zittel and Schlosser 1911 A, 452 (*Aceratherium*).  
 1923 A, 537, fig. 665 (*Aceratherium*).  
 Oligocene (Upper Brule); Colorado?, North Dakota, Nebraska.

### *Cænopus tridactylus avus* Troxell.

- Troxell, E. L. 1921 F, 49, fig. 5.  
 Wood, H. E. 1927 B, 71, tab. vb (*Diceratherium avum*).  
 Upper Oligocene (Protoceras); South Dakota.

### *Cænopus tubifer* Cope.

- Hay, O. P. 1902 A, 640 (*Anchisodon*).  
 Matthew, W. D. 1909 C, 108.  
 Merriam and Sinclair 1907 A, 186 (*Aceratherium*).  
 Upper Oligocene (John Day); Oregon.

### *Cænopus* sp. indet.

- Abel, O. 1926 B, 347.  
 Deussen, A. 1924 A, 21 (*Aceratherium*); 98 (*Cænopus*). Miocene (Oakville); Texas.  
 Matthew, W. D. 1901 B, 356.  
 1909 C, 104 (*Cænopus*, Subhyracodon).  
 Oligocene (Lower); Montana, Canada.  
 Sinclair, W. J. 1924 A, 101. Oligocene (White River); South Dakota.  
 Stock, C. 1920 A, 271, figs. 4, 5 (*Cænopus?* or *Diceratherium*). Oligocene (San Lorenzo); California.  
 Wanless, H. R. 1923 A, 219.

### Type *D. armatum* Marsh.

- Delafontaine, M. 1875 A, 172 (*Dyceratherium*).  
 Depéret, C. 1904 B, 28.  
 1906 A, 619.  
 1912 A, 708.  
 Depéret and Douxami 1902 D, 11.  
 Dollo, L. 1885 C, 295, 298.  
 Eastman, C. R. 1912 C, 658.  
 Fairchild, H. L. 1894 A, 209.  
 Haug, E. 1911 A, 1705.  
 Lacey, L. 1907 A, 585.  
 Lobley, J. L. 1908 A, 212.  
 Loomis, F. B. 1908 A, 51.  
 Matthew, W. D. 1907 A, 172, 176.  
 1909 C, 108, 111, 119.  
 1915 A, 240.  
 1917 A, 576.



- Matthew, W. D. 1924 E, 748.  
1926 D, 450, fig. 1.  
1928 B, 979, fig. 15.
- Merriam, J. C. 1900 B, 220.  
1901 A, 297.  
1915 G, 99.
- O'Harra, C. C. 1910 A, 91, 131.
- Osborn, H. F. 1907 F, 872.  
1909 D, 23, 65, 124.  
1910 B, 612.  
1912 G, 247, 249.  
1918 B, 132.
- Palacký, J. 1903 B, 311.
- Palmer, T. S. 1904 A, 226, 940.
- Peterson, O. A. 1906 B, 490.  
1911 C, 274.  
1912 A, 801.  
1919 A, 128.  
1920 A, 401.
- Pilgrim, G. E. 1912 A, 24.
- Ringstrom, T. 1924 A, 104, 114.
- Rogers, A. F. 1924 A, 539, pl. xxvii, fig. 1;  
pl. xxviii, fig. 3.
- Roman, F. 1912 A, 65, 85.
- Schlosser, M. 1901 B, 301, 307.  
1902 J, 257.
- Schuchert, C. 1910 A, 599.
- Scott, W. B. 1913 A, 238, 333, 679.
- Smith and Packard 1919 A, 96.
- Thorpe, M. R. 1921 D, 94.
- Trouessart, E. L. 1905 A, 626.
- Troxell, E. L. 1921 F, 41.  
1921 G, 197.  
1923 G, 134.
- Wallace, A. R. 1876 A, i, 137; ii, 137.
- Weber, M. 1904 A, 626.
- Weber and Abel 1928 A, 667.
- Wood, H. E. 1927 B, 70, 77.
- Wright, R. R. 1883 A, 245.
- Zittel and Schlosser 1911 A, 453.  
1923 A, 538, 671, 672.
- Diceratherium annectens Marsh.**
- Hay, O. P. 1902 A, 644 (D. annectens, D. nanum).
- Dépéret and Douxami 1902 B, 26 (D. nanum).
- Loomis, F. B. 1908 A, 54, 62, fig. 3 (D. annectens); 55, fig. 4 (D. nanum).
- Matthew, W. D. 1909 C, 108 (Cænopus? annectens, D. nanum).
- Merriam and Sinclair 1907 A, 186 (Aceratherium annectens, D. nanum).
- Peterson, O. A. 1920 A, 403, pls. lxiii, lxv, lxvii; pl. lxviii (D. nanum); text-fig. 11.
- Sternberg, C. H. 1909 C, 189 (D. nanum).
- Troxell, E. L. 1921 G, 199, 201, fig. 1 (D. nanum, a syn.).  
Upper Oligocene (John Day); Oregon.
- Diceratherium armatum Marsh.**
- Hay, O. P. 1902 A, 644.
- Loomis, F. B. 1908 A, 51, 53, 62, fig. 2.
- Matthew, W. D. 1909 C, 108.
- Merriam and Sinclair 1907 A, 186.
- Peterson, O. A. 1906 C, 47.  
1920 A, 404, 414, pl. lvii; text-fig. 10.
- Troxell, E. L. 1921 F, 49, fig. 6.
- Troxell, E. L. 1921 G, 197, 198, 201, 203, figs. 1, 3, 5.  
1922 D, 34.
- Wood, H. E. 1927 B, 71.  
Oligocene or Miocene (John Day); Oregon.
- Diceratherium cuspidatum Troxell.**
- Troxell, E. L. 1921 G, 204, fig. 7.
- Wood, H. E. 1927 B, 71.  
Oligocene (Middle John Day); Oregon.
- Diceratherium gregorii Peterson.**
- Peterson, O. A. 1920 A, 402, 421, pl. lix; text-fig. 12.
- Troxell, E. L. 1921 G, 208 (Metacænopus. "Of doubtful validity").  
Miocene (Lower Rosebud); South Dakota.
- Diceratherium? hesperium (Leidy).**
- Hay, O. P. 1902 A, 644.
- Becker, G. F. 1891 A, 189 (Rhinoceros).
- Cooper, J. G. 1875 A, 390 (Rhinoceros).
- Hay, O. P. 1927 D, 228 (Rhinoceros).
- Knowlton, F. H. 1911 D, 63 ("rhinoceros").
- Leidy, J. 1880, in Whitney, J. D. 1879 B, 243 (Young rhinoceros).
- Lindgren, W. 1911 A, 51 (Rhinoceros).
- Loomis, F. B. 1908 A, 52, 55, 62, fig. 5.
- Merriam and Sinclair 1907 A, 186 (Aceratherium).
- Osborn, H. F. 1904 D, 308, fig. 2 (Rhinoceros).
- Peterson, O. A. 1920 A, 411, text-fig. 6 (This genus?).
- Schlosser, M. 1901 B, 308 (Aceratherium).
- Stock, C. 1920 A, 272 (Rhinoceros).
- Troxell, E. L. 1921 G, 201 (Not valid).
- Whitney, J. D. 1865 A, 251 ("rhinoceros"); 268 (Rhinoceros hesperus).  
1879 B, 233 ("rhinoceros").
- Wilson, T. 1901 A, 312 ("rhinoceros").
- Yates, L. G. 1903 A, 117 (Rhinoceros).
- The generic position of this species is doubtful.
- Pleistocene?; California: Miocene? (John Day); Oregon: (Auriferous gravels?); California.
- Diceratherium lobatum Troxell.**
- Troxell, E. L. 1921 G, 199, 202, 205, figs. 1, 6.
- Wood, H. E. 1927 B, 71, tab. vb.  
Oligocene (John Day); Oregon.
- Diceratherium niobrarense Peterson.**
- Peterson, O. A. 1906 D, 281, 282 (D. niobrarensis).
- Breunig, S. 1924 A, 12 (Metacænopus egregius).
- Cook, H. J. 1908, in Loomis, F. B. 1908 A, 61, fig. 15 (Aceratherium egrerius).  
1908 A, 543, figs. 1, 2 (Aceratherium egregium).  
1909 C, 245, pl. i (M. egregius).  
1912 A, 31 (M. egregius).  
1912 D, 40 (D. niobrarenensis); 41 (Metacænopus egregius).
- Loomis, F. B. 1908 A, 52, 56, 62, fig. 1 (D. niobrarense); 61, fig. 15 (Aceratherium egrerius).
- Matthew, W. D. 1909 C, 113.

O'Harra, C. C. 1920 A, 156 (D. niobrariense, Metacænopus egregius).

Peterson, O. A. 1906 C, 46, pls. xiii, xiv; text-fig. 11.

1920 A, 403, 424, pls. lx-xlii; text-figs. 13-15.

Troxell, E. L. 1921 G, 197, 208 (Metacænopus).

Wood, H. E. 1927 B, 71.

Lower Miocene (Lower Harrison); Nebraska.

### *Diceratherium oregonense* (Marsh).

Hay, O. P. 1902 A, 644.

Loomis, F. B. 1908 A, 52, 60, 62, fig. 13.

Matthew, W. D. 1909 C, 114 (Aphelops).

Merriam and Sinclair 1907 A, 195 (Aceratherium).

Peterson, O. A. 1920 A, 412, fig. 7 (Genus and species indeterminate).

Troxell, E. L. 1921 G, 198, 201, fig. 4 (This genus?).

Yates, L. G. 1903 A, 117 (Rhinoceros. This species?).

Middle Miocene (Mascall); Oregon.

### *Diceratherium? pacificum* (Leidy).

Hay, O. P. 1902 A, 644.

Buwalda, J. P. 1914 B, 306 (Diceratherium. This species?).

Cope and Matthew 1915 A, pl. civ, figs. 3, 4; pl. cv, figs. 6-18 (Aceratherium, Diceratherium).

Loomis, F. B. 1908 A, 55, 62, fig. 6.

Matthew, W. D. 1909 C, 108 (Cænopus?).

Merriam and Sinclair 1907 A, 186 (Aceratherium).

Peterson, O. A. 1920 A, 410; text-fig. 5 (This genus?).

Troxell, E. L. 1921 G, 201 (Not valid).

Oligocene (John Day); Oregon; (Truckee beds); Nevada.

The generic position of this species is doubtful.

### MENOCERAS Troxell. Type *Diceratherium cooki* Peterson.

Troxell, E. L. 1921 G, 206.

Weber and Abel 1928 A, 667.

Wood, H. E. 1927 B, 58, 70, 80.

### *Menoceras cooki* (Peterson).

Peterson, O. A. 1906 D, 282 (Diceratherium). Unless otherwise indicated, the authors, as quoted, use for this species the generic name *Diceratherium*.

Abel, O. 1926 B, 374, fig. 241 (Diceratherium, Menoceras).

Barbour, E. H. 1906 C, 780, figs. 1, 2 (D. arikarensis).

1906 D, 313, figs. 1-5 (D. arikarensis).

1909 A, 252 (D. arikarensis).

1909 B, 253, pl. i (D. arikarensis).

1912 A, 51 (D. arikarensis).

Cook, H. J. 1912 A, 29, figs. 1-3 (D. loomisi); 29 (D. aberrans); 30 (D. cooki, D. schiffi).

1912 D, 40 (D. cooki; D. arikarensis; D. schiffi); 41 (D. aberrans; D. loomisi; Metacænopus? stigeri).

Loomis, F. B. 1908 A, 57, 62, fig. 8 (D. schiffi); 58, 62, fig. 9 (D. cooki); 59, 62, fig. 10 (D. aberrans); 60, fig. 14 (Aceratherium stigeri).

### *Diceratherium petersoni* Loomis.

Loomis, F. B. 1908 A, 57, 62, fig. 7.

Cook, H. J. 1912 D, 40.

Peterson, O. A. 1920 A, 413, fig. 9 ("incertæ sedis").

Troxell, E. L. 1921 G, 208 (Syn. of Metacænopus egregius).

Miocene (Lower Harrison); Nebraska.

### *Diceratherium truquianum* (Cope).

Hay, O. P. 1902 A, 644.

Matthew, W. D. 1909 C, 108 (Cænopus).

Merriam and Sinclair 1907 A, 186 (Aceratherium).

Peterson, O. A. 1920 A, 412, fig. 8.

Troxell, E. L. 1921 G, 201 (Not valid species).

Upper Oligocene or Miocene? (John Day); Oregon.

The generic position of this species is in doubt.

### *Diceratherium* sp. indet.

Condon, T. 1902 A, 118, pls. xiii-xv ("rhinoceros").

1910 A, 99, pls. xiii-xv ("rhinoceros").

Cook, H. J. 1912 D, 40. Miocene (Monroe Creek); Nebraska: 42. Miocene (Upper Harrison); Nebraska.

Lambe, L. M. 1914 H, 402. Oligocene; Wyoming.

Matthew, W. D. 1909 C, 113. Lower Miocene (Harrison, Rosebud); Nebraska, South Dakota.

Peterson, O. A. 1906 C, 24. Miocene (Monroe Creek); Nebraska.

Young and Cooper 1926 A, 5.

Loomis, F. B. 1923 A, 222 (Diceratherium).

Matthew, W. D. 1909 C, 113.

1923 D, 359, figs. 6, 11.

Moodie, R. L. 1923 B, 270, pl. lii (D. cooki).

O'Harra, C. C. 1910 A, 90 (D. schiffi).

1920 A, 156, pl. xxvi (D. cooki); 96, 156 (D. schiffi, D. arikarensis).

Peterson, O. A. 1906 C, 47, pl. xv; text-figs. 12, 13.

1911 C, 274, pl. xlv.

1912 A, 801 (D. cooki, D. aberrans, D. loomisi).

1920 A, 404, 406, pl. lviii; pls. lx-lxvi; text-figs. 4, 16-37; 409 (D. schiffi).

1923 A, 91 (Diceratherium).

Scott, W. B. 1913 A, 239, fig. 129.

Troxell, E. L. 1921 G, 206, fig. 2 (Menoceras cooki, Diceratherium aberrans, D. arikarensis, D. loomisi, D. schiffi, D. stigeri).

1922 D, 34.

Wood, H. E. 1927 B, 10, 55, 58, tab. vii.

Young and Cooper 1927 A, 1, 2, 4, fig. (D. cooki).

Lower Miocene (Lower Harrison); Nebraska, Wyoming.

## ACERATHERIINÆ Osborn.

- Osborn, H. F., in Osborn and Wortman 1892 A, 93.  
 Hay, O. P. 1902 A, 645 (Elasmotheriinae).  
 Breunig, S. 1924 A, 11, 36.  
 Dollo, L. 1885 C, 295 (Acerotheriinae).  
 Lydekker, R. 1898 C, 88.  
 Osborn, H. F. 1901 H, 505.  
 1909 D, 61, 64, 67, 68.

- Osborn, H. F. 1910 B, 605.  
 1923 F, 213 ("aceratheres").  
 Ringstrom, T. 1924 A, 73.  
 Schlosser, M. 1898 C, 390.  
 1903 C, 555, 558 (Aceratheriinae).  
 Trouessart, E. L. 1905 A, 626 (Elasmotheriinae).  
 Weber and Abel 1928 A, 667, 668.

ACERATHERIUM Kaup. Type *Rhinoceros incisivus* Cuvier.

- Hay, O. P. 1902 A, 645.  
 Abel, O. 1910 E, 8.  
 1914 A, 241.  
 Arldt, T. 1907 D, 635.  
 Beddard, F. E. 1902 A, 259.  
 Breunig, S. 1924 A, 11.  
 Bronn, H. G. 1838 A, 1289 (Acerotherium).  
 1848 A, 6.  
 Cooper, C. F. 1924 B, 387.  
 Cope, E. D. 1880 U, 156.  
 Cossman, M. 1899 A, 82.  
 1901 B, 188.  
 Depéret, C. 1904 B, 13, 17 (Acerotherium).  
 1912 A, 708.  
 Douglass, E. 1909 C, 231, 283.  
 Filhol, H. 1881 A, 1 (Acerotherium).  
 Gervais, P. 1859 A, 101.  
 Hoernes, R. 1886 A, 669.  
 Laloy, L. 1907 A, 585.  
 Loble, J. L. 1908 A, 212.

- Loomis, F. B. 1908 A, 52 ("aceratheres").  
 Osborn, H. F. 1907 G, 75, fig. 181.  
 1910 B, 605.  
 Palacký, J. 1903 B, 311.  
 Pictet, F. J. 1853 A, 296 (Acerotherium).  
 Roman, F. 1912 A, 9, 27 (Acerotherium).  
 Schlosser, M. 1898 C, 376.  
 1901 B, 304, 308.  
 1902 J, 257.  
 1903 G, 145.  
 1903 I, 67, 180, 209.  
 Schmidt, O. 1886 A, 195.  
 Seeley, H. G. 1878 A, 223 (Acerotherium).  
 Toulou, F. 1902 A, 91.  
 Troxell, E. L. 1921 F, 42.  
 Weber, M. 1904 A, 625.  
 Zittel and Schlosser 1911 A, 452.  
 1923 A, 537.  
 At present no North American species are referred to this genus.

EPIAPHELOPS Cook. Type *E. virgasectus* Cook.

- Cook, H. G. 1912 B, 219.  
 1912 C, 21.

**Epiaphelops virgasectus** Cook.

- Cook, H. J. 1912 B, 219.  
 1912 C, 21, pl. i.  
 1912 D, 42.  
 O'Harra, C. C. 1920 A, 156.  
 Miocene (Harrison); Nebraska, Wyoming.

APHELOPS Cope. Type *A. megalodus* Cope.

- Hay, O. P. 1902 A, 645.  
 Arldt, T. 1907 D, 258, 260.  
 Beddard, F. E. 1902 A, 260.  
 Breunig, S. 1924 A, 21.  
 Cope, E. D. 1880 U, 157.  
 Cummins, W. F. 1893 A, 203.  
 Dollo, L. 1885 C, 295, 297.  
 Douglass, E. 1909 A, 477.  
 Freudenberg, W. 1922 A, 10.  
 Furlong, E. L. 1927 A, 174.  
 Haug, E. 1911 A, 1705, 1706.  
 Hay, O. P. 1890 A, 16, 32, 34.  
 1919 D, 373.  
 Heilprin, A. 1887 A, 368.  
 Lane, H. H. 1927 A, 297.  
 Matsumoto, H. 1921 A, 90.  
 Matthew, W. D. 1909 C, 119.  
 1915 A, 240.  
 1917 A, 576.  
 1918 A, 202, 204.  
 1918 E, 153.  
 1924 C, 70.  
 1924 E, 748.  
 1926 A, 50.  
 1928 B, 979, fig. 15.

- Matthew and Cook 1909 A, 300, 366.  
 1909 B, 197.  
 Merriam, J. C. 1917 A, 437.  
 Osborn, H. F. 1909 D, 78, 81.  
 1910 B, 606.  
 Palmer, T. S. 1904 A, 112, 939.  
 Peterson, O. A. 1928 A, 101 (Aphalops).  
 Schlosser, M. 1901 B, 304.  
 Trouessart, E. L. 1905 A, 627.  
 Wallace, A. R. 1876 A, 1, 119, 136 (Acerotherium).  
 Weber and Abel 1928 A, xx, 668.  
 Zittel and Schlosser 1911 A, 453.  
 1923 A, 538, 673, 679, 680.

**Aphelops brachyodus** Osborn.

- Osborn, H. F. 1904 D, 322, fig. 19 [A. (Dicera-therium?)].  
 Matthew, W. D. 1909 C, 116 (Aphelops?).  
 O'Harra, C. C. 1920 A, 158.  
 Upper Miocene (Arikaree); South Dakota.

**Aphelops ceratorhinus** Douglass.

- Douglass, E. 1903 A, 154, 195, figs. 33-35 (This genus?).

Cope and Matthew 1915 A, pl. cxlii.

Douglass, E. 1908 A, 258, 260, pl. lxiv; text-figs. 2-5.

Matthew, W. D. 1909 C, 116 (Aphelops?).  
1918 A, 202, 204, fig. 9.

Osborn, H. F. 1904 D, 317, figs. 12, 13, 14.  
1909 D, 80.

Peterson, O. A. 1928 A, 101, pl. x, figs. 1, 2, 5, 10-19 (Aphalops). Miocene or Pliocene (Brown's Park); Colorado: Upper Miocene (Arikaree); Montana.

### **Aphelops crassus (Leidy).**

Hay, O. P. 1902 A, 645.

Matthew, W. D. 1901 B, 373 (Teleoceras).  
1909 C, 116 (Teleoceras).  
1918 B, 204 (Aphelops?).  
1924 C, 66 (This species?).

Merrill, G. P. 1907 A, 59 (Rhinoceros).

Osborn, H. F. 1904 D, 308 (Rhinoceros).  
Lower Pliocene (Upper Snake Creek); Nebraska: Upper Miocene (Arikaree); Nebraska, Texas.

### **Aphelops jemezianus Cope.**

Hay, O. P. 1902 A, 646.

Matthew, W. D. 1901 B, 373 (Teleoceras).  
1909 C, 116 (Aphelops?).

Merrill, G. P. 1907 A, 23.

Osborn, H. F. 1904 D, 310.  
Upper Miocene (Arikaree): New Mexico.

### **Aphelops longipes (Leidy).**

Hay, O. P. 1902 A, 646 (A. malacorhinus, in part).

1923 A, 479.

Matson and Clapp 1909 A, 137 (Rhinoceros).

Merrill, G. P. 1907 A, 59 (Rhinoceros).

Osborn, H. F. 1904 D, 314 (Rhinoceros).  
1923 F, 215.

Sellards, E. H. 1914 A, 162 (A. malacorhinus).  
Trouessart, E. L. 1905 A, 627 (Syn. of A. malacorhinus).

Upper Pliocene or Lower Pleistocene (Alachua); Florida.

### **Aphelops malacorhinus Cope.**

Hay, O. P. 1902 A, 646.

Cope and Matthew 1915 A, pls. cxxxix-cxliii.

Lane, H. H. 1927 A, 298 (Peraceras).

Matson and Clapp 1909 A, 137.

Matthew, W. D. 1901 B, 373 (Teleoceras).  
1909 C, 116 (Aphelops?).

1918 A, 204.

1924 C, 150.

Merriam, J. C. 1917 A, 438, 439.

Morrill, G. P. 1907 A, 23.

Osborn, H. F. 1904 D, 307, 311, 314, figs. 5, 20, 21.

1909 D, 81.

1923 F, 214.

Pavlov, M. 1915 A, 17.

Sellards, E. H. 1916 B, 94.

Trouessart, E. L. 1905 A, 627.

Upper Miocene or Lower Pliocene (Republican River); Kansas, Nebraska?, Florida?.

### **Aphelops malacorhinus mutilus Matthew.**

Matthew, W. D. 1924 C, 66 (A. mutilus); 150, figs. 41-43 (A. malacorhinus mutilus).

Lower Pliocene (Upper Snake Creek); Nebraska.

### **Aphelops? matutinus (Marsh).**

Hay, O. P. 1902 A, 646.

Osborn, H. F. 1904 D, 309 (Rhinoceros).

Rhoads, S. N. 1903 A, 236 (Aceratherium).

Miocene; New Jersey.

### **Aphelops megalodus Cope.**

Hay, O. P. 1902 A, 646.

Cook, H. J. 1927 B, 2.

Cope, E. D. 1891 N, 86, fig. 58.

Cope and Matthew 1915 A, pls. cxv-cxvii; pls. cxix, cxxx, cxxxiv, fig. 3; pl. cxxxv, fig. 1.

Douglass, E. 1908 A, 259.

Matthew, W. D. 1909 C, 114.

1918 A, 203, pls. iv, v; text-fig. 10.

1924 C, 66, 150.

Osborn, H. F. 1904 D, 309, 324, figs. 3, 20, 21.  
1923 F, 214.

Pavlov, M. 1915 A, 16.

Sternberg, C. H. 1909 C, 123.

Trouessart, E. L. 1905 A, 627.

Woodward, A. S. 1898 B, 334, fig. 192 [Aceratherium (Aphelops)].

1923 C, 29, fig. 11 (Aceratherium).

Middle Miocene (Pawnee Creek); Colorado. (Sheep Creek and Lower Snake Creek); Nebraska.

### **Aphelops meridianus (Leidy).**

Hay, O. P. 1902 A, 646.

Deussen, A. 1924 A, 97, 99, explan. pl. xxviii (Cenopus sp.).

Dumble, E. T. 1894 A, 558.

1903 A, 957.

1915 A, 473.

1920 A, 238.

Matthew, W. D. 1918 A, 204 (Aphelops??).

1920 E, 238.

Merrill, G. P. 1907 A, 59 (Rhinoceros).

Osborn, H. F. 1904 D, 308 (Rhinoceros).

Miocene (Oakville): Texas.

### **Aphelops montanus Douglass.**

Douglass, E. 1908 A, 256, pl. lxiii; text-fig. 1.

Matthew, W. D. 1918 A, 204.

Middle Miocene (Flint Creek): Montana.

### **Aphelops planiceps Osborn.**

Osborn, H. F. 1904 D, 321, fig. 18 [A. (Peraceras?)].

Matthew, W. D. 1909 C, 114.

1918 A, 209.

Middle Miocene (Pawnee Creek); Colorado.

### **Aphelops profectus (Matthew).**

Hay, O. P. 1902 A, 646.

Matthew, W. D. 1901 B, 358, 373.

1909 C, 114.

- Osborn, H. F. 1904 D, 317, fig. 15 (*Aceratherium*).  
 Trouessart, E. L. 1905 A, 627.  
 Middle Miocene (Pawnee Creek); Colorado.
- Aphelops** sp. indet.  
 Cook, H. J. 1912 D, 44 (Pliocene Snake Creek); Nebraska.  
 Deussen, A. 1924 A, 97. Miocene (Oakville); Texas.  
 Dumble, E. T. 1920 A, 232, 237 (This genus?). Neocene (Fleming); Texas.  
 Gidley, J. W. 1918 C, 180 (This genus?). Late Tertiary (Flaxville); Montana.  
 Gilbert, G. K. 1875 A, 543. (Rhinoceros) Pliocene?; New Mexico.  
 Hay, O. P. 1923 A, 479. Pleistocene?, Pliocene?; Florida.  
 1927 D, 101 (This genus?). Pleistocene; Oregon: 101, 266 (This genus?). Pleistocene (Idaho); Idaho.  
 Matthew, W. D. 1909 C, 114. Middle Miocene; Montana.
- Matthew, W. D. 1915 L, 471, 472 (This species?). Miocene (Fleming); Texas.  
 1918 A, 205, figs. 12, 13. Pliocene (Snake Creek); Nebraska.  
 1920 E, 232, 237 (This genus?). Neocene (Fleming); Texas.  
 1923 A, 12. Lower Pliocene (Upper Snake Creek); Nebraska.  
 Merriam, J. C. 1911 B, 205, 214, 266, figs. 37, 38 (This genus?). Miocene (Virgin Valley); Nevada.  
 1917 A, 436. Pliocene (Snake Creek); Nebraska.  
 Merrill, G. P. 1907 A, 23 (This genus) Pliocene; Florida.  
 Moodie, R. L. 1923 B, 258, fig. 24.  
 Sellards, E. H. 1915 D, 106, 108, figs. 37-39 (This genus?). Miocene or Pliocene; Florida.  
 Sinclair, W. J. 1915 A, 76. Pliocene (Snake Creek); Nebraska.  
 Stock and Furlong 1926 A, 49, pl. ix. Pliocene (Ricardo); California.  
 Young and Cooper 1926 A, 5.  
 1927 A, 1.

PARAPHELOPS Lane. Type *P. rooksensis* Lane.

Lane, H. H. 1927 A, 300.

**Paraphelops rooksensis** Lane.

Lane, H. H. 1927 A, 300, pls. xxii-xxv.

Osborn, H. F. 1904 D, 312, "No. 10878" (*Peraceras superciliosus*).

Upper? Miocene (Republican River); Kansas: "Loup Fork"; South Dakota.

PERACERAS Cope. Type *Aphelops superciliosus* Cope.

- Hay, O. P. 1902 A, 645 (Aphelops, in part).  
 Beddard, F. E. 1902 A, 262.  
 Cook, H. J. 1927 B, 1.  
 Dollo, L. 1885 C, 295, 299.  
 Haug, E. 1911 A, 1706.  
 Laloy, L. 1907 A, 585.  
 Lane, H. H. 1927 A, 297.  
 Matsumoto, H. 1921 A, 90.  
 Matthew, W. D. 1909 C, 119.  
 1918 A, 202, 207.  
 1918 E, 153.  
 1924 C, 69, 151.  
 1926 A, 50.  
 Osborn, H. F. 1909 D, 79, 80, 81.  
 1910 B, 348, 349, 350, 352, 557.  
 1912 G, 250.  
 1918 A, 27.  
 Palmer, T. S. 1904 A, 521, 940.  
 Scott, W. B. 1913 A, 332.  
 Stock and Furlong 1926 A, 4.  
 Weber and Abel 1928 A, xxii, 668.  
 Zittel and Schlosser 1911 A, 453.  
 1923 A, 538.

**Peraceras superciliosus** Cope.

Hay, O. P. 1902 A, 646 (Aphelops).

Cope and Matthew 1915 A, pls. cxliv, cxlvb.

Lane, H. H. 1927 A, 306.

Matthew, W. D. 1901 B, 373 (Teleoceras).

1909 C, 116.

1918 A, 186, 203, 207, fig. 10.

1924 C, 151.

Merriam, J. C. 1917 A, 438.

Oshorn, H. F. 1904 D, 307, 312, 324, figs. 6, 20, 21.

Lower Pliocene (Republican River); Kansas, Nebraska.

**Peraceras troxelli** Matthew.

Matthew, W. D. 1918 A, 208, pls. vi-ix; text-fig. 9.

1924 C, 151.

Pliocene (Lower); Nebraska.

**Peraceras** sp. indet.

Matthew, W. D. 1923 A, 12. Lower Pliocene (Upper Snake Creek); Nebraska.

1924 C, 66, 150. Lower Pliocene (Snake Creek); Nebraska.

Stock and Furlong 1926 A, 50 (This genus?). Pliocene (Ricardo); California.

TELEOCERATINÆ Hay.

Hay, O. P. 1902 A, 646.

Breunig, S. 1924 A, 21 (Brachypodinæ).

Osborn, H. F. 1901 H, 505 (Brachypodinæ).

1909 D, 76, 136 (Teleoceratines).

Osborn, H. F. 1910 B, 633.  
1923 F, 216 (Brachypodinæ).  
Palmer, T. S. 1904 A, 773, 939.

**TELEOCERAS Hatcher. Type *T. major* Hatcher.**

Hay, O. P. 1902 A, 646.  
Bach, F. 1909 A, 760.  
Beddard, F. E. 1902 A, 280 (Syn of Aphelops)  
Breunig, S. 1924 A, 21.  
Cooper, C. F. 1924 B, 372, 385.  
Depéret, C. 1906 B, 1121.  
Gregory, W. K. 1912 F, 288.  
Haug, E. 1911 A, 1705, 1706.  
Hay, O. P. 1919 D, 373.  
1923 A, 497.  
Lane, H. H. 1927 A, 297.  
Lee, Stone and Gale 1915 A, 34, pl. vi.  
Matsumoto, H. 1918 C, 80.  
1921 A, 76, 87, 88.  
Matthew, W. D. 1909 C, 119.  
1915 A, 240.  
1917 A, 576.  
1918 A, 201, 209.  
1918 E, 153.  
1924 C, 70.  
1924 E, 748.  
1926 A, 50.  
1928 B, 979, fig. 15.  
Matthew and Cook 1909 A, 366, 384.  
1909 B, 197.  
Merriam, J. C. 1917 A.  
Osborn, H. F. 1902 D, 263, fig. 3.  
1904 D, 315.  
1905 I, 92.  
1907 G, 232, fig. 212.  
1909 D, 136.  
1910 B, 633.  
1918 A, 24, 33.  
1923 F, 216, 225, fig.  
Palmer, T. S. 1904 A, 667, 940.  
Pilgrim, G. E. 1912 A, 30.  
1913 A, 312.  
Repelin, J. 1916 A, 982.  
Ringström, T. 1924 A, 26, 66, 68.  
Rogers, A. F. 1924 A, 545.  
Schlosser, M. 1901 B, 307.  
1902 J, 242.  
1903 I, 211.  
Scott, W. B. 1913 A, 331, 350.  
Spencer, J. W. 1898 A, 26 ("rhinoceros").  
Sternberg, C. H. 1906 A, 72.  
Weber, M. 1904 A, 627.  
Weber and Abel 1928 A, 670.  
Zittel and Schlosser 1911 A, 453.  
1923 A, 538, 673, 679.

**Teleoceras felicis Freudenberg.**

Freudenberg, W. 1922 A, 5 (Syn. ? of *Rhinoceros longipes* Leidy).  
1921 A, 139 [T. (Aphelops); name only]  
Felix and Lenk 1891 A, 133, pl. xxx, fig. 9 (Aphelops sp.).  
Pleistocene?; Mexico.

**Teleoceras fossiger (Cope).**

Hay, O. P. 1902 A, 646.  
Barbour, E. H. 1914 C, 222.

Schlosser, M. 1903 C, 557 (Brachypodinæ).  
Weber and Abel 1928 A, 669 (Teleocerinæ).

Barbour, E. H. 1915 A, 92.  
Beddard, F. E. 1902 A, 261, fig. 135 (Aphelops).  
Cockerell, T. D. A. 1923 D, 276, figs. 6, 7.  
Cook, H. J. 1927 B, 1.  
Cope and Matthew 1915 A, pls. cxxxi, cxxxii (Aphelops, Teleoceras, Eusyodon); pl. cxxxiii; pl. cxxxiv, figs. 1, 2; pl. cxxxv, fig. 2; pl. cxxxvi (T. = Eusyodon); pl. cxxxvii (Aphelops, Teleoceras); pl. cxxxviii.  
Felix and Lenk 1891 A, 133, pl. xxx, fig. 9.  
Figgins, J. D. 1921 A, 11, 19, 2 figs. (Teleoceras).  
Freudenberg, W. 1922 A, 5, 19 (Rhinoceros, Aphelops).  
Gidley, J. W. 1903 C, 634 (Aphelops).  
Hay, O. P. 1927 D, 266-269.  
Koken, E. 1901 B, 228.  
Lane, H. H. 1927 A, 299.  
Lindgren, W. 1900 A, 99 (Aphelops).  
Lucas, F. A. 1900 in Lindgren, W.  
1900 A, 99.  
Matsumoto, H. 1921 A, 87.  
Matthew, W. D. 1901 B, 373.  
1909 C, 116.  
1918 A, 202, 206, fig. 9 (T. fossiger); 209 (T. major, a syn.).  
1923 A, 12 (This species?).  
1924 C, 66, 73 (This species?).  
Merriam, J. C. 1917 A, 428, 429, 438 (This species?); 432 (Aphelops).  
Merriam and Stock 1923 A, 17, pls. ii, iii; text-fig. 11.  
Merriam, Stock, Moody 1925 A, 54, 81, fig. 36 ("T.? near fossiger"). Pliocene (Rattlesnake); Oregon.  
Merrill, G. P. 1907 A, 23 (Aphelops), 20 (Aceratherium acutum); 27 (Aphelops fossiger. This species?).  
Newberry, J. S. 1870 D, 28 ("rhinoceros." This species?).  
Osborn, H. F. 1899 K, 274, fig. 5.  
1904 D, 307, 310, figs. 1, 4, 20, 21 (Aphelops); 313 (Aceratherium acutum, a syn.).  
1904 F, 29, 48.  
1905 I, pl. viii.  
1910 B, 349, 350, fig. 161.  
1923 F, 217, fig.  
Palacký, J. 1903 B, 105 ("rhinoceros").  
Pavlov, M. 1915 A, 16.  
Pilgrim, G. E. 1912 A, 31.  
Ringström, T. 1924 A, 70, figs. 49, 91.  
Schlosser, M. 1901 H, 499-500.  
1903 I, 62.  
Scott, W. B. 1913 A, 230, fig. 125.  
Sternberg, C. H. 1899 B, 105 ("rhinoceros").  
1906 A, 72 (Aphelops).  
1907 C, 123.  
1909 C, 127, 134, fig. 25.  
Stock, C. 1925 A, 18.  
Stock and Furlong 1926 A, 49.  
Toula, F. 1902 A, 9 (Aceratherium).  
Trouessart, E. L. 1905 A, 627.  
Troxell, E. L. 1916 A, 347.

Villada, M. M. 1903 A, 447, pl. iii (Aphelops. This species?).

Weber and Abel 1928 A, 669, fig. 457.

Wood, H. E. 1927 B, tab. vii.

Zittel and Schlosser 1911 A, 453.

1923 A, 538, fig. 667.

Pliocene (Republican River); Kansas: Lower Pliocene (Upper Snake Creek); Nebraska: Pliocene?; Colorado: Pleistocene? (Idaho); Idaho.

### **Teleoceras hicksi** Cook.

Cook, H. J. 1927 B, 1, 4, figs.

Pliocene; Colorado.

### **Teleoceras major** Hatcher.

Hay, O. P. 1902 A, 646 (T. fossiger, in part).

Lane, H. H. 1927 A, 299.

Matthew, W. D. 1918 A, 209 (Syn? of T. fossiger).

Osborn, H. F. 1904 D, 314, fig. 10.

Miocene (Upper); Nebraska.

### **Teleoceras medicornutus** Osborn.

Osborn, H. F. 1904 D, 319, fig. 17.

Matsumoto, H. 1921 A, 87.

Matthew, W. D. 1909 C, 114.

1918 A, 203, fig. 10.

1924 C, 66, 72, 150.

Osborn, H. F. 1905 I, 106, pl. vii, fig. 1 (T. bicornutus).

1910 B, 252, 292, 352, fig. 127.

Ringström, T. 1924 A, 66.

Scott, W. B. 1913 A, 333.

Upper Miocene (Pawnee Creek); Colorado: (Lower Snake Creek); Nebraska.

### **Teleoceras minor** Oleott.

Oleott, T. F. 1909 A, 403.

Ringström, T. 1924 A, 66.

Miocene (Arikaree); Nebraska.

### **Teleoceras proterus** (Leidy).

Leidy, J. 1885 A, 33 (Rhinoceros).

Hay, O. P. 1902 A, 646 (T. fossiger, in part).

Allen, G. M. 1926 A, 454 (This genus?).

Gidley, J. W. 1915 D, 21 (T. fossiger).

Hay, O. P. 1923 A, 497.

Leidy, J. 1885 C, 334 (Rhinoceros).

Matson, G. C. 1915 A, 37, pl. xii, fig. E ("rhinoceros").

Matson and Clapp 1909 A, 136 (Rhinoceros).

Matthew, W. D. 1909 C, 116 (T. fossiger, in part).

Merriam, J. C. 1917 A, 439 (T. fossiger proterus).

Merriam, Stock, Moody 1925 A, 81 (T. fossiger).

Merrill, G. T. 1907 A, 60 (Rhinoceros).

Neal, J. C. 1885 A, 334 (Rhinoceros).

Osborn, H. F. 1904 D, 313 (Rhinoceros proterus, Eusyodon maximus, syns. of T. fossiger).

1910 B, 343 (T. fossiger).

Sellards, E. H. 1914 A, 162 (T. fossiger).

1915 A, 135 (T. fossiger).

1915 D, 72 (T. fossiger).

1916 B, 94 (T. fossiger proterus).

Spencer, J. W. 1895 A, 131 (Rhinoceros).

Trouessart, E. L. 1905 A, 627 (Syn. of T. fossiger).

Pliocene? (Alachua); Florida.

### **Teleoceras** sp. indet.

Barbour, E. H. 1927 A, 133. Pleistocene? (Early); Nebraska.

Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.

Cook, H. J. 1912 D, 44. Pliocene (Snake Creek); Nebraska.

Douglass, E. 1908 A, 263, fig. 7 (This genus?).

Dumble, E. T. 1920 A, 232 (This genus?). Neocene (Fleming); Texas.

Felix and Lenk 1891 A, 133, pl. xxx, fig. 9 ("Aphelops sp." This genus?). Pliocene or Pleistocene; Mexico.

Freudenberg, W. 1922 A, 4. Pliocene; Mexico.

Gidley, J. W. 1918 C, 180 (This genus?). Late Tertiary (Flaxville); Montana.

Hay, O. P. 1923 A, 380. Pliocene? (Phosphate mines); Florida.

1924 D, 312. Pliocene?; Montana.

Matthew, W. D. 1909 C, 114. Miocene (Arikaree); South Dakota.

1918 A, 186, 210, 211, fig. 14. Pliocene (Snake Creek); Nebraska.

1920 E, 232 (This genus?). Neocene (Fleming); Texas.

Merriam, J. C. 1911 B, 216, 267 (This genus?). (Virgin Valley and Thousand Creek beds); Nevada.

1917 A, 425, 426 (This genus?). (Etche-goin): California; 436 (Snake Creek); Nebraska.

Rath, G. 1886 A, 106 ("Rhinoceros." This genus?). Pliocene?; Mexico.

Sellards, E. H. 1915 D, 72, figs. 37-39. Pliocene; Florida.

Sinclair, W. J. 1915 A, 76. Pliocene (Snake Creek); Nebraska.

Stock, C. 1921 A, 258, fig. 7 (This genus?). Pliocene? (Panaca); Nevada.

## Order ARTIODACTYLA Owen.

Hay, O. P. 1902 A, 647.

Abel, O. 1904 B, 743 ("artiodactylen").

1910 B, 186).

1912 D, 604 ("paraxonier").

1912 F, 236 ("paraxonier").

1913 B, 729, 737.

1914 A, 121.

1919 A, 799.

1920 A, 434.

Abel, O. 1921 A, 253 ("artiodactylen").

Adloff, P. 1920 A, 181 ("artiodactylen").

Allen, J. A. 1913 B, 454 ("artiodactyls").

Ameghino, F. 1889 A, 1006.

1897 B, 262 ("artiodactyles").

1906 A, 341, 404 ("artiodactyles").

1912 B, 171 ("artiodactyles").

Bayer, F. 1897 A, 149.

Beddard, F. E. 1902 A, 269.

- Behlen, H. 1906 A ("paarhufer").  
 Bensley, B. A. 1901 C, 252.  
     1902 A, 4 ("artiodactyls").  
 Bertelli, D. 1909 A, 166 ("artiodactili").  
 Black, D. 1915 A, 353.  
 Blainville, H. M. D. 1819 A, 41 ("ongulés à système de doigts pair").  
 Boas, J. E. V. 1884 B, 394 ("artiodactylen").  
     1914 B, 577, 589 ("artiodactylen")  
 Branca, W. 1907 A, 9.  
 Broom, R. 1915 A, 162.  
 Brown, A. E. 1904 B, 56.  
 Burmeister, H. 1879 B, 452 (Paridigitata).  
 Carus, V. 1875 A, 140.  
 Clark and Sonntag 1926 A, 454.  
 Cope, E. D. 1885 BB, 72.  
     1891 N, 84, 90  
 Depéret, C. 1904 B, 43 ("paridigités").  
     1907 B ("paridigités").  
 Dollo, L. 1889 D, 680 ("artiodactyles").  
 Doran, A. H. G. 1878 A, 421.  
 Fairchild, H. L. 1894 A, 207.  
 Flower, W. H. 1873 B, 95 ("artiodactyles").  
     1892 A, 13.  
 Frassetto, F. 1915 A ("artiodattili").  
 Freund, L. 1906 A, 115 ("wiederkäuer").  
 Gaudry, A. 1908 A, 1133 ("artiodactyles").  
 Gaupp, E. 1905 D, 1037.  
     1906 B, 850.  
     1913 A, 125 ("artiodactylen").  
 Gervais, P. 1852 A, 68, 197, explan. pl. xxxvi ("bisulques").  
     1859 A, 129 ("bisulques").  
 Gregory, W. K. 1910 A, 90, 347, 400-406, 410, 448, 456, 466.  
     1912 F, 294.  
     1920 A, 186, 243.  
 Hackel, E. 1868 A, 478.  
     1873 A, 544, 554.  
 Hay, O. P. 1912 D, 594.  
     1914 A, 210.  
 Heilprin, A. 1887 A, 373.  
 Hensel, R. 1879 A, 554 ("paridigitaten").  
 Hescheler, K. 1906 A, 30 ("paarhufer").  
 Hilzheimer, M. 1913 A, 567 ("paarhufer").  
 Hoernes, R. 1886 A, 672.  
 Hogben, L. T. 1919 A, 75 ("artiodactyls").  
 Huxley, T. H. 1863 E, 555.  
     1870 F, 527.  
     1880 E, 460 ("artiodactyles").  
 Jaekel, O. 1911 A, 232 (Diungulati).  
 Kampfen, P. N. 1905 A, 533.  
 Kingsley, J. S. 1925 A, 213, 261, 299, fig. 320.  
 Knottnerus-Meyer, T. 1907 A, 6, 97, 102.  
 Koken, E. 1893 B, 482, 500 ("paarhufer").  
 Kükenthal, W. 1913 A, 682.  
 Leche, W. 1887 A.  
     1900 A, 1035.  
 Leunis and Ludwig 1883 A, 236.  
 Loomis, F. B. 1925 B, 226 ("artiodactyls").  
     1925 E, 583.  
 Lubosch, W. 1926 A, 116, fig. 9 ("paarhufer").  
 Lull, R. S. 1904 C, 2.  
     1917 B, 295.  
 Lydekker, R. 1907 B, 13.  
     1913 B, 3.  
 Major, C. J. F. 1880 A, 26, 35 (Paridigitata).  
     1899 B, 62.  
 Matthew, W. D. 1901 B, 395.  
     1909 C, 122.  
     1909 D, 302, 333, 485, 550.  
     1910 G, 160.  
     1915 A, 241, 254, fig. 27.  
     1915 K, 456.  
     1921 D, 214.  
     1928 B, 948, 961, 964, 968, 970.  
 Mead, C. S. 1906 A, 482.  
 Meckel, J. F. 1823 A, 18 ("paarhufer").  
 Miller, G. S. 1912 B, 383.  
     1924 C, 481.  
 Mitchell, P. C. 1905 A, 469.  
 Moodie, R. L. 1922 C, 365.  
 Mysberg, W. A. 1917 A, 656.  
 Osborn, H. F. 1902 E, 356, fig. 1.  
     1905 H, 216, fig. 2.  
     1905 I, 99.  
     1905 N, 242 ("artiodactyls").  
     1907 G, 14, 84, 171.  
     1909 D, 122.  
     1910 B, 687.  
     1912 A, 94.  
     1925 B, 18.  
     1925 C, 750.  
 Owen, R. 1857 E.  
     1858 A, 27.  
     1863 A, 362.  
 Palacký, J. 1903 B, 305.  
 Parker and Haswell 1897 A, 452, 506.  
 Petersen, G. 1921 A.  
 Peterson, O. A. 1912 B, 162.  
 Pictet, F. J. 1853 A, 319 ("artiodactyles").  
 Popowa, N. 1913 A, 279.  
 Puccioni, N. 1908 A, 41 ("artiodattili").  
 Rehs, J. 1914 A, 2, 48.  
 Reynolds, S. H. 1897 A, 489, 533.  
 Rosenberg, A. 1873 A, 120.  
 Schlosser, M. 1898 B, 360.  
     1899 T, 454 ("paarhufer").  
     1903 A, 238 ("artiodactylen").  
     1905 A, 324.  
     1911 A, 165 ("artiodactylen").  
 Schmidt, O. 1886 A, 127, 135, 189.  
 Selater, P. L. 1866 A, 403.  
 Scott, W. B. 1896 D, 47, 57, 60 ("artiodactyls").  
     1913 A, 676.  
     1916 A, 116.  
     1928 B, 257.  
 Seeley, H. G. 1878 A, 224.  
 Sefve, I. 1913 A, 362 ("paraxonier").  
 Stehlin, H. G. 1905 A, 582 ("artiodactylen").  
     1910 A, 1134 ("artiodactylen").  
     1916 B, 1531 ("artiodactylen").  
 Steinmann, G. 1907 A, 493.  
 Stromer, E. 1902 B, 561 ("artiodactylen").  
     1912 A, 195, 244.  
 Taschenberg, O. 1899 A, 4434.  
 Terra, P. 1911 A, 316.  
 Thacker, A. G. 1922 A, 600, 603.  
 Tornier, G. 1888 A, 226.  
     1894 B, 103 ("artiodactylen").  
     1909 C, 540 ("artiodactylen").  
 Trouessart, E. L. 1905 A, 647.  
 Underhill, B. M. 1910 A, 81.  
 Van Bemmelen, J. F. 1918 A, 571.  
 Wallace, A. R. 1876 A, 1, 126, 137, 146.  
 Walmsley, T. 1918 A, 326.



Weber, M. 1904 A, 588, 628 (Artiodactyla); 591, 628 (Paraxonia).  
 Weber and Abel 1928 A, 415, 423, 426, 517, 537, 881, fig. 258.  
 Wilder, B. 1872 B, 320.  
 Woodward, A. S. 1898 D, 331, 335.

Woodward, H. 1904 B, 161.  
 Wortman, J. L. 1903 A, 430.  
 Wright, R. R. 1883 A, 262.  
 Zierler, F. E. 1905 A, 514.  
 Zittel and Schlosser 1911 A, 468.  
 1923 A, 556, 669.

### Suborder SUIFORMES Jaekel.

Jaekel, O. 1911 A, 233.  
 Ameghino, F. 1889 A, 1025 (Suina).  
 Beddard, F. E. 1902 A, 273 (Suina).  
 Gray, J. E. 1869 A, 325 (Setifera).  
 Haeckel, E. 1873 A, 554 (Chœromorpha).  
 Hensel, R. 1879 A, 555 ("bunodonten paarzeher").  
 Hogben, L. T. 1919 A, 75 (Suina).  
 Kükenthal, W. 1913 A, 683 (Non-ruminantia).  
 Lydekker, R. 1913 B, 7 (Suina).  
 1915 D, 305 (Suina).  
 Matthew, W. D. 1924 C, 176 (Suina).

Matthew, W. D. 1928 B, 968, 981, fig. 16 ("suillines").  
 Osborn, H. F. 1910 B, 548 (Suina).  
 Reynolds, S. H. 1897 A, 466, 523, 556, fig. 94 (Suina).  
 Rutland, J. 1901 A, 21033 (Omnivora).  
 Scott, W. B. 1913 A, 361, 362 (Suina).  
 Terra, P. 1911 A, 317 (Bunodontia).  
 Weber and Abel 1828 A, 426, 538, 545 (Neobunodontia).  
 Wright, R. R. 1883 A, 263 (Suina).  
 Zittel and Schlosser 1911 A, 472 (Bunodontia).  
 1923 A, 560 (Bunodontia).

### Superfamily DICHOBUNOIDÆ, new form.

Gill, T. 1872 B, 10, 81 (Anoplotheroidea).  
 Stromer, E. 1911 A, 197 (Bunoselenodontia, part).  
 Weber, M. 1904 A, 688 (Dichobunoidia).

Zittel and Schlosser 1911 A, 476 (Bunoselenodontia, part).  
 1925 A, 564 (Bunoselenodontia, part).

### LEPTOCHÆRIDÆ Marsh.

Marsh, O. C. 1894 L, 273.  
 Hay, O. P. 1902 A, 656 (Hyotheriinae, in part).  
 Matthew, W. D. 1901 B, 443.  
 1909 C, 104, 106, 109, 111.  
 O'Harra, C. C. 1910 A, 106, 128.

Osborn, H. F. 1909 D, 63, 69.  
 Palmer, T. S. 1904 A, 750, 927.  
 Scott, W. B. 1913 A, 361.  
 Zittel and Schlosser 1911 A, 475.  
 1923 A, 563.

### LEPTOCHÆRUS Leidy. Type *L. spectabilis* Leidy.

Hay, O. P. 1902 A, 657 (Leptochærus); 792 (Menotherium).  
 Delafontaine, M. 1875 A, 171 (Laopithecus).  
 Giebel, C. G. 1883 A, 124.  
 Hatcher, J. B. 1901 A, 134.  
 Haug, E. 1911 A, 1528, 1529.  
 Hay, O. P. 1923 A, 14.  
 Heilprin, A. 1887 A, 400 (Laopithecus).  
 Matthew, W. D. 1901 B, 369, 375, 443.  
 1909 C, 111.  
 1915 K, 420.  
 1924 E, 748.  
 Osborn, H. F. 1902 C, 169.  
 1905 H, 219 (Laopithecus, Menotherium).  
 1905 I, 104 (Laopithecus, Menotherium).  
 1907 G, 173, fig. 157.  
 Palacký, J. 1903 B, 312.  
 Palmer, T. S. 1904 A, 364, 928 (Laopithecus); 371, 928 (Leptochærus); 410, 929 (Menotherium).  
 Trouessart, E. L. 1905 A, 656.  
 Wallace, A. R. 1876 A, 1, 133 (Laopithecus, Menotherium); 137 (Leptochærus); 11, 215.  
 Zittel and Schlosser 1911 A, 475.  
 1923 A, 563.

### *Leptochærus gracilis* Marsh.

Hay, O. P. 1902 A, 657.  
 Cook, H. J. 1912 D, 37.  
 Hatcher, J. B. 1901 A, 131, pl. i, fig. 4.  
 Matthew, W. D. 1901 B, 443.  
 1909 C, 106.

O'Harra, C. C. 1920 A, 152.  
 Oligocene (Brule); Nebraska.

### *Leptochærus lemurus* (Cope).

Hay, O. P. 1902 A, 792 (Menotherium).  
 Matthew, W. D. 1901 B, 357.  
 1909 C, 106.

Osborn, H. F. 1902 C, 174.  
 Seeley, H. G. 1886 A, 514 (Menotherium).  
 Trouessart, E. L. 1905 A, 656.  
 Middle Oligocene (Cedar Creek); Colorado.

### *Leptochærus robustus* (Marsh).

Hay, O. P. 1902 A, 792 (Menotherium).  
 Baird, S. F. 1876 A, 336 (Laopithecus).  
 Matthew, W. D. 1909 C, 106.  
 Osborn, H. F. 1902 C, 174.  
 Trouessart, E. L. 1905 A, 656 (Syn. of *L. spectabilis*).  
 Middle Oligocene (Cedar Creek); Colorado.

### *Leptochærus spectabilis* Leidy.

Hay, O. P. 1902 A, 657.  
 Cook, H. J. 1912 D, 37.  
 Giebel, C. G. 1883 A, pl. xliii.  
 Matthew, W. D. 1901 B, 357.  
 1909 C, 106.  
 O'Harra, C. C. 1910 A, 106, 128.  
 1920 A, 152.  
 Trouessart, E. L. 1905 A, 656.  
 Upper Oligocene (Brule); Nebraska.

**Leptochoerus** sp. indet.

Cook, H. J. 1912 D, 39. Upper Oligocene (Brule); Nebraska.

Hay, O. P. 1914 A, 26.

Matthew, W. D. 1909 C, 109. Upper Oligocene (Brule); Nebraska.

**STIBARUS** Cope. Type *S. obtusilobus* Cope.

Hay, O. P. 1902 A, 672.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1903 B, 220.

1909 C, 111.

Palmer, T. S. 1904 A, 648, 929.

Scott, W. B. 1913 A, 361.

Trouessart, E. L. 1905 A, 684.

**Stibarus montanus** Matthew.

Matthew, W. D. 1903 B, 219, fig. 13.

Cook, H. J. 1912 D, 35.

Matthew, W. D. 1909 C, 104.

Trouessart, E. L. 1905 A, 684.

Oligocene (Lower); Montana: (Chadron); Nebraska.

**Stibarus obtusilobus** Cope.

Hay, O. P. 1902 A, 672.

Matthew, W. D. 1901 B, 358.

1903 B, 219, 220, fig. 12.

1909 C, 106.

Palacký, J. 1903 B, 312.

Trouessart, E. L. 1905 A, 684.

Middle Oligocene (Cedar Creek); Colorado.

**Stibarus quadricuspis** (Hatcher).

Hatcher, J. B. 1901 A, 131, pl. i, fig. 8 (*Leptochoerus*).

Matthew, W. D. 1903 B, 230 (*To Stibarus?*).

1909 C, 106.

O'Harra, C. C. 1920 A, 153.

Trouessart, E. L. 1905 A, 656 (*Leptochoerus*).

Middle Oligocene (Brule); Nebraska.

**DICHOBUNIDÆ** Gill.

Gill, T. 1872 B, 74, 81.

Abel, O. 1914 A, 154.

1920 A, 434 ("*dichobuniden*").

Cope, E. D. 1887 B, 379, 382.

Falconer, H. 1868 A, 1, 225 ("*dichobunes*").

Gervais, P. 1852 A, explan. pl. xxxv, 6 (*Dichobune*).

1859 A, 198, pl. xvii (*Dichobune*).

Gregory, W. K. 1920 A, 188.

Kowalewsky, W. 1877 A, 152 (*Dichobune*).

Loomis, F. B. 1925 E, 584, 588, 590, figs. 2-4.

Major, C. J. F. 1877 A, 13, 14 (*Dichobune*).

Matthew, W. D. 1909 C, 95, 98, 99, 103, 106.

1914 B, 387.

1915 K, 474.

Matthew, W. D. 1921 D, 214.

Matthew and Granger 1925 D, 7 (*Dichobunidae*, *Helohyidae*).

Osborn, H. F. 1909 D, 36, 57.

Roger, O. 1896 A, 220 (*Dichobuninae*).

Rütimeyer, L. 1892 A, 109, fig. d. (*Dichobune*).

Schlosser, M. 1921 A, 123, 126.

Scott, W. B. 1913 A, 361, 398.

Sinclair, W. J. 1914 A, 294 ("*dichobunids*").

Trouessart, E. L. 1905 A, 679 (*Dichobuninae*).

Weber, M. 1904 A, 688.

Weber and Abel 1928 A, 817.

Zittel, K. A. 1893 B, 374 (*Dichobuninae*).

Zittel and Schlosser 1911 A, 479.

1923 A, 568.

**BUNOPHORUS** Sinclair. Type *Trigonolestes etsagicus* Cope.

Sinclair, W. J. 1914 A, 273.

Lydekker, R. 1915 C, 620.

Peterson, O. A. 1919 A, 75.

Weber and Abel 1928 A, 617, 618.

Zittel and Schlosser 1923 A, 569, 666.

**Bunophorus etsagicus** (Cope).

Hay, O. P. 1902 A, 649 (*Trigonolestes*).

Loomis, F. B. 1907 B, 357 (*Trigonolestes*).

Matthew, W. D. 1909 C, 98 (*Helohyus*).

Sinclair, W. J. 1914 A, 273, fig. 7.

Trouessart, E. L. 1905 A, 647 (*Trigonolestes*).

Zittel and Schlosser 1923 A, 569.

Lower Eocene (Wasatch); Wyoming.

**Bunophorus macropternus** (Cope).

Hay, O. P. 1902 A, 604 (*Phenacodus*).

Matthew, W. D. 1909 C, 94 (*Phenacodus*).

Sinclair, W. J. 1914 A, 275, fig. 8.

Lower Eocene (Wasatch); Wyoming.

**WASATCHIA** Sinclair. Type *W. grangeri* Sinclair.

Sinclair, W. J. 1914 A, 268.

Lydekker, R. 1915 C, 620.

Weber and Abel 1928 A, 618.

Zittel and Schlosser 1923 A, 569, 666.

**Wasatchia dorseiyana** Sinclair.

Sinclair, W. J. 1914 A, 269, figs. 2-4.

Lower Eocene (Wasatch); Wyoming.

**Wasatchia grangeri** Sinclair.

Sinclair, W. J. 1914 A, 269, fig. 1.

Lower Eocene (Wasatch); Wyoming.

**Wasatchia lysitensis** Sinclair.

Sinclair, W. J. 1914 A, 271, figs. 5, 6.

Lower Eocene (Wind River); Wyoming.

**Lophiohyus** Sinclair. Type *L. alticeps* Sinclair.

Sinclair, W. J. 1914 A, 276.  
Weber and Abel 1928 A, 542.

**Lophiohyus alticeps** Sinclair.

Sinclair, W. J. 1914 A, 276, figs. 9-11.  
Abel, O. 1922 C, 276, fig. 233.  
Middle Eocene (Bridger); Wyoming.

**Antiacodon** Marsh. Type *A. venustus* Marsh.

Hay, O. P. 1902 A, 787.  
Chapman, H. C. 1904 A, 150 (=Anaptomorphus).  
Matthew, W. D. 1909 C, 96, 101.  
Osborn, H. F. 1910 B, 547.  
Palmer, T. S. 1904 A, 109, 898.

**Antiacodon venustus** Marsh.

Hay, O. P. 1902 A, 787  
Matthew, W. D. 1909 C, 96.  
Osborn, H. F. 1902 C, 173 (To Homacodon?).  
Middle Eocene (Bridger); Wyoming.

**Bunomeryx** Wortman. Type *B. elegans* Wortman.

Hay, O. P. 1902 A, 650.  
Cossmann, M. 1899 B, 83.  
Haug, E. 1911 A, 1528.  
Matthew, W. D. 1909 C, 103.  
Osborn, H. F. 1907 G, 172, fig. 154.  
1910 B, 170, 547.  
Palmer, T. S. 1904 A, 147, 927.  
Peterson, O. A. 1919 A, 67, 73.  
Schlosser, M. 1901 D, 463.  
Scott, W. B. 1913 A, 361.  
Stehlin, H. G. 1906 A, 671.  
Trouessart, E. L. 1905 A, 648.  
Weber, M. 1904 A, 661, 664.  
Winge, H. 1906 A, 95.  
Zittel and Schlosser 1911 A, 484.  
1923 A, 574, 669.

**Bunomeryx elegans** Wortman.

Hay, O. P. 1902 A, 650.  
Matthew, W. D. 1909 C, 99.  
Peterson, O. A. 1919 A, 67, pl. xxxvii, fig. 18.  
Schlosser, M. 1901 D, 463.  
Stehlin, H. G. 1906 A, 671.  
Upper Eocene (Uinta); Utah.

**Bunomeryx montanus** Wortman.

Hay, O. P. 1902 A, 650.  
Matthew, W. D. 1909 C, 99.  
Peterson, O. A. 1919 A, 66, 72.  
Schlosser, M. 1901 D, 462  
Stehlin, H. G. 1906 A, 671.  
Upper Eocene (Uinta); Utah.

**Homacodon** Marsh. Type *H. vagans* Marsh.

Hay, O. P. 1902 A, 649.  
Beddard, F. E. 1902 A, 280.  
Fairchild, H. L. 1894 A, 208.  
Granger, W. 1909 A, 22.  
Matthew, W. D. 1909 C, 98, 103.  
1909 D, 522.  
1924 E, 748.  
1928 B, 981, fig. 16.  
Osborn, H. F. 1902 C, 173.  
1910 B, 157, 547.  
Palmer, T. S. 1904 A, 329, 927.  
Peterson, O. A. 1919 A, 69, 70, 73.  
Schlosser, M. 1901 D, 462, 466.  
1903 A, 289.  
1903 I, 112.  
Scott, W. B. 1913 A, 273, 398.  
Sinclair, W. J. 1914 A, 284.  
Stehlin, H. G. 1910 A, 1094.  
Trouessart, E. L. 1905 A, 648.  
Weber, M. 1904 A, 644.  
Weber and Abel 1928 A, 618.  
Zittel and Schlosser 1911 A, 480.  
1923 A, 569, 667.

**Homacodon priscus** Marsh.

Hay, O. P. 1902 A, 650.  
Ameghino, F. 1905 A, 32, fig. 37.

Stehlin, H. G. 1906 A, 669.  
Eocene; Wyoming, New Mexico.

**Homacodon pucillus** Marsh.

Hay, O. P. 1902 A, 650.  
Stehlin, H. G. 1906 A, 669.  
Eocene; Wyoming, New Mexico.

**Homacodon vagans** Marsh.

Hay, O. P. 1902 A, 650.  
Abel, O. 1922 C, 277, fig. 234.  
Beddard, F. E. 1902 A, 280.  
Gregory, W. K. 1920 A, 186.  
Lydekker, R. 1915 C, 619, fig. 1.  
Matthew, W. D. 1909 C, 98 (This species?).  
Peterson, O. A. 1919 A, 68.  
Sinclair, W. J. 1914 A, 286, figs. 19, 20.  
Stehlin, H. G. 1906 A, 669.  
Trouessart, E. L. 1905 A, 648.  
Weber and Abel 1928 A, 618, fig. 414.  
Zittel and Schlosser 1911 A, 480.  
1923 A, 569, fig. 709.  
Middle Eocene (Lower Bridger); Wyoming.

**Homacodon** sp. indet.

Matthew, W. D. 1909 C, 98. Middle Eocene (Bridger); Wyoming.

**Hylomeryx** Peterson. Type *H. annectens* Peterson.

Peterson, O. A. 1919 A, 67.  
Trouessart, E. L. 1905 A, 666.

**Hylomeryx annectens** Peterson.

Peterson, O. A. 1919 A, 68, pl. xxxvi, figs. 5, 6;  
text-figs. 8-10.  
Upper Eocene (Uinta); Utah.

LIMNENETES Douglass. Type *L. platyceps* Douglass.

- Douglass, E. 1901 B, 259.  
1905 A, 211.  
Loomis, F. B. 1924 A, 369.  
1924 B, 7, 14, 15.  
Matthew, W. D. 1909 C, 111.  
Palmer, T. S. 1904 A, 376, 911.  
Peterson, O. A. 1928 B, 165.  
Thorpe, M. R. 1925 A, 76.  
Trouessart, E. L. 1905 A, 668.  
Zittel and Schlosser 1911 A, 482.  
1923 A, 572.

**Limnenetes platyceps** Douglass.

- Douglass, E. 1901 B, 242, 260, pl. ix, figs. 5, 6.  
1903 A, 149.  
1907 A, 822.  
Loomis, F. B. 1924 A, 371, pl. lii; pl. liii, figs. 2-7; text-fig. 2.  
1924 B, 8, fig. 5.  
Matthew, W. D. 1909 C, 104.  
Peterson, O. A. 1928 B, 165.  
Trouessart, E. L. 1905 A, 668.  
Lower Oligocene (White River); Montana.

**Limnenetes** sp. indet.

- Matthew, W. D. 1903 B, 222. Oligocene (Titano-therium beds); Montana.

OREONETES Loomis. Type *Limnenetes anceps* Douglass.

- Loomis, F. B. 1924 A, 373.  
1924 B, 7, 15.  
1925 E, 592.  
Peterson, O. A. 1928 B, 166 (Oionetes).

**Oreonetes anceps** (Douglass).

- Douglass, E. 1901 B, 242, 262 (Limnenetes).  
1903 A, 149 (Limnenetes).  
1907 A, 822 (Limnenetes).

- Loomis, F. B. 1924 A, 373, pls. lni, liv; text-fig. 3.  
1924 B, 6, fig. 4.  
Matthew, W. D. 1909 C, 104 (Limnenetes. This genus?).  
Peterson, O. A. 1919 A, 68 (Limnenetes).  
Trouessart, E. L. 1905 A, 668 (Limnenetes).  
Lower Oligocene (White River); Montana.

SPHENOMERYX Peterson. Type *S. quadricuspis* Peterson.

- Peterson, O. A. 1919 A, 71.

**Sphenomeryx quadricuspis** Peterson.

- Peterson, O. A. 1919 A, 71, pl. xxxvii, figs. 15, 16.  
Upper Eocene (Uinta); Utah.

NANOMERYX Marsh. Type *N. caudatus* Marsh.

- Hay, O. P. 1902 A, 650.  
Matthew, W. D. 1909 C, 103.  
Palmer, T. S. 1904 A, 447, 927.  
Sinclair, W. J. 1914 A, 287.  
Trouessart, E. L. 1905 A, 648.  
Zittel and Schlosser 1923 A, 569.

**Nanomeryx caudatus** Marsh.

- Hay, O. P. 1902 A, 650.  
Matthew, W. D. 1909 C, 98.  
Middle Eocene (Bridger?); Wyoming.

MESOMERYX Peterson. Type *M. grangeri* Peterson.

- Peterson, O. A. 1919 A, 73.

**Mesomeryx grangeri** Peterson.

- Peterson, O. A. 1919 A, 73, pl. xxxvii, fig. 17.  
Upper Eocene (Uinta); Utah.

SARCOLEMUR Cope. Type *Antiacodon furcatus* Cope.

- Hay, O. P. 1902 A, 793.  
Haug, E. 1911 A, 1528.  
Loomis, F. B. 1905 A, 416.  
Lydekker, R. 1915 C, 620.  
Matthew, W. D. 1909 C, 98, 103.  
1909 D, 512.  
Osborn, H. F. 1901 D, 623.  
1902 C, 189.  
1909 D, 38.  
Palmer, T. S. 1904 A, 618, 898.  
Pia, J. 1916 A, 129.  
Schlosser, M. 1921 A, 123, 126, text-fig. 1.  
Sinclair, W. J. 1914 A, 287.  
Trouessart, E. L. 1904 A, 42.  
Weber, M. 1904 A, 763.  
Weber and Abel 1928 A, 618.

- Zittel and Schlosser 1911 A, 480.  
1923 A, 569, 667.

**Sarcolemur bicuspidis** Loomis.

- Loomis, F. B. 1907 B, 337 (No description).  
Lower Eocene (Wasatch); Wyoming.

**Sarcolemur crassus** Cope.

- Hay, O. P. 1902 A, 793.  
Osborn, H. F. 1902 C, 174.  
Trouessart, E. L. 1904 A, 42.  
Lower Eocene (Wasatch); New Mexico.

**Sarcolemur furcatus** (Cope).

- Cope, E. D. 1872 NN, 2 (Lophiotherium).  
1873 E, 608 (Antiacodon).

- Hay, O. P. 1902 A, 793 (*S. pygmaeus*, in part).  
 Matthew, W. D. 1909 C, 98.  
 Osborn, H. F. 1902 C, 172, 174, 189, fig. 16.  
 Trouessart, E. L. 1904 A, 42.  
 Middle Eocene (Bridger); Wyoming.

***Sarcolemur pygmaeus* Cope.**

- Hay, O. P. 1902 A, 793.  
 Matthew, W. D. 1909 C, 98.  
 Osborn, H. F. 1902 C, 172, 189, fig. 17.  
 Sinclair, W. J. 1914 A, 287, fig. 21.  
 Trouessart, E. L. 1904 A, 42.  
 Middle Eocene (Bridger); Wyoming.

**MICROSUS Leidy. Type *M. cuspidatus* Leidy.**

- Hay, O. P. 1902 A, 792.  
 Haug, E. 1911 A, 1528.  
 Loomis, F. B. 1905 A, 417 (=Hyopsodus).  
 Matthew, W. D. 1909 C, 98, 103.  
 1909 D, 512.  
 Palmer, T. S. 1904 A, 423, 898.  
 Sinclair, W. J. 1914 A, 288.  
 Zittel and Schlosser 1923 A, 569.

***Microsus cuspidatus* Leidy.**

- Hay, O. P. 1902 A, 792.  
 Matthew, W. D. 1909 C, 98.

- Merrill, G. P. 1907 A, 48.  
 Osborn, H. F. 1902 C, 172 (=Hyopsodus paulus).  
 Sinclair, W. J. 1914 A, 288, fig. 22.  
 Middle Eocene (Bridger); Wyoming.

***Microsus* sp. indet.**

- Gidley, J. W. 1926 E, 41. Lower Eocene (Wasatch); Wyoming.  
 Sinclair, W. J. 1914 A, 289, figs. 23, 24?. Middle Eocene (Bridger); Wyoming.

**DIACODEXIS Cope. Type *Phenacodus laticuneus* Cope.**

- Cope, E. D. 1882 GG, 1029.  
 Hay, O. P. 1902 A, 649 (Trigonolestes); 790 (Hyopsodus, in part).  
 Chardin, T. 1922 A, 83.  
 Gregory, W. K. 1910 A, 403 (Trigonolestes).  
 Haug, E. 1911 A, 1528 (Trigonolestes).  
 Loomis, F. B. 1925 E, 585, 588, 590, figs. 2, 3, 4.  
 Matthew, W. D. 1905 C, 299 (Trigonolestes).  
 1909 C, 103 (Trigonolestes).  
 1909 D, 522 (Trigonolestes).  
 1915 E, 327.  
 1915 K, 421, 472.  
 1917 C, 837.  
 1918 H, 566.  
 1921 H, 510.  
 1924 E, 749.  
 1928 B, 964, 981, fig. 16.  
 Osborn, H. F. 1907 G, 171, figs. 152, 199 (Trigonolestes).  
 1909 D, 38, 48 (Trigonolestes).  
 1910 B, 127, 547 (Trigonolestes).  
 1912 G, 236, fig. 3 (Trigonolestes).  
 Palmer, T. S. 1904 A, 224, 898 (Diacodexis); 691, 927 (Trigonolestes).  
 Schlosser, M. 1898 B, 371 (Trigonolestes).  
 1921 A, 123, 126, text-fig. 1.  
 Scott, W. B. 1913 A, 281, 398 (Trigonolestes).  
 Sinclair, W. J. 1914 A, 289.  
 Stehlin, H. G. 1906 A, 669, 673 (Trigonolestes).  
 1910 A, 1154 (Trigonolestes).  
 Trouessart, E. L. 1905 A, 647 (Trigonolestes).  
 Weber, M. 1904 A, 664 (Trigonolestes).  
 Weber and Abel 1928 A, 618.  
 Zittel and Schlosser 1911 A, 480 (Trigonolestes).  
 1923 A, 569, 666 (Trigonolestes).

***Diacodexis brachystomus* (Cope).**

- Hay, O. P. 1902 A, 649 (Trigonolestes).  
 Matthew, W. D. 1909 C, 95 (Trigonolestes).  
 Sinclair, W. J. 1914 A, 290.  
 Lower Eocene (Bighorn Valley); Wyoming.

***Diacodexis chacensis* Cope.**

- Hay, O. P. 1902 A, 649 (Trigonolestes).  
 Loomis, F. B. 1907 B, 357 (Trigonolestes).  
 Matthew, W. D. 1909 C, 95 (Trigonolestes).  
 Reeside, J. B. 1924 A, 46 (Trigonolestes).  
 Sinclair, W. J. 1914 A, 290, fig. 25.  
 Trouessart, E. L. 1905 A, 648 (Trigonolestes).  
 Zittel and Schlosser 1923 A, 569.  
 Lower Eocene (Wasatch); Wyoming.

***Diacodexis laticuneus* Cope.**

- Hay, O. P. 1902 A, 790 (Hyopsodus).  
 Loomis, F. B. 1905 A, 421, 424 (Hyopsodus).  
 Matthew, W. D. 1909 C, 93 (Hyopsodus).  
 Osborn, H. F. 1902 C, 175, 184, fig. 10 (Hyopsodus?, Diacodexis).  
 Sinclair, W. J. 1914 A, 290 (This species?).  
 Trouessart, E. L. 1904 A, 42, 48 (Hyopsodus).  
 Lower Eocene (Wasatch); Wyoming.

***Diacodexis metsiacus* (Cope).**

- Hay, O. P. 1902 A, 649 (Trigonolestes).  
 Loomis, F. B. 1907 B, 357 (Trigonolestes).  
 Matthew, W. D. 1909 C, 95 (Trigonolestes).  
 Sinclair, W. J. 1914 A, 290.  
 Trouessart, E. L. 1905 A, 648 (Trigonolestes).  
 Lower Eocene (Wasatch); Wyoming.

***Diacodexis nuptus* (Cope).**

- Hay, O. P. 1902 A, 649 (Trigonolestes).  
 Matthew, W. D. 1909 C, 95 (Trigonolestes).  
 Stehlin, H. G. 1906 A, 673 (Pantolestes).  
 1910 A, 1155 (Trigonolestes).  
 Trouessart, E. L. 1905 A, 648 (Trigonolestes).  
 Lower Eocene (Wind River); Wyoming.  
 Colorado.

***Diacodexis olseni* Sinclair.**

- Sinclair, W. J. 1914 A, 292, fig. 26.  
 Lower Eocene (Wind River); Wyoming.

**Diacodexis robustus** Sinclair.

Sinclair, W. J. 1914 A, 293, figs. 27, 28.  
Lower Eocene (Wasatch); Wyoming.

**Diacodexis secans** (Cope).

Hay, O. P. 1902 A, 649 (Trigonolestes).  
Matthew, W. D. 1909 C, 95 (Trigonolestes).  
Stehlin, H. G. 1906 A, 673 (Pantolestes).  
1910 A, 1155 (Trigonolestes).  
Trouessart, E. L. 1905 A, 643 (Trigonolestes).  
Lower Eocene (Wind River); Wyoming;  
Colorado.

**STENACODON** Marsh. Type *S. rarus* Marsh.

Hay, O. P. 1902 A, 794.  
Loomis, F. B. 1905 A, 417 (Syn. of Hyopsodus).  
Matthew, W. D. 1909 C, 103  
Palmer, T. S. 1904 A, 644, 898.

**Stenacodon rarus** Marsh.

Hay, O. P. 1902 A, 794.  
Matthew, W. D. 1909 C, 98 (This genus?).  
1909 D, 302.  
Osborn, H. F. 1902 C, 173, 185 (Hyopsodus).  
Middle Eocene (Bridger); Wyoming.

**ITHYGRAMMODON** Osborn, Scott, and Speir. Type *I. cameloides* Osborn, Scott, and Speir.

Hay, O. P. 1902 A, 674.  
Howes, G. B. 1902 A, 523.  
Matthew, W. D. 1909 C, 103.  
Palmer, T. S. 1904 A, 354, 921.  
Trouessart, E. L. 1905 A, 684.  
Zittel and Schlosser 1923 A, 564.  
The systematic position of this genus is uncertain.

**Ithygrammodon cameloides** Osborn, Scott, and Speir.

Hay, O. P. 1902 A, 674.  
Matthew, W. D. 1909 C, 98 (This genus?).  
Middle Eocene (Bridger?); Wyoming?.

**ANOPLOTHERIIDÆ** Leidy.

Leidy, J. 1869 A, 206.  
Abel, O. 1919 A, 803.  
1920 A, 434, 436, figs. 659, 660.  
Arlt, T. 1907 D, 688.  
Bonn, H. G. 1838 A, 1292 (Anoplotherium).  
Carus, V. 1875 A, 147 (Anoplotherioidea).  
Cope, E. D. 1837 B, 378, 382.  
Cuvier, G. 1804 E, 370 (Anoplotherium).  
1812, Oss. Foss. ed. 1, v, pls. (Anoplotherium).  
1822, Oss. Foss., ed. 2, III, pls. (Anoplotherium).  
1825 A, 39-250, III, pls. (Anoplotherium).  
Depéret, C. 1908 A, 166 (Anoplotheridæ).  
Earle, C. 1897 A, 686.  
Falconer, II. 1868 A, I, 190 (Anoplotherium).  
Flower and Lydekker 1891 A, 293.  
Gervais, P. 1852 A, 91, explan. pls. xvi, xxxv (Anoplotherium).  
1859 A, 163 ("anoplotherides").  
Haeckel, E. 1868 A, 478 ("anoplotherien").  
1873 A, 553, 554 (Anoplotherida).  
Hennig, E. 1921 A, 221 (Anoplotherium).  
Kowalevsky, W. 1874 A, pl. xxxvii, figs. 2, 11 (Anoplotherium).  
1877 A, 152 (Anoplotherium).  
Lazier and Parieu 1838 A, 335 (Anoplotherium).  
Loomis, F. B. 1925 E, 584, 588, 590, figs. 2, 4.

Lydekker, R. 1885 C, 183.  
Major, C. J. F. 1877 A, 13, 14, 15 (Anoplotherium).  
Matthew, W. D. 1928 B, 981, fig. 16 ("anoplotheres").  
Osborn, H. F. 1910 B, 548.  
Owen, R. 1845 B, 523, pl. cxxxv.  
1860 E, 332 (Anoplotherium).  
1866 B, 266, 286 (Anoplotherium).  
1868 A, 340, 375, 390 (Anoplotherium).  
Palmer, R. W. 1913 A, 878 (Anoplotherium).  
Peterson, O. A. 1919 A, 76 (Anoplotheridæ); 79 (Anoplotheriinae; Diplobunopsinae).  
Pomel, A. 1851 A, 16-17 (Anoplotherium).  
Reynolds, S. H. 1897 A, 423 (Anoplotherium).  
Roger, O. 1896 A, 219.  
Rutimeyer, L. 1862 C, 70 (Anoplotherium).  
Sauvage, H. E. 1882 A, 106 (Anoplotherium).  
Schlosser, M. 1883 B, 141, pl. vi ("anoplotherien").  
1883 C, 153, pls. vi, vii ("anoplotherien").  
1921 A, 123, 124 ("anoplotheriden").  
Terra, P. 1911 A, 323.  
Trouessart, E. L. 1905 A, 677 (Anoplotheridæ).  
Weber and Abel 1928 A, 543.  
Zittel, K. A. 1893 B, 366.  
Zittel and Schlosser 1911 A, 477.  
1923 A, 566, 667.

**DIPLOBUNOPS** Peterson. Type *D. matthewi* Peterson.

Peterson, O. A. 1919 A, 76.

**Diplobunops matthewi** Peterson.

Peterson, O. A. 1919 A, 76, pl. xxxviii.  
Upper Eocene (Uinta); Utah.

*Superfamily ANTHRACOTHERIOIDÆ, new form.*

- Hay, O. P. 1902 A, 651 (Anthracotherioidea).  
 Cope, E. D. 1891 N, 87 (Anthracotherioidea).  
 Stehlin, H. G. 1908 A, 798 ("anthracotherien").  
 Stromer, E. 1912 A, 197 (Bunoselenodontia, in part).  
 Weber, M. 1904 A, 690 (Anthracotherioidea).  
 Weber and Abel 1928 A, 535 (Bunoselenodontia).  
 Zittel and Schlosser 1911 A, 476 (Bunoselenodontia, part).  
 1923 A, 564 (Bunoselenodontia, part).

## ANTHRACOTHERIIDÆ Leidy.

- Leidy, J. 1869 A, 202 (Anthracotheridæ).  
 Hay, O. P. 1902 A, 651.  
 Abel, O. 1913 B, 729, 740.  
 1914 A, 160.  
 1919 A, 801.  
 1920 A, 435, 436 ("anthracotheriiden").  
 Arldt, T. 1907 D, 638.  
 1912 A, 700.  
 Beddard, F. E. 1902 A, 328 (Anthracotheridæ).  
 Behlen, H. 1907 A, 277 ("anthracotheriden").  
 Case, E. C. 1899 B, 171.  
 Cope, E. D. 1880 U, 152 ("hypotamides").  
 Deiner, C. 1909 A, 39.  
 Depéret, C. 1905 A, 1521 ("anthracothéridés").  
 1905 C, 704 ("anthracothéridés").  
 1908 B, 158 ("anthracothéridés").  
 1912 A, 708 ("anthracothéridés").  
 Gegenbaur, C. 1880 A, 591 (Hypotamidae).  
 Gervais, P. 1859 A, 189 ("hypotamiens").  
 Hoernes, R. 1886 A, 673 (Hypotamidae).  
 Kampfen, P. N. 1905 A, 609.  
 Loomis, F. B. 1925 E, 584, 588, 590, figs. 2, 4.  
 Matthew, W. D. 1909 C, 104, 106, 109, 111.  
 1915 A, 252, fig. 26 ("anthracotheres").  
 1928 B, 981, fig. 16.  
 O'Hairra, C. C. 1910 A, 108, 145.  
 1920 A, 122.  
 Osborn, H. F. 1905 I, 103  
 1909 D, 121.  
 1910 B, 606.  
 Pilgrini, G. E. 1912 A, 40.  
 Schlosser, M. 1911 A, 163 ("anthracotheriiden").  
 Scott, W. B. 1913 A, 361, 370, 675.  
 Stehlin, H. G. 1910 A, 1143 (Anthracotheridæ).  
 Stromer, E. 1916 A, 402.  
 Terra, P. 1911 A, 317  
 Trouessart, E. L. 1905 A, 649  
 Wallace, A. R. 1876 A, 1, 137 (Anthracotheridæ).  
 Weber and Abel 1928 A, 542.  
 Winge, H. 1906 A, 70, 127.  
 Woodward, A. S. 1923 C, 37.  
 Zittel and Schlosser 1911 A, 476.  
 1923 A, 564, 602.

## ANTHRACOTHERIINÆ Zittel.

- Zittel, K. A. 1893 B, 327 (Anthracotherinæ).  
 Hay, O. P. 1902 A, 651.  
 Palacký, J. 1903 B, 310 ("anthracotherinen").  
 Trouessart, E. L. 1905 A, 649.

ANTHRACOTHERIUM Cuvier. Type *A. magnum* Cuvier.

- Hay, O. P. 1902 A, 651.  
 Abel, O. 1912 D, 605.  
 1912 F, 644.  
 1913 B, 740, fig. 53.  
 1914 A, 160, fig. 112.  
 1919 A, 803, figs. 604, 605.  
 Beddard, F. E. 1902 A, 328.  
 Boettger, O. 1877 A, 163, 7 figs.  
 Bronn, H. G. 1848 A, 83.  
 1849 A, 705.  
 Depéret, C. 1906 A, 618.  
 1907 B.  
 1908 B, 158.  
 Filhol, H. 1877 A, 174.  
 Gervais, P. 1852 A, 95, explan. pl. xxxi.  
 1859 A, 189, pls. xxxi, xxxiii.  
 Giebel, C. G. 1855 A, 74.  
 Haug, E. 1911 A, 1528, 1529.  
 Heilprin, A. 1887 A, 375.  
 Hennig, E. 1921 A, 221.  
 Hoernes, R. 1886 A, 673.  
 Lambe, L. M. 1908 A, 25.  
 Loomis, F. B. 1925 E, 590, fig. 4.  
 Lydekker, R. 1884 A, 148, pls. xxiii-xxv.  
 Major, C. J. F. 1877 A, 16.  
 1880 A, 19.  
 Matthew, W. D. 1906 B, 365.  
 1909 C, 111.  
 1915 A, 253.  
 1915 K, 420.  
 Moreau, L. 1914 A, 86.  
 Osborn, H. F. 1907 G, 172, fig. 155.  
 1910 B, 606.  
 Owen, R. 1845 B, 567, pl. cxxxv, fig. 10.  
 Palmer, T. S. 1904 A, 108, 913.  
 Pilgrim, G. E. 1912 A, 40.  
 Schlosser, M. 1883 B, 162.  
 1903 I, 209.  
 Scott, W. B. 1913 A, 259, 371, 675.  
 Stromer, E. 1903 C, 66.  
 Terra, P. 1911 A, 317.  
 Thorpe, M. R. 1923 E, 241.  
 Trouessart, E. L. 1905 A, 649.  
 Troxell, E. L. 1921 B, 326.  
 Weber, M. 1904 A, 690.  
 Weber and Abel 1928 A, xx, 539, fig. 363.  
 Winge, H. 1906 A, 131.  
 Woodward, A. S. 1923 C, 37.  
 Zittel and Schlosser 1911 A, 476.  
 1923 A, 565, 671, fig. 702.  
**Anthracotherium kareense** Osborn and Wortman.  
 Hay, O. P. 1902 A, 652.  
 Abel, O. 1920 A, 435, fig. 658.  
 Cook, H. J. 1912 D, 39.  
 Depéret, C. 1912 A, 708.  
 Matthew, W. D. 1909 C, 109.  
 O'Harra, C. C. 1920 A, 154.  
 Troxell, E. L. 1921 B, 328 (To Octacodon).

Trouessart, E. L. 1905 A, 650.

Upper Oligocene (Brule); Nebraska.

**Anthracotheium pygmaeum** Lambe.

Lambe, L. M. 1908 A, 10, 25, pl. vi, fig. 6 (This genus?).

Oligocene (Cypress Hills); Saskatchewan.

**Anthracotheium** sp. indet.

Matthew, W. D. 1909 C, 104. Lower Oligocene (Chadron); South Dakota, etc.

**HEPTACODON** Marsh. Type *H. curtus* Marsh.

Marsh, O. C. 1894 C, 409.

Hay, O. P. 1902 A, 651 (Anthracotheium, part).

Matthew, W. D. 1915 K, 420.

Troxell, E. L. 1921 B, 327.

Zittel and Schlosser 1911 A, 477.

1923 A, 565.

**Heptacodon curtus** Marsh.

Hay, O. P. 1902 A, 652 (Anthracotheium).

Cook, H. J. 1912 D, 37 (Anthracotheium).

Depéret, C. 1912 A, 703 (Anthracotheium).

Matthew, W. D. 1901 B, 369 (Anthracotheium).  
1909 C, 106 (Anthracotheium).

Trouessart, E. L. 1905 A, 650 (Anthracotheium).

Troxell, E. L. 1921 B, 327, fig. 1.

Upper Oligocene (Protoceras beds); South Dakota.

**ARRETOTHERIUM** Douglass. Type *A. acridens* Douglass.

Douglass, E. 1901 B, 269, 276.

Matthew, W. D. 1909 A, 3, 4.

1909 C, 111.

1915 A, 253.

Osborn, H. F. 1910 B, 189, 548.

Palmer, T. S. 1904 A, 122, 911.

Zittel and Schlosser 1911 A, 477.

1923 A, 566.

**Arretotherium acridens** Douglass.

Douglass, E. 1901 B, 243, 269, pl. ix, figs. 1-3.

Matthew, W. D. 1909 C, 109.

Trouessart, E. L. 1905 A, 652.

Oligocene (Upper); Montana.

**OCTACODON** Marsh. Type *O. valens* Marsh.

Hay, O. P. 1902 A, 652.

Palmer, T. S. 1904 A, 469, 914.

Troxell, E. L. 1921 B, 328.

Zittel and Schlosser 1911 A, 477.

1923 A, 565.

**Octacodon gibbiceps** Marsh.

Hay, O. P. 1902 A, 652 (Anthracotheium).

Troxell, E. L. 1921 B, 329, fig. 3.

Upper Oligocene (Protoceras beds); South Dakota.

**Octacodon valens** Marsh.

Hay, O. P. 1902 A, 652.

Troxell, E. L. 1921 B, 328, fig. 2.

Upper Oligocene (Protoceras beds); South Dakota.

**ELOMERYX** Marsh. Type *Heptacodon armatus* Marsh.

Hay, O. P. 1902 A, 652.

Matthew, W. D. 1909 A, 6 (Syn. ? of Ancodon).

Palacký, J. 1903 B, 312.

Palmer, T. S. 1904 A, 257, 914.

Troxell, E. L. 1921 B, 331.

Zittel and Schlosser 1911 A, 477.

1923 A, 566.

**Elomeryx armatus** Marsh.

Hay, O. P. 1902 A, 652.

Matthew, W. D. 1909 A, 6 (Heptacodon syn. ? of Ancodon brachyrhynchus).

Troxell, E. L. 1921 B, 331, fig. 4.

Upper Oligocene (Protoceras beds); South Dakota.

**Elomeryx armatus angustus** Troxell.

Troxell, E. L. 1921 B, 334, fig. 5.

Upper Oligocene (Protoceras beds); South Dakota.

**Elomeryx mitis** Marsh.

Hay, O. P. 1902 A, 652.

Matthew, W. D. 1909 A, 7 (= ? Ancodon brachyrhynchus).

Trouessart, E. L. 1905 A, 650.

Troxell, E. L. 1921 B, 334.

Upper Oligocene (White River); South Dakota.

**BOTHRIDON** Aymard. Type *B. platyrhynchus* Aymard.

Hay, O. P. 1902 A, 652 (Ancodon).

Abel, O. 1912 F, 644 (Hyopotamus).

Andrews, C. W. 1906 A, 178 (Ancodon).

Beddard, F. E. 1902 A, 329 (Ancodus).

Bush, L. P. 1903 A, 93.

Dall and Harris 1892 A, 289 (Hyopotamus).

Douglass, E. 1901 B, 275 (Hyopotamus).

Gaudry, A. 1875 D, 1282 (Hyopotamus).

1896 A, 87, fig. 60 (Hyopotamus).

Gervais, P. 1852 A, 95, explan., pl. xxxi.

1859 A, 193 (Bothriodon); 191 (Hyopotamus).



- Gregory, W. K. 1910 A, 400, 405 (Ancodus).  
 Haug, E. 1911 A, 1528, 1529 (Hyopotamus).  
 Heilprin, A. 1887 A, 375 (Hyopotamus).  
 Huxley, T. H. 1870 F, 537 (Hyopotamus).  
 Lambe, L. M. 1905 D, 370 A (Hyopotamus).  
 Loomis, F. B. 1925 E, 585, figs. 2, 3 (Ancodus).  
 Major, C. J. F. 1877 A (Hyopotamus).  
 1880 A, 17 (Hyopotamus).  
 Matthew, W. D. 1909 A, 1, 6 (Ancodon).  
 1909 C, 111 (Hyopotamus).  
 1912 A, 158 (Ancodon).  
 1915 A, 253 (Ancodon).  
 1915 K, 420 (Ancodon).  
 1917 A, 573 (Ancodon).  
 1924 E, 748 (Ancodon).  
 1928 B, 964 (Ancodus).  
 Osborn, H. F. 1910 B, 606 (Ancodus).  
 Palacký, J. 1903 B, 312 (Hyopotamus).  
 Palmer, T. S. 1904 A, 140, 913.  
 Pictet, F. J. 1853 A, 330.  
 Pilgrim, G. E. 1912 A, 67 (Ancodus).  
 Schlosser, M. 1898 H, 324 (Ancodus).  
 1899 H, 547 (Ancodus).  
 1911 A, 163 (Ancodus).  
 Schmidt, O. 1886 A, 170, fig. 25 (Hyopotamus).  
 Scott, W. B. 1913 A, 352, fig. (133); 258, 370.  
 Stromer, E. 1903 C, 65 (Ancodus).  
 Trouessart, E. L. 1905 A, 650.  
 Troxell, E. L. 1921 B, 325.  
 Weber, M. 1904 A, 690 (Ancodus, Hyopotamus).  
 Zittel and Schlosser 1911 A, 477 (Ancodus).  
 1923 A, 565 (Syn. of Ancodon); 565, 670, 671, figs. 703, 704 (Ancodus).

**ÆPINACODON** Troxell. Type *Hyopotamus deflectus* Marsh.

Troxell, E. L. 1921 B, 334.

**Æpinacodon americanus** (Leidy).

- Hay, O. P. 1902 A, 652 (Ancodon).  
 Cook, H. J. 1912 D, 35 (Ancodon).  
 Depéret, C. 1903 B, 161 (Hyopotamus).  
 1912 A, 708 (Hyopotamus).  
 Major, C. J. F. 1880 A, 19 (Hyopotamus).  
 Matthew, W. D. 1901 B, 369 (Hyopotamus).  
 1909 A, 1, 3, 5, 6 (Ancodon americanus); 6 (Hyopotamus deflectus).  
 1909 C, 104 (Hyopotamus).  
 O'Harra, C. C. 1910 A, 107 (Hyopotamus).  
 1920 A, 150 (Hyopotamus).  
 Osborn, H. F. 1909 D, 127 (Hyopotamus).  
 Schlosser, M. 1899 H, 547 (Ancodus).  
 Trouessart, E. L. 1905 A, 651 (Bothriodon).  
 Troxell, E. L. 1921 B, 336 (Æpinacodon).  
 Lower Oligocene (Chadron); South Dakota, Nebraska.

**Bothriodon brachyrhynchus** (Osborn and Wortman).

- Hay, O. P. 1902 A, 653 (Ancodon).  
 Abel, O. 1914 A, 164, fig. 116 (Brachyodus).  
 Beddard, F. E. 1902 A, 329 (Ancodon).  
 Cook, H. J. 1912 D, 39 (Ancodon).  
 Depéret, C. 1912 A, 708 (Hyopotamus).  
 Gregory, W. K. 1910 A, 405, fig. 26 (Ancodus).  
 1920 A, 190, fig. 162 (Ancodon).  
 Lambe, L. M. 1905 D, 387 (Hyopotamus. This species?).  
 1908 A, 10, 24, pl. ii, figs. 1-9 (Ancodon).  
 Matthew, W. D. 1901 B, 370 (Ancodon).  
 1909 A, 1, 3, 5 (Ancodon).  
 1909 C, 109 (Hyopotamus).  
 O'Harra, C. C. 1910 A, 107, fig. 15 (Hyopotamus).  
 1920 A, 122, 154, figs. 60, 61 (Hyopotamus).  
 Schlosser, M. 1898 H, 324 (Ancodus).  
 1899 H, 547 (Ancodus).  
 Scott, W. B. 1913 A, 371, fig. 196.  
 Weber and Abel 1928 A, 540, 542, fig. 362 (Brachyodus).  
 Woodward, A. S. 1923 C, 38, fig. 21 (Ancodus).  
 Upper Oligocene (Brule); South Dakota, Nebraska?, North Dakota?.

**Bothriodon leptodus** (Matthew).

- Matthew, W. D. 1909 A, 1, 5 (Ancodon).  
 O'Harra, C. C. 1920 A, 157 [Ancodon (Bothriodon?)].  
 Lower Oligocene (Chadron); South Dakota.

**Æpinacodon deflectus** (Marsh).

- Marsh, O. C. 1890 D, 524 (Hyopotamus).  
 Hay, O. P. 1902 A, 653 (Ancodon americanus, in part).  
 Troxell, E. L. 1921 B, 337, fig. 7.  
 Lower Oligocene (Chadron); South Dakota.

**Æpinacodon rostratus** (Scott).

- Hay, O. P. 1902 A, 653 (Ancodon).  
 Cook, H. J. 1912 D, 37 (Ancodon).  
 Matthew, W. D. 1909 A, 1, 3, 5 (Ancodon).  
 1909 C, 106 (Hyopotamus).  
 O'Harra, C. C. 1920 A, 152 (Hyopotamus).  
 Trouessart, E. L. 1905 A, 651 (Bothriodon).  
 Troxell, E. L. 1921 B, 337 (Ancodon).  
 Upper Oligocene (Brule); South Dakota.

**HELOHYIDÆ** Marsh.

- Hay, O. P. 1902 A, 650.  
 Matthew, W. D. 1909 D, 302.

- Matthew, W. D. 1924 C, 176 (Choropotamidæ).  
 Matthew and Granger 1925 D, 7.

**HELOHYUS** Marsh. Type *H. phicodon* Marsh.

- Hay, O. P. 1902 A, 650.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 103.  
 1915 A, 242.  
 1924 C, 176.

- Matthew, W. D. 1924 E, 748.  
 1928 B, 981, fig. 16.  
 Matthew and Granger 1925 D, 7.  
 Palmer, T. S. 1904 A, 315, 926.  
 Pearson, H. S. 1923 A, 63, 73, fig. 1.

- Schlosser, M. 1901 D, 462.  
 Scott, W. B. 1913 A, 273, 365.  
 Sinclair, W. J. 1914 A, 279, 283, fig. 18 (This genus?).  
 Stehlin, H. G. 1906 A, 672  
 1910 A, 1094, 1154.  
 Trouessart, E. L. 1905 A, 648.  
 Weber and Abel 1928 A, 542, 623.  
 Zittel and Schlosser 1923 A, 564, 667.

### ***Helohyus lentus* Marsh.**

- Hay, O. P. 1902 A, 650  
 Matthew, W. D. 1909 C, 98.  
 Pearson, H. S. 1923 A, 76, 93, fig. 16.  
 Sinclair, W. J. 1914 A, 283, fig. 17.  
 Stehlin, H. G. 1906 A, 672.  
 Middle Eocene (Bridger); Wyoming.

### ***Helohyus milleri* Sinclair.**

- Sinclair, W. J. 1914 A, 280, fig. 14.  
 Pearson, H. S. 1923 A, 74, fig. 15.  
 Middle Eocene (Bridger); Wyoming.

### ***Helohyus plicodon* Marsh.**

- Hay, O. P. 1902 A, 650.  
 Matthew, W. D. 1909 C, 98.  
 Pearson, H. S. 1923 A, 74.  
 Trouessart, E. L. 1905 A, 648.  
 Sinclair, W. J. 1914 A, 281, fig. 15.  
 Stehlin, H. G. 1906 A, 672.  
 Middle Eocene (Bridger); Wyoming.

### ***Helohyus validus* Marsh.**

- Hay, O. P. 1902 A, 650  
 Matthew, W. D. 1909 C, 98.  
 Pearson, H. S. 1923 A, 93, fig. 16.  
 Sinclair, W. J. 1914 A, 283, fig. 16.  
 Stehlin, H. G. 1906 A, 672.  
 1910 A, 1154.  
 Middle Eocene (Bridger); Wyoming.

### ***Helohyus* sp. indet.**

- Matthew, W. D. 1909 C, 98. Middle Eocene (Bridger); Wyoming.

## *Superfamily SUOIDÆ, new form.*

- Hay, O. P. 1902 A, 653 (Suoidæ).  
 Abel, O. 1914 A, 295 (Neobunodontia).  
 Cope, E. D. 1891 N, 87 (Suoidæ).  
 Hay, O. P. 1912 D, 595 (Suoidæ).  
 1914 A, 211 (Suoidæ).  
 Matthew, W. D. 1924 C, 176 (Suina).  
 Osborn, H. F. 1909 D, 59-61 (Suoidæ).  
 1910 B, 548 (Suina).

- Terra, P. 1911 A, 319 (Suide).  
 Weber, M. 1904 A, 645 (Suoidæ).  
 Weber and Burlet 1927 A, xv (Neobunodontia).  
 Winge, H. 1906 A, 70, 143 (Suide).  
 Woodward, A. S. 1923 C, 34 (Suina).  
 Zittel and Schlosser 1911 A, 472 (Bunodontia).  
 1923 A, 560 (Bunodontia).

## **ACHÆNODONTIDÆ Matthew.**

- Matthew, W. D. 1909 C, 95, 99, 103.  
 Hay, O. P. 1902 A, 653 (Achænodontinæ).  
 Arldt, T. 1907 D, 635 (Achænodontinæ).  
 1912 A, 700 (Achænodontinæ).  
 Matthew, W. D. 1901 B, 371 (Elotheriidæ)  
 1915 K, 460 ("entelodonts").  
 Matthew and Granger 1925 D, 8.  
 Osborn, H. F. 1909 D, 57 (Achænodontinæ).  
 1910 B, 127, 156, 549 (Achænodontinæ).  
 Palacky, J. 1903 B, 306, 307 ("achænodontinen")

- Peterson, O. A. 1909 A, 43 (Entelodontidæ).  
 1919 A, 79  
 Repeln, J. 1918 A, 397.  
 Roman, F. 1912 A, 77 ("achænodontidés").  
 Trouessart, E. L. 1905 A, 652 (Achænodontinæ).  
 Weber, M. 1904 A, 653 (Elotheriidæ).  
 Weber and Abel 1928 A, 623.  
 Winge, H. 1906 A, 70 (Entelodontini).

## **ACHÆNODON Cope. Type *A. insolens* Cope.**

- Hay, O. P. 1902 A, 654 (Achænodon, Protelotherium).  
 Arldt, T. 1907 D, 259.  
 Baird, S. F. 1876 A, 334.  
 Barbour, E. H. 1925 B, 32.  
 Case, E. C. 1899 B, 172.  
 Cope, E. D. 1880 U, 154.  
 Granger, W. 1909 A, 22.  
 Gregory, W. K. 1910 A, 403.  
 Hailprin, A. 1887 A, 374.  
 Matthew, W. D. 1907 D, 7.  
 1909 C, 103.  
 1924 C, 176.  
 1928 B, 981, fig. 16.  
 Osborn, H. F. 1909 D, 53, 54.  
 1910 B, 158, 167, 217, 218, 549.  
 1912 G, 241, fig. 6.

- Palmer, T. S. 1904 A, 74, 927 (Achænodon);  
 578, 929 (Protelotherium).  
 Peterson, O. A. 1919 A, 80 (Protelotherium, Achænodon).  
 Schlosser, M. 1899 I, 349.  
 1902 J, 257.  
 1921 A, 120 (Achænodon); 121 (Protelotherium).  
 Scott, W. B. 1913 A, 273, 369, 675.  
 Trouessart, E. L. 1905 A, 652 (Achænodon);  
 653 (Protelotherium).  
 Wallace, A. R. 1876 A, r, 138.  
 Weber, M. 1904 A, 654.  
 Weber and Abel 1928 A, 622.  
 Zittel and Schlosser 1911 A, 475 (Achænodon, Protelotherium).  
 1923 A, 523, 562, 667, 668 (Achænodon); 562 (Protelotherium).

**Achænodon insolens** Cope.

- Hay, O. P. 1902 A, 654.  
 Baird, S. F. 1876 A, 334.  
 Matthew, W. D. 1909 C, 121.  
 Peterson, O. A. 1919 A, 79, fig. 11.  
 Upper Eocene (Washakie?); Wyoming.

**Achænodon robustus** Osborn.

- Hay, O. P. 1902 A, 654.  
 Matthew, W. D. 1909 C, 121.  
 Scott, W. B. 1913 A, 369, fig. 195.  
 Weber and Abel 1928 A, 621, fig. 419.  
 Upper Eocene (Washakie?); Wyoming.

PARAHYUS Marsh. Type *P. vagus* Marsh.

- Hay, O. P. 1902 A, 654.  
 Barbour, E. H. 1925 B, 32.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1889 A, 374.  
 Matthew, W. D. 1909 C, 103.  
 Palmer, T. S. 1904 A, 513, 929.  
 Peterson, O. A. 1919 A, 79.  
 Scott, W. B. 1913 A, 281.  
 Sinclair, W. J. 1914 A, 287.  
 Stehlin, H. G. 1910 A, 1154.  
 Weber, M. 1904 A, 654.  
 Zittel and Schlosser 1911 A, 475 (Syn.? of Achænodon).  
 1923 A, 562 (Syn.? of Achænodon).

**Achænodon uintensis** (Osborn).

- Hay, O. P. 1902 A, 654 (Protelotherium).  
 Beddard, F. E. 1902 A, 279 (Elotherium).  
 Matthew, W. D. 1909 C, 99.  
 Peterson, O. A. 1919 A, 80 (A. untense).  
 Zittel and Schlosser 1923 A, 562 (Protelotherium).  
 Upper Eocene (Uinta); Wyoming.

**Achænodon** sp. indet.

- Matthew, W. D. 1909 C, 99. Upper Eocene (Uinta); Wyoming.

**Parahyus aberrans** Marsh.

- Hay, O. P. 1902 A, 654.  
 Matthew, W. D. 1909 C, 95.  
 Peterson, O. A. 1919 A, 82.  
 Sinclair, W. J. 1914 A, 267.  
 Lower Eocene (Wasatch); Wyoming.

**Parahyus vagus** Marsh.

- Hay, O. P. 1902 A, 654.  
 Matthew, W. D. 1909 C, 95.  
 Peterson, O. A. 1919 A, 79, fig. 12.  
 Sinclair, W. J. 1914 A, 267.  
 Lower Eocene (Wasatch); Wyoming.

## ELOTHERIIDÆ Alston.

- Alston, E. R. 1878, Zool. Record for 1876, Mamm., 18.  
 Hay, O. P. 1902 A, 653 (Suidæ, in part).  
 Abel, O. 1913 B, 739 (Elotheriidae); 729, 738 (Hypoconifera).  
 1914 A, 121, 128, 154 (Elotheriidae); 121, 128, 154 (Hypoconifera).  
 1920 A, 434 ("elotheriiden").  
 1926 B, 27, 78, 346 ("entelodonten").  
 Gregory, W. K. 1920 A, 191 (Entelodontinæ).  
 Lydekker, R. 1883 A, 146 (Entelodontidae).  
 Marinelli, W. 1924 A, 24 ("entelodontiden").  
 Matthew, W. D. 1907 A, 216.  
 1909 C, 104, 106, 108, 111, 113, 119.  
 1921 D, 214 (Entelodontidae).  
 1928 B, 968, 980 ("entelodonts").  
 Matthew and Granger 1925 D, 7 (Entelodontidae).  
 O'Harra, C. C. 1910 A, 103, 146.  
 1920 A, 118.  
 Osborn, H. F. 1909 D, 61, 63, 125 (Entelodontinæ).  
 1910 B, 614 (Entelodontidae).  
 Peterson, O. A. 1909 A, 47, 144 (Entelodontidae).  
 Schlosser, M. 1921 A, 120.  
 Scott, W. B. 1913 A, 250, 281, 381, 366, 445 (Entelodontidae).  
 Sinclair, W. J. 1921 C, 467 (Entelodontidae).  
 1922 A, 654 ("entelodonts").  
 Stehlin, H. G. 1910 A, 1135 (Hypoconifera).  
 Troxell, E. L. 1920 B, 254 (Entelodontidae).  
 Weber and Abel 1928 A, 426, 618 (Elotheriidae, Entelodontidae).  
 Zittel and Schlosser 1911 A, 474.  
 1923 A, 562, 602.

ELOTHERIUM Pomel. Type *E. magnum* (Aymard).

- Hay, O. P. 1902 A, 654.  
 Matthew, W. D. 1928 B, 981, fig. 16 (Entelodon).  
 Schlosser, M. 1921 A, 120.  
 Zittel and Schlosser 1911 A, 475.  
 1923 A, 425, 562, 670, fig. 527.  
 For additional citations see under *Archæotherium*. The two species recorded below are represented by materials hardly identifiable in other specimens.  
**Elotherium imperator** Leidy.  
 Hay, O. P. 1902 A, 655.  
 Condon, T. 1902 A, 119, pl. xvi ("Entelodon," This species?).  
 Cope and Matthew 1915 A, pl. cix a, fig. 2 (Elotherium, Entelodon).  
 Matthew, W. D. 1909 C, 108.  
 Merriam and Sinclair 1907 A, 186.  
 O'Harra, C. C. 1910 A, 105, pl. xlii.  
 1920 A, pl. xxxviii.  
 Peterson, O. A. 1909 A, 69 (This species?).  
 Repelin, J. 1918 A, 398 (Entelodon).  
 Trouessart, E. L. 1905 A, 653 (Entelodon).  
 Troxell, E. L. 1920 B, 250 (Archæotherium).  
 Upper Oligocene (John Day); Oregon.  
**Elotherium superbum** Leidy.  
 Hay, O. P. 1902 A, 656.  
 Cope, E. D. 1880 V, 62 ("Elotherium").

Hay, O. P. 1927 D, 228.  
 Lindgren, W. 1911 A, 52.  
 Peterson, O. A. 1909 A, 69 (Elotherium?).  
 Troxell, E. L. 1920 B, 250 (Archæotherium).

Whitney, J. D. 1879 B, 283 ("elotherium").  
 Miocene?: California.

**Elotherium sp. indet.**

Figgins, J. D. 1925 A, 19. Oligocene; Colorado.

**SCAPTOTHYUS Sinclair. Type *S. altidens* Sinclair.**

Sinclair, W. J. 1921 C, 480.

**Scaptohyus altidens Sinclair.**

Sinclair, W. J. 1921 C, 480, figs. 11-17.

Upper Oligocene (Upper Brule); South Dakota.

**ARCHÆOTHERIUM Leidy. Type *A. mortoni* Leidy.**

Leidy, J. 1850 A, 90.  
 Hay, O. P. 1902 A, 654 (Elotherium).  
 Abel, O. 1912 D, 605 (Entelodon).  
 1912 F, 239, 644 (Entelodon).  
 1913 B, 739 (Elotherium).  
 1914 A, 154, fig. 105 (Elotherium).  
 Arldt, T. 1907 D, 259 (Elotherium).  
 Baird, S. F. 1876 A, 334 (Elotherium).  
 Barbour, E. H. 1906 C, 781 (Elotherium).  
 1912 A, 50 (Elotherium).  
 1925 B, 32 (Entelodon).  
 Beddard, F. E. 1902 A, 279 (Elotherium).  
 Bush, L. P. 1903 A, 97 (Entelodon).  
 Case, E. C. 1899 B, 173 (Elotherium).  
 Cope, E. D. 1880 U, 156 (Elotherium).  
 Dall and Harris 1892 A, 222 (Elotherium).  
 Depéret, C. 1908 A, 167 (Entelodon).  
 1912 A, 707 (Entelodon).  
 Gaudry, A. 1875 D, 1282 (Entelodon).  
 Gervais, P. 1859 A, 194 (Entelodon).  
 Gebel, C. G. 1855 A, 73, pl. xxx, fig. 1 (Entelodon).  
 Greene, F. V. 1853 A, 292.  
 Gregory, W. K. 1920 B, 190, fig. 161 (Entelodon).  
 Haug, E. 1911 A, 1528, 1529, 1705 (Elotherium).  
 Jaekel, O. 1909 C, 307 (Elotherium).  
 Kampfen, P. N. 1905 A, 586 (Elotherium).  
 Lambe, L. M. 1904 C, 29 (Elotherium).  
 Marinelli, W. 1924 A, 24.  
 Matthew, W. D. 1901 B, 369, 370 (Elotherium).  
 1906 B, 365 (Elotherium).  
 1907 A, 172, 176 (Elotherium).  
 1909 C, 108, 119 (Elotherium).  
 1915 A, 253 (Entelodon).  
 1915 K, 420 (Entelodon).  
 1924 E, 748 (Entelodon).  
 Matthew and Granger 1923 A, 3.  
 Merriam, J. C. 1915 G, 99 (Elotherium).  
 Merriam and Sinclair 1903 A, 95 (Elotherium).  
 1907 A, 188 (Elotherium).  
 Moodie, R. L. 1923 B, 128.  
 O'Hara, C. C. 1910 A, 104 (Elotherium).  
 Osborn, H. F. 1904 F, 41 (Elotherium).  
 1909 D, 125 (Elotherium).  
 1910 B, 217, 218 (Archæotherium); 230, 549, fig. 76 (Entelodon).  
 1925 D, 532.  
 Owen, R. 1866 B, 286 (Entelodon).  
 Peterson, O. A. 1909 A, 47, 144.  
 Repelin, J. 1918 A, 397 (Elotherium).  
 Schlosser, M. 1899 I, 349 (Entelodon).  
 1902 G, 136 (Elotherium).  
 Scott, W. B. 1913 A, 676, figs. 133, 194.

Sinclair, W. J. 1921 C, 487.

1924 A, 124.

Stehlin, H. G. 1906 A, 673 (Elotherium).

Thorpe, M. R. 1923 E, 241 (Elotherium).

Trouessart, E. L. 1905 A, 653 (Entelodon).

Troxell, E. L. 1920 B, 361.

Turner, H. W. 1895 A, 375 (Elotherium).

Weber, M. 1904 A, 653 (Elotherium, Entelodon).

Zittel and Schlosser 1911 A, 475 (Elotherium).

1923 A, 562, 565, 670, fig. 699 (Syn. of Elotherium).

**Archæotherium clavum clavum (Marsh).**

Hay, O. P. 1902 A, 655 (Elotherium).

Marinelli, W. 1924 A, 26, fig. 1 (A. clavus c.).

Peterson, O. A. 1909 A, 49, fig. 7 (A. mortoni clavum).

Sinclair, W. J. 1921 C, 476 (syn. of A. mortoni).

1922 B, 61 (syn. of A. mortoni).

Trouessart, E. L. 1905 A, 653 (Entelodon).

Troxell, E. L. 1920 B, 251, 361, figs. 1-3 (A. clavus c.).

Weber and Abel 1928 A, 620, fig. 417 (A. clavus).  
 Lower Oligocene (Chadron); South Dakota.

**Archæotherium clavum darbyi Troxell.**

Troxell, E. L. 1920 B, 367, figs. 4-8 (A. clavus d.).

Marinelli, W. 1924 A, 26, fig. 2 (A. clavus d.).

Sinclair, W. J. 1921 C, 476 (syn. of A. mortoni).

1922 B, 61 (syn. of A. mortoni).

Oligocene (Brule); Nebraska.

**Archæotherium coarctatum (Cope).**

Hay, O. P. 1902 A, 655 (Elotherium).

Lambe, L. M. 1904 C, 29, 38, 51 (Elotherium).

1905 D, 367 A (Elotherium).

1908 A, 10, 28, pl. ii, figs. 10, 15; pl. iii, figs. 1-6 (Elotherium).

Matthew, W. D. 1909 C, 104 (Elotherium).

Peterson, O. A. 1909 A, 55, fig. 11.

Sinclair, W. J. 1922 B, 53, 56.

Troxell, E. L. 1920 B, 349 (Entelodon).

Lower Oligocene (Chadron); Assiniboia.

**Archæotherium crassum (Marsh).**

Hay, O. P. 1902 A, 655 (Elotherium).

Abel, O. 1913 B, 739, fig. 50 (Elotherium).

Cook, H. J. 1912 D, 35, 37 (Entelodon); 39 (Entelodon. This species?).

Heilmann, G. 1914 A, 53, fig. 143.

Matthew, W. D. 1901 B, 356, 357 (Elotherium. This species?).

Matthew, W. D. 1909 C, 104, 106 (Elotherium); 108 (Elotherium. This species?).  
 O'Harra, C. C. 1920 A, 150 (Elotherium).  
 Peterson, O. A. 1909 A, 51, figs. 8, 71.  
 Repelin, J. 1918 A, 398 (Entelodon).  
 Sinclair, W. J. 1921 C, 473, fig. 9 (This species?).  
 1924 A, 102, 126 (This species?).  
 Trouessart, E. L. 1905 A, 653 (Entelodon).  
 Troxell, E. L. 1920 B, 250, 375, fig. 9.  
 Zittel and Schlosser 1911 A, 475, fig. 660 (Elotherium).  
 Oligocene (Chadron); Colorado: (Brule); Nebraska.

### **Archæotherium ingens (Leidy).**

Hay, O. P. 1902 A, 655 (Elotherium).  
 Barbour, E. H. 1912 A, 50, pl. 1 (Elotherium).  
 1925 B, 31 (Elotherium).  
 Cook, H. J. 1912 D, 3, 7, 39 (Entelodon).  
 Lee, Stone, Gale 1915 A, 40, pl. vi (Archæotherium).  
 Lydekker, R. 1910 F, 661, fig. 3.  
 O'Harra, C. C. 1910 A, 105, pl. xli (Elotherium).  
 1920 A, 119, 152, pls. xxvii, xxxvii; text-fig. 57 (Elotherium, Archæotherium).  
 Scott, W. B. 1913 A, 260 (fig. 137); 367 (fig. 192).  
 Sinclair 1921 C, 469 (Elotherium); 470, 493, fig. 4 (Archæotherium).  
 Trouessart, E. L. 1905 A, 653 (Entelodon).  
 Troxell, E. L. 1920 B, 250.  
 Weber and Abel 1928 A, 620, fig. 416.  
 Lower Oligocene (Chadron?); Nebraska: (Brule); Nebraska.

### **Archæotherium marshi Troxell.**

Troxell, E. L. 1920 B, 252, 361, 379, pl. iii, fig. A; text-figs. 10-12.  
 Marinelli, W. 1924 A, 26, fig. 3.  
 Sinclair, W. J. 1921 C, 473.  
 Weber and Abel 1928 A, 621, fig. 418.  
 Oligocene (Lower); South Dakota.

### **Archæotherium mortoni Leidy.**

Hay, O. P. 1902 A, 655 (Elotherium).  
 Baird, S. F. 1876 A, 334 (Elotherium mortonii).  
 Barbour, E. H. 1925 B, 31 (Elotherium).  
 Cook, H. J. 1912 D, 37 (Entelodon).  
 Darton, N. H. 1905 A, 173 (Elotherium).  
 Gervais, P. 1859 A, 360 (A. mortoni, A. robustum).

### **CHÆRONDON Troxell. Type *C. caninus* Troxell.**

Troxell, E. L. 1920 B, 442.

Matthew, W. D. 1901 B, 356 (Elotherium. This species?).

1909 C, 106 (Elotherium).  
 Merrill, G. P. 1907 A, 24 (A. mortoni, A. robustum); 35 (Elotherium).  
 Peterson, O. A. 1909 A, 47, figs. 4-6.  
 Scott, W. B. 1913 A, 367, fig. 193.  
 Sinclair, W. J. 1921 C, 476, figs. 7, 8.  
 1922 B, 54, 59, figs. 1-5.  
 1924 A, 101, 102, 124, 126, fig. 9.  
 Trouessart, E. L. 1905 A, 653 (Entelodon).  
 Troxell, E. L. 1920 B, 249.  
 1921 A, 475.  
 Zittel and Schlosser 1911 A, 475 (Syn. of Elotherium).  
 1923 A, 563 (Elotherium).  
 Oligocene (White River); South Dakota: (Brule); Nebraska.

### **Archæotherium scotti Sinclair.**

Sinclair, W. J. 1921 C, 468, figs. 1-3, 22.  
 1924 A, 125, 126.  
 Oligocene (Chadron); South Dakota.

### **Archæotherium wanlessi Sinclair.**

Sinclair, W. J. 1921 C, 472, figs. 5, 6, 9, 21.  
 Marinelli, W. 1924 A, 27.  
 Sinclair, W. J. 1924 A, 102, 126  
 Oligocene (Lower Brule); South Dakota.

### **Archæotherium sp. indet.**

Condon, T. 1901 A, 100, pl. xvi ("Elotherium").  
 1910 A, 119, pl. xvi ("Entelodon"). Oligocene; Oregon.  
 Cook, H. J. 1912 D, 41 (Entelodon). Lower Miocene (Lower Harrison); Nebraska.  
 Figgins, J. D. 1921 A, 19.  
 Gregory and Cook 1928 A, 3. Oligocene (Chadron); Colorado.  
 Matthew, W. D. 1909 C, 104, 108, 113 (Elotherium) Oligocene (Lower and Upper): Lower Miocene (Harrison); Nebraska.  
 Merriam, J. C. 1901 B, 586, fig. 5 ("Elotherium").  
 Merriam and Sinclair 1907 A, 188, 190, 191, 192. John Day; Oregon.  
 Merrill, G. P. 1907 A, 24 (Arctodon). Oligocene (White River); South Dakota.  
 Sinclair, W. J. 1924 A, 102.  
 Troxell, E. L. 1920 B, 372. Oligocene (Cedar Creek?); Colorado.

### **Chæronon caninus Troxell.**

Troxell, E. L. 1920 B, 442, figs. 19, 20.  
 Weber and Abel 1928 A, 619, fig. 415.  
 Oligocene (Middle John Day); Oregon.

### **DINOCHÆRUS Peterson. Type *Dinochærus hollandi* Peterson.**

Peterson, O. A. 1905 D, 719.  
 Abel, O. 1926 B, 373, 443.  
 Barbour, E. H. 1925 B, 32.  
 Eastman, C. R. 1912 G, 658.  
 Haug, E. 1911 A, 1705.  
 Matthew, W. D. 1909 C, 108.  
 Osborn, H. F. 1907 F, 872.  
 1909 D, 72, 74.

Osborn, H. F. 1910 B, 612.  
 1912 G, 247, 249.  
 Peterson, O. A. 1905 C, 212 (Dinochærus, preoccupied).  
 1909 A, 66.  
 1912 B, 167.  
 Troxell, E. L. 1920 B, 361.  
 1921 A, 475.

Scott, W. B. 1913 A, 239, 366.  
Weber and Abel 1923 A, 622.  
Zittel and Schlosser 1911 A, 475.  
1923 A, 563, 672.

**Dinohyus hollandi** Peterson.

Peterson, O. A. 1905 C, 212 (Dinochoerus).  
Abel, O. 1914 A, 155, fig. 106.  
Allen, G. M. 1926 A, 450.  
Barbour, E. H. 1924 A, 13 ("Dinohyus").  
Cook, H. J. 1912 D, 41.  
Matthew, W. D. 1909 C, 113.  
1923 D, 359, figs. 8, 11.  
O'Harra, C. C. 1910 A, 104.  
1920 A, 118, 157, pl. xxxvii; text-figs. 55, 56, 58.  
Osborn, H. F. 1910 B, 187, figs. 80, 83.  
1918 B, 132 ("Dinohyus").

Peterson, O. A. 1905 D, 719.  
1906 B, 491.  
1906 C, 49, pls. xvi, xvii.  
1909 A, 66, pls. lv-lxii; text-figs. 29-70, 72-80.

Troxell, E. L. 1920 B, 252.  
Zittel and Schlosser 1911 A, 475.

1923 A, 563, fig. 700.

Lower Miocene (Harrison); Nebraska.

**Dinohyus mento** Allen.

Allen, G. M. 1926 A, 450, pl. i (This genus?).  
Miocene? (Phosphate beds); South Carolina.

**Dinohyus** sp. indet.

Cook, H. J. 1912 D, 42 Phocene (Upper Harrison); Nebraska.  
Loomis, F. B. 1923 A, 222. Miocene (Lower Harrison); Nebraska.

**PELONAX** Cope. Type *P. ramosus* Cope.

Cope, E. D. 1874 B, 504  
Hay, O. P. 1902 A, 654 (Elotherium, in part).  
Barbour, E. H. 1925 B, 32.  
Marinelli, W. 1924 A, 26.  
Palmer, T. S. 1904 A, 520, 929.  
Peterson, O. A. 1909 A, 56.  
Troxell, E. L. 1920 B, 254, 361.  
Wallace, A. R. 1876 A, 188.

**Pelonax bathrodon** (Marsh).

Hay, O. P. 1902 A, 656 (Ammodon).  
Cook, H. J. 1912 D, 39 (Entelodon bathrodon).  
Matthew, W. D. 1909 A, 108, fig. 13 (Elotherium).  
1909 C, 108 (Elotherium).  
O'Harra, C. C. 1920 A, 154 (Elotherium).  
Peterson, O. A. 1909 A, 57, fig. 13.  
Troxell, E. L. 1920 B, 251, 432, pl. iii, fig. B; text-fig. 14.  
Upper Oligocene (Brule); South Dakota.

**Pelonax potens** (Marsh).

Hay, O. P. 1902 A, 656 (Ammodon).  
Marinelli, W. 1924 A, 27, fig. 4.  
Peterson, O. A. 1909 A, 60, fig. 14.  
Troxell, E. L. 1920 B, 251, 431, figs. 13, 14.  
Weber and Abel 1923 A, 622, fig. 420.  
Middle Oligocene (Cedar Creek); Colorado.

**Pelonax ramosus** Cope.

Hay, O. P. 1902 A, 656 (Elotherium).  
Baird, S. F. 1876 A, 334 (Elotherium).  
Cope and Matthew 1915 A, pl. cix, figs. 1, 2; pl. cix a, fig. 1 (Elotherium, Pelonax).  
Dall and Harris 1892 A, 289 (Elotherium).  
Matthew, W. D. 1901 B, 356, 357 (Elotherium).  
1909 C, 106 (Pelonax).  
Osborn, H. F. 1904 F, 41 (Elotherium).  
Peterson, O. A. 1909 A, 56, fig. 12 (Pelonax).  
Troxell, E. L. 1920 B, 251, 253.  
Middle Oligocene (Cedar Creek); Colorado.

**MEGACHÆRUS** Troxell. Type *M. zygomatiscus* Troxell.

Troxell, E. L. 1920 B, 433.  
Marinelli, W. 1924 A, 26.  
Matthew and Granger 1923 A, 3.  
**Megachœrus latidens** Troxell.  
Troxell, E. L. 1920 B, 437, figs. 17, 18.  
Sinclair, W. J. 1921 C, 493.  
Oligocene (Upper Brule); South Dakota.

**Megachœrus zygomatiscus** Troxell.

Troxell, E. L. 1920 B, 433, fig. 16.  
Marinelli, W. 1924 A, 27, fig. 5.  
Sinclair, W. J. 1921 C, 486, figs. 18, 19.  
Weber and Abel 1923 A, 620, fig. 421.  
Oligocene (Upper Brule); South Dakota.

**BOÏCHÆRUS** Cope. Type *B. humerosus* Cope.

Hay, O. P. 1902 A, 654 (Elotherium, in part).  
Barbour, E. H. 1925 B, 32.  
Osborn, H. F. 1910 B, 218, 549.  
Palacký, J. 1903 B, 312.  
Palmer, T. S. 1904 A, 139, 928.  
Peterson, O. A. 1909 A, 61.  
Scott, W. B. 1913 A, 367.

**Boïchœrus humerosus** Cope.

Hay, O. P. 1902 A, 655 (Elotherium).  
Cope and Matthew 1915 A, pl. cix a, figs. 3-8; pl. cx [(B. Daodon?)].  
Matthew, W. D. 1909 C, 108.  
Merriam and Sinclair 1907 A, 186 (Elotherium).  
Peterson, O. A. 1909 A, 61, 122, figs. 15-17.  
Sternberg, C. 1881 C, 417.  
1884 B, 676.  
1909 C, 186 (Elotherium).  
Oligocene (John Day); Oregon.

DÆODON Cope. Type *D. shoshonensis* Cope.

- Hay, O. P. 1902 A, 633.  
 Barbour, E. H. 1925 B, 32.  
 Holland and Peterson 1913 A, 213.  
 Matthew, W. D. 1909 C, 108.  
 Osborn, H. F. 1910 B, 549.  
 Palmer, T. S. 1904 A, 214, 941.  
 Peterson, O. A. 1909 A, 63.  
 Troxell, E. L. 1921 A, 476.

**Dæodon calkinsi** (Sinclair).

- Sinclair, W. J.* 1905 A, 132, pl. xv (Elotherium)  
*Matthew, W. D.* 1909 C, 108 (Elotherium?).  
*Merriam and Sinclair* 1907 A, 186, 191, 192 (Elotherium).

- Peterson, O. A. 1909 A, 64, fig. 19.  
 Troxell, E. L. 1920 B, 249 (Enteledon); 442 (Chærodon)  
 Upper Oligocene (John Day); Oregon.

**Dæodon shoshonensis** Cope.

- Hay, O. P. 1902 A, 633.  
 Matthew, W. D. 1909 C, 108.  
 Merriam and Sinclair 1907 A, 186.  
 Peterson, O. A. 1909 A, 64, fig. 18.  
 Troxell, E. L. 1920 B, 251  
 1921 A, 476.  
 Upper Oligocene (John Day); Oregon.

AMMODON Marsh. Type *A. leidymanus* Marsh.

- Hay, O. P. 1902 A, 656.  
 Palmer, T. S. 1904 A, 92, 927.  
 Peterson, O. A. 1909 A, 67, fig. 22 (This genus?).

**Ammodon leidymanus** Marsh.

- Hay, O. P. 1902 A, 656.  
 Peterson, O. A. 1909 A, 67, figs 20, 21 (*A. leidymanus*).  
 Rhoads, S. N. 1908 A, 237 (*A. leidymanus*).  
 Troxell, E. L. 1920 B, 252, 441, pl. iii, fig. C.  
 1921 A, 475.  
 Weber and Abel 1928 A, 623.  
 Miocene?; New Jersey.

## SUIDÆ Gray.

- Gray, J. E.* 1821 A, 306.  
 Hay, O. P. 1902 A, 653.  
 Abel, O. 1913 B, 729, 739  
 1914 A, 157.  
 1919 A, 800.  
 Adloff, P. 1901 A, 481 (Sus).  
 1901 C, 419 ("schweine").  
 1913 A, 238 ("schweine").  
 1913 C, 12 (Sus).  
 Ahrens, H. 1912 A, 513 ("schweine").  
 1913 B, 109 (Sus).  
 Ameghino, F. 1889 A, 1025.  
 1912 B, 171 ("suidés").  
 Anderson, R. J. 1912 D, 253.  
 Andres, J. 1924 A, 259.  
 Arldt, T. 1907 D, 683.  
 Baumler, H. 1922 A, 140 ("schweine").  
 Bardeleben, K. 1907 B, 155 ("schwein")  
 Baum, H. 1920 A, 19, figs. 5, 11-15, 18-20  
 ("schwein").  
 Beecker, A. 1903 A, 596 (Sus).  
 Behlen, H. 1906 A ("schweine").  
 1907 A ("suiden").  
 Bertelli, D. 1909 A, 166, figs. 6, 32 (Sus).  
 Beyer, H. 1908 A, 81, 98 ("schweine").  
 Bild, A. 1902 A, 401 (Sus).  
 Black, N. 1900 A, 11 (Suina).  
 Blendinger, W. 1904 A, 456, fig. 2 ("schwein").  
 Boas, J. E. V. 1884 B, 394 ("schweine").  
 Bolk, L. 1922 A, 130.  
 Bonaparte, C. L. 1832 A, 292 (Suina).  
 Burlet, H. M. 1913 B, 397, fig. 7 (Sus).  
 Carus, J. V. 1875 A, 146 (Suina).  
 Cleland, J. 1863 B, 300 ("pigs")  
 Cope, E. D. 1885 EE, 608 ("hogs").  
 Cuvier, F. 1825 A, 208 ("sangliers").  
 Cuvier, G. 1805 A ("cochons").  
 1825 A, II, 115-126, pls i, ii ("cochons").

- Dependorf, T. 1907 C, 109 ("suiden").  
 Depéret, C. 1905 C, 704 ("suidés").  
 1906 A, 619 ("suidés").  
 1906 B, 1120 ("suidés").  
 1907 B ("suidés").  
 Dietrich, K. 1841 A, 84 (Sus).  
 Disselhorst, R. 1906 A, 324 ("schweine").  
 Dixey, F. A. 1881 A, 69, pl. ii, fig. 3 ("pig").  
 Doran, A. H. G. 1878 A, 422.  
 Ellenberger and Baum 1903 A ("schweine").  
 Engelman, O. 1910 A, 486 ("schweine").  
 Fairchild, H. L. 1894 A, 208 ("hogs").  
 Foote, J. S. 1916 A, 104 (Sus).  
 Forster, A. 1901 A, 103 ("schwein").  
 Frassetto, F. 1903 A, 193.  
 Frech, F. 1906 A, 492 ("schweine").  
 Gaudry, A. 1891 C, 130 ("schweine").  
 Gaupp, E. 1905 D, 1040 ("schweine").  
 1910 C, 336 ("schwein").  
 Gegenbaur, C. 1880 A, 590 ("schweine").  
 1888 A, 395 ("schweine").  
 Gervais, P. 1852 A, 98 (Sus).  
 1859 A, 173 ("suidés"); 175 ("suins").  
 Gidley, J. W. 1920 A, 653.  
 Giebel, C. G. 1883 A ("schweine").  
 Gregory, W. K. 1920 A, 193, figs. 166-168.  
 1920 B, 266.  
 Haller, G. 1922 A ("schweine").  
 Hanson, F. B. 1918 A, 291.  
 1919 A, 197 (Sus)  
 1920 C, 1 (Sus).  
 Hasse, C. 1872 B, 547 ("schwein").  
 Hasse and Schwarck 1870 A, 141 (Sus).  
 Hayek, H. 1926 A, 171 ("schwein").  
 Hoernes, R. 1886 A, 681.  
 Holland, W. J. 1912 B, 750.  
 Hollard, H. 1864 C, 362 ("suidés").  
 Hrdlička, A. 1903 A, 379.

- Hrdhēka, A. 1921 A, 166.  
Huxley, T. H. 1856 A, 49 ("pig").  
1863 E, 553 ("pig").  
1870 F, 530 ("pigs").  
Jacobi, A. 1921 A, 216.  
Kampfen, P. N. 1905 A, 583.  
Kingsley, J. S. 1900 A, 221 ("pig").  
Klatt, B. 1912 A, 165 ("schweine").  
Knottnerus-Meyer, F. 1907 A, 7, 97.  
Köstlin, O. 1844 A ("schweine").  
Kravetz, L. P. 1906 A, 10, pls. i, ii ("schweim").  
1906 A, 10 ("schweine").  
Laloy, L. 1907 A, 586 ("suidés").  
Lankester, E. R. 1908 A, 324 ("pigs").  
Lavocat, A. 1885 A, 48 ("suidés").  
Leboucq, H. 1884 A, 85, fig. 43 ("porc").  
Leche, W. 1887 A.  
Lepkowski, W. 1897 A, 571, figs 3-6, 8-11 ("schweine").  
Leunis and Ludwig 1883 A, 239 (Sunna).  
Lobley, J. L. 1908 A, 200, 204.  
Loomis, F. B. 1925 E, 534, fig. 4.  
Lydekker, R. 1913 B, 7.  
1915 D, 306.  
Major, C. J. F. 1901 B, 245.  
Martins, C. 1867 A, 68 ("cochons").  
Matthew, W. D. 1901 B, 371.  
1915 K, 457, fig. 17 ("pigs and peccaries").  
1924 C, 178.  
1928 B, 968 ("pigs").  
Meud, C. S. 1909 A, 167 (Sus).  
Meckel, J. F. 1825 A ("schweine").  
Nauck, E. 1926 A, 208, figs. 1, 2 ("schwein").  
1926 B, 45, figs. 10-12 (Sus).  
Noordenbos, W. 1905 B, 376 ("schwein").  
Owen, R. 1848 B, 129, fig. 24 (Sus).  
1866 A, 469.  
Palmer, T. S. 1904 A, 772, 927.  
Pander and Alton 1821 B, 17, pls. xi, xii ("schweine").  
Parker, W. K. 1879 C, 342 ("pig").  
Paulli, S. 1900 A, 193, figs. 7-10 ("schweine").  
Peter, K. 1924 B, 461, figs. 1, 5-7, 15 ("schweine").  
Pictet, F. J. 1853 A, 323 ("cochons").  
Pilgrim, G. E. 1913 A, 298.  
Popowa, N. 1913 A, 279 ("schweine").  
Pouchet and Chabry 1884 A, 161 ("porc").  
Puntigam, F. 1925 A, 470.  
Rathke, H. 1846 A, 168 ("cochons").  
Rehs, J. 1914 A, 48.  
Reichert, K. B. 1837 A, 207, pls. vii-ix ("schweine").  
1849 A, 447, 467 ("schwein").  
Retterer, E. 1884 A, 486, 509 ("porc").  
Retterer and Lelièvre 1910 B, 988 ("porc").  
Retzius, A. 1837 A, 488 ("schwein").  
Rosenberg, A. 1873 A, 121 ("schwein").  
Schlosser, M. 1900 C, 134 ("schweine").  
1902 J, 256.  
1902 K, 463 ("suiden").  
1903 I, 182 ("suiden").  
1911 A, 165 ("suiden").  
Schmalhausen, J. J. 1903 B, 373 ("schweine").  
Schmidt, O. 1886 A, 137.  
Schorr, G. 1908 A, 80, figs. 1-15 ("schwein").  
Scott, W. B. 1896 D, 57 ("pigs").  
1917 A, 144 ("pigs").  
Sippel, W. 1907 A, 509, figs. 8, 9 (Sus).  
Sisson, S. 1910 A, 136, figs. 105-114.  
Stadelmann, F. 1916 A, 114, pls. viii, ix (Sus).  
Stehlin, H. G. 1908 A, 691, 738.  
Taschenberg, O. 1899 A, 4684.  
Tims, H. W. M. 1903 A, 143.  
Tornier, G. 1888 A, 230 ("schweine").  
1891 A, 122 ("suiden").  
Tourneux, F. and J. P. 1912 A, 69, figs. 4-6 ("porc").  
Trouessart, E. L. 1905 A, 652.  
Van Rimmelen, J. F. 1918 A, 572.  
Wallace, A. R. 1876 A, i, 119; ii, 214.  
1894 A, 435.  
Weber, M. 1904 A, 643, 647.  
Weber and Abel 1928 A, 538, 547.  
Whitehead and Waddell 1911 A, 93, figs. 1-4 ("pig").  
Windle, B. C. A. 1905 A, 1051 ("schweine").  
Winge, H. 1906 A, 70, 143 (Suini).  
Woodward, A. S. 1898 D, 335 ("pigs").  
Wright, R. R. 1883 A, 263.  
Zaaijer, T. 1894 A, 340, fig. 4 (Sus).  
Zierler, F. E. 1905 A, 508 ("suiden").  
Zimmerman, A. 1912 A, 650 ("schwein").  
Zittel, K. A. 1897 A, 126 ("suiden").  
Zittel and Schlosser 1911 A, 472.  
1923 A, 560, 562.

## SUINÆ.

- Hay, O. P. 1902 A, 656 (Hyotheriinae); 661 (Suinae).  
Arlt, T. 1907 D, 659 (Hyotheriinae).  
Cope, E. D. 1888 X, 1087 (Hyotheriinae).  
Matthew, W. D. 1924 C, 177.  
Palmer, T. S. 1904 A, 747, 927 (Hyotheriinae).  
Weber, M. 1904 A, 649.

HYOTHERIUM Meyer. Type *H. sömmeringii* Meyer.

- Hay, O. P. 1902 A, 656.  
Beddard, F. E. 1902 A, 280.  
Depéret, C. 1892 A, 84.  
Filhol, H. 1881 A, 6-30, pls. iv-x.  
Gervain, P. 1850 A, 181.  
Giebel, C. G. 1883 A, 125.  
Heilprin, A. 1887 A, 374.  
Lydekker, R. 1887 D, 19, fig.  
Matthew, W. D. 1924 C, 177.  
1928 B, 981, fig. 16.  
Matthew and Cook 1909 A, 391.  
Palmer, T. S. 1904 A, 339, 928.  
Pilgrim, G. E. 1913 A, 298, 313.  
Schlosser, M. 1916 A, 21.  
Seeley, H. G. 1878 A, 223.  
Trouessart, E. L. 1905 A, 655.  
Weber, M. 1904 A, 652.  
The two species here arranged under *Hyotherium* probably belong elsewhere.



**Hyotherium americanum** Scott and Osborn.

Hay, O. P. 1902 A, 656.

Matthew and Cook 1909 A, 391 ("=an oreodont").

Trouessart, E. L. 1905 A, 656.

Oligocene (White River); region of South Dakota and Nebraska.

**Hyotherium platyops** Cope.

Hay, O. P. 1902 A, 656.

Cook, H. J. 1912 D, 39 (Perchoerus).

Matthew, W. D. 1909 C, 109 (Perchoerus?).

O'Harra, C. C. 1920 A, 154 (Perchoerus).

Trouessart, E. L. 1905 A, 656.

Upper Oligocene (Brule); region of South Dakota and Nebraska.

## PALÆOCHÆRINÆ Matthew.

Matthew, W. D. 1924 C, 176.

PERCHÆRUS Leidy. Type *Palæochærus probus* Leidy.

Hay, O. P. 1902 A, 657 (Perchoerus); 658 (Bothrolabis).

Ardt, T. 1907 D, 259 (Bothrolabis).

Barbour, E. H. 1925 B, 32 (Thinohyus).

Boule and Thevenin 1920 A, 164 (Perchoerus); 165 (Thinohyus).

Condon, T. 1902 A, 120, pl. xvii (Bothrolabis).

Cope, E. D. 1880 U, 156 (Palæochærus).

Gaudry, A. 1875 D, 1282.

Gidley, J. W. 1904 A, 268.

Giebel, C. G. 1883 A, 124.

Gregory, W. K. 1920 A, 191, fig. 164.

Haug, E. 1911 A, 1528, 1529.

Heilprin, A. 1887 A, 354 (Thinohyus).

Hoernes, R. 1886 A, 652 (Thinohyus).

Kampfen, P. N. 1905 A, 587.

Lydekker, R. 1908 A, 510.

Matthew, W. D. 1901 B, 369, 370.

1907 A, 176, 178, 216 (Perchoerus, Thinohyus).

1909 C, 111.

1915 A, 242.

1915 K, 420.

1924 C, 176 (Perchoerus, Bothrolabis, Thinohyus).

1928 B, 981, fig. 16.

Merriam and Sinclair 1907 A, 190 (Thinohyus).

O'Harra, C. C. 1910 A, 105, 150.

Osborn, H. F. 1907 G, 197, fig. 199 (Thinohyus).

1910 B, 220, 223, 231 (Thinohyus).

Palacký, J. 1903 B, 312 (Perchoerus, Bothrolabis, Thinohyus).

Palmer, T. S. 1904 A, 141, 928 (Bothrolabis); 523, 929 (Perchoerus).

Pearson, H. S. 1923 A, 62, figs 3, 4, 15, 16.

Peterson, O. A. 1906 A, 305 (Bothrolabis).

Scott, W. B. 1913 A, 361 (Thinohyus); 365 (Perchoerus).

Sinclair, W. J. 1905 A, 135 (Bothrolabis; a synonym of Thinohyus).

1924 A, 126.

Thorne, M. R. 1923 E, 241.

Trouessart, E. L. 1905 A, 657 (Perchoerus, Bothrolabis).

Weber, M. 1904 A, 655 (Bothrolabis).

Zittel and Schlosser 1911 A, 473 (Perchoerus, Thinohyus).

1923 A, 561, 670-672.

**Perchoerus antiquus** Marsh.

Hay, O. P. 1902 A, 657.

Rhoads, S. N. 1903 A, 238 (Thinohyus).

Trouessart, E. L. 1905 A, 657.

Miocene (Shark River); New Jersey.

**Perchoerus lentus** (Marsh).

Hay, O. P. 1902 A, 657.

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 186, 190 [Thinohyus (Bothrolabis)].

Peterson, O. A. 1906 A, 319 (Thinohyus).

Sinclair, W. J. 1905 A, 135 (Thinohyus).

Trouessart, E. L. 1905 A, 657.

Upper Oligocene (John Day); Oregon.

**Perchoerus minor** Cook.

Cook, H. J. 1922 C, 358, fig. 20.

Pearson, H. S. 1923 A, 75.

Lower Oligocene (Chadron); Nebraska.

**Perchoerus nanus** (Marsh).

Hay, O. P. 1902 A, 657.

Cook, H. J. 1912 D, 37.

Matthew, W. D. 1909 C, 106

Pearson, H. G. 1923 A, 93.

Sinclair, W. J. 1924 A, 102, 126

Trouessart, E. L. 1905 A, 657.

Middle Oligocene (Brule); South Dakota.

**Perchoerus osmonti** (Sinclair).

Sinclair, W. J. 1905 A, 138, pl. xvii (Thinohyus).

Matthew, W. D. 1909 C, 109.

Merriam, J. C. 1901 B, 589, fig. 7 ("peccary").

Merriam and Sinclair 1907 A, 186, 188, 190 [Thinohyus (Bothrolabis)].

Upper Oligocene (John Day); Oregon.

**Perchoerus pristinus** Leidy.

Hay, O. P. 1902 A, 658 (Bothrolabis).

Cope and Matthew 1915 A, pl. cix a, fig. 9 (Thinohyus, Perchoerus); pl. cxi, fig. 2 (Palæochærus, Perchoerus).

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 186, 189, 190 (Thinohyus).

Pearson, H. S. 1923 A, 69, 78, 80, 85, figs. 5, 10, 12, 17.

Sinclair, W. J. 1905 A, 140 (Thinohyus).

Trouessart, E. L. 1905 A, 657 (Bothrolabis).

Upper Oligocene (John Day); Oregon.

**Perchoerus probus** Leidy.

Hay, O. P. 1902 A, 657.

Cook, H. J. 1912 D, 37.

Giebel, C. G. 1883 A, pl. xlii.

Matthew, W. D. 1909 C, 106.

O'Harra, C. C. 1920 A, 152.

- Pearson, H. S. 1923 A, 72, 74, figs. 6-9, 15, 16.  
 Sinclair, W. J. 1924 A, 126.  
 Trouessart, E. L. 1905 A, 657.  
 Middle Oligocene (Brule); South Dakota.

**Perchœrus robustus (Marsh).**

- Hay, O. P. 1902 A, 657.  
 Cook, H. J. 1912 D, 39.  
 Matthew, W. D. 1909 C, 109.  
 O'Hara, C. C. 1920 A, 154.  
 Trouessart, E. L. 1905 A, 657.  
 Upper Oligocene (Upper Brule); South Dakota, Nebraska: (John Day); Oregon.

**Perchœrus rostratus (Cope).**

- Hay, O. P. 1902 A, 658 (Bothrolabis).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 186, 189, 190 (Thinohyus).  
 Pearson, H. S. 1923 A, 69, 78, figs. 11, 13  
 Sinclair, W. J. 1905 A, 140 (Thinohyus).  
 Trouessart, E. L. 1905 A, 657 (Bothrolabis).  
 Upper Oligocene (John Day); Oregon.

**Perchœrus socialis (Marsh).**

- Hay, O. P. 1902 A, 657.  
 Cope and Matthew 1915 A, pl. cxi, fig. 3 (Palœochœrus, Perchœrus).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 186 [Thinohyus (Bothrolabis)].  
 Pearson, H. S. 1923 A, 94, fig. 16.  
 Trouessart, E. L. 1905 A, 657.  
 Upper Oligocene (John Day); Oregon.

**Perchœrus subæquans (Cope).**

- Hay, O. P. 1902 A, 658 (Bothrolabis).  
 Cook, H. J. 1912 D, 42 (Desmathyus. This species?).  
 Cope and Matthew 1915 A, pl. cx a, fig. 1 (Palœochœrus, Perchœrus).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 186 (Thinohyus).  
 Pearson, H. S. 1923 A, 72 (Thinohyus).  
 Peterson, O. A. 1906 A, 306, figs. 1-3 (Thinohyus. This species?).  
 Sinclair, W. J. 1905 A, 140 (Thinohyus).  
 Trouessart, E. L. 1905 A, 657 (Bothrolabis).  
 Upper Oligocene (John Day); Oregon: Lower Miocene (Upper Harrison); Nebraska.

**Perchœrus trichœnus (Cope).**

- Hay, O. P. 1902 A, 658 (Bothrolabis).  
 Cope and Matthew 1915 A, pl. cx a, fig. 2 (Palœochœrus; Perchœrus).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 186 (Thinohyus).  
 Pearson, H. S. 1923 A, 71, 80, figs. 14-16.  
 Peterson, O. A. 1906 A, 306 (Bothrolabis).  
 Sinclair, W. J. 1905 A, 140 (Thinohyus).  
 Trouessart, E. L. 1905 A, 657 (Bothrolabis).  
 Upper Oligocene (John Day); Oregon.

**Perchœrus sp. indet.**

- Condon, T. 1902 A, 120, pl. xvii ("Bothrolabis").  
 1910 A, 101, pl. xvii ("Bothrolabis"). Oligocene (John Day); Oregon.  
 Cook, H. J. 1912 D, 35 Oligocene (Chadron); Nebraska.  
 Merriam, J. C. 1911 B, 275, fig. 55 (Thinohyus?). (Virgin Valley); Nevada.  
 Wanless, H. R. 1923 A, 220. Oligocene (White River); Nebraska.

**CHÆNOHYUS Cope. Type *C. decedens* Cope.**

- Hay, O. P. 1902 A, 658.  
 Barbour, E. H. 1925 B, 32.  
 Beddard, F. E. 1902 A, 280.  
 Heilprin, A. 1887 A, 374 (Chœnohyus).  
 Matthew, W. D. 1909 C, 111.  
 1924 C, 176.  
 Osborn, H. F. 1910 B, 549.  
 Palacký, J. 1903 B, 312.  
 Palmer, T. S. 1904 A, 176, 228.  
 Sinclair, W. J. 1905 A, 135 (Syn. of Thinohyus).

**Chœnohyus decedens Cope.**

- Hay, O. P. 1902 A, 658.  
 Cope and Matthew 1915 A, pl. cx a, fig. 3; pl. cxi, fig. 1.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 186, 188, 190 (Thinohyus).  
 Peterson, O. A. 1906 A, 318 (Thinohyus).  
 Sinclair, W. J. 1905 A, 134, 139, 140, pl. xvi (Thinohyus).  
 Trouessart, E. L. 1905 A, 657.  
 Oligocene (John Day); Oregon.

**TAYASSUIDÆ Palmer.**

- Palmer, T. S. 1897, Proc. Biol. Soc. Wash., xi, 174.  
 Hay, O. P. 1902 A, 658 (Tayassuinae).  
 Allen, J. A. 1902 A, 162 ("peccaries").  
 Ameghino, F. 1912 B, 170 ("dicotylinés").  
 Arldt, T. 1907 B, 453 ("dicotylinen").  
 1907 D, 650 (Dicotylinæ).  
 1912 A, 700, 746 (Tayassinae).  
 Barbour, E. H. 1925 B, 25, 32 (Dicotyliidæ, Tayassuidæ).  
 Beddard, F. E. 1902 A, 278 (Dicotyliidæ).  
 Boule and Thevenin 1920 A, 163 ("pecaris").

- Cuvier, F. 1825 A, 210 ("dicotyless").  
 Elliot, D. G. 1901 A, 33 (Dicotyliidæ).  
 Gervais, P. 1855 B, 335 ("pécari").  
 Gidley, J. W. 1920 A, 654.  
 Gill, T. 1902 B, 38 ("peccaries").  
 Grant, M. 1904 B, 196, 205 (Dicotyliidæ).  
 Hanson, F. B. 1918 A, 291 ("peccaries").  
 Hay, O. P. 1912 D, 595.  
 1914 A, 212.  
 1923 A, 5, 312 (Tayassuidæ).  
 1927 E, 76 ("peccaries").

- Knotnerus-Meyer, T. 1907 A, 6, 97, 102 (Tayassuidæ).  
 Lydekker, R. 1907 B, 63 (Dicotylidæ).  
     1913 B, 7 (Dicotylidæ).  
     1915 D, 374 (Dicotylidæ).  
 Matthew, W. D. 1907 A, 216 (Dicotylidæ).  
     1909 C, 113, 115, 117, 119, 120 (Dicotylidæ, Tagassuidæ).  
     1910 H, 477 ("peccaries").  
     1915 A, 241, 254, figs. 21, 23 (Dicotylidæ).  
     1918 A, 214 (Dicotylidæ).  
     1924 C, 176 (Dicotylidæ); 177 (Dicotylidæ).  
     1928 B, 968, 980 ("peccaries").  
 Miller, G. S. 1912 B, 383.  
     1924 C, 481.  
 O'Harra, C. C. 1910 A, 103 (Dicotylidæ).  
     1920 A, 118 (Dicotylidæ).

- Osborn, H. F. 1905 I, 109 (Dicotylidæ).  
     1909 D, 59, 63 (Dicotylidæ).  
     1910 B, 612 (Dicotylidæ).  
 Palmer, T. S. 1904 A, 773 (Tayassuidæ); 930 (Tagassuidæ).  
 Paulli, S. 1900 A, 199, figs. 11, 12 (Dicotyles).  
 Scharf, R. F. 1911 A, 156 ("peccaries").  
 Schlosser, M. 1902 J, 253 ("peccaries").  
 Schwarz, E. 1924 A, 420 ("peccaries").  
 Scott, W. B. 1913 A, 361, 363 (Tagassuidæ).  
     1916 A, 119 ("water-hogs").  
     1928 B, 260 ("peccaries").  
 Trouessart, E. L. 1905 A, 658 (Tayassidæ).  
 Wallace, A. R. 1876 A, II, 215 ("peccaries").  
 Weber, M. 1904 A, 651 (Dicotylidæ).  
 Weber and Abel 1928 A, 553 (Dicotylidæ).  
 Winge, H. 1906 A, 70, 138, 143 (Dicotylidæ).  
 Woodward, A. S. 1923 C, 37 (Dicotylidæ).

#### CYNORCA Cope. Type *C. proterva* Cope.

- Cope, E. D. 1867 C, 144, 152.  
 Hay, O. P. 1902 A, 589 (Squalodon).  
 Case, E. C. 1904 D, 7, pl. x, figs. 4, 5 (Squalodon).  
 Cope, E. D. 1868 I, 185.  
 Kellogg, R. 1923 A, 28.  
 Leidy, J. 1869 A, 423.  
 Palmer, T. S. 1904 A, 213.

#### *Cynorca proterva* Cope.

- Cope, E. D. 1867 C, 144, 152.  
 Hay, O. P. 1902 A, 589 (Squalodon).  
 Cope, E. D. 1868 I, 185.  
 Kellogg, R. 1923 A, 28.  
 Shattuck, G. B. 1904 A, xciv (Squalodon).  
     Middle Miocene (Calvert); Maryland.

#### DESMATHYUS Matthew. Type *D. pinensis* Matthew.

- Matthew, W. D. 1907 A, 173, 217.  
 Barbour, E. H. 1925 B, 32.  
 Boule and Thevenin 1920 A, 165.  
 Loomis, F. B. 1910 A, 381 (Pediohyus, type *P. ferus*).  
 Lydekker, R. 1908 A, 510.  
 Matthew, W. D. 1909 C, 119.  
     1915 A, 242.  
     1924 C, 177, 178 (Desmathyus; Pediohyus a syn.).  
 O'Harra, C. C. 1910 A, 105, 131.  
 Osborn, H. F. 1909 D, 74, 75.  
     1910 B, 236, 286, 549.  
     1912 G, 249.  
 Pearson, H. S. 1923 A, 66, 68.  
 Scott, W. B. 1913 A, 361.

#### *Desmathyus ferus* (Loomis).

- Loomis, F. B. 1910 A, 381, fig. 1 (Pediohyus).  
     Lower Miocene (Upper Harrison); Nebraska.

#### *Desmathyus pinensis* Matthew.

- Matthew, W. D. 1907 A, 173, 217.  
     1909 C, 113.  
 O'Harra, C. C. 1920 A, 157.  
     Lower Miocene (Rosebud); South Dakota.  
*Desmathyus siouxensis* (Peterson).  
 Peterson, O. A. 1906 A, 308, pls. xxxiv, xxxv; text-fig. 4 (Thinohyus).  
 Cook, H. J. 1912 D, 41.  
 Matthew, W. D. 1907 A, 216, 217.  
     1909 C, 113.  
 O'Harra, C. C. 1920 A, 121, 157, fig. 59.  
 Peterson, O. A. 1906 C, 35 (Thinohyus).  
     Lower Miocene (Lower Harrison); Nebraska.

#### *Desmathyus* sp. indet.

- Matthew, W. D. 1909 C, 113. Miocene (Lower); Nebraska.  
     1924 C, 180. Middle Miocene (Sheep Creek); Nebraska.

#### PROSTHENNOPS Gidley. Type *P. crassigenis* Gidley.

- Gidley, J. W. 1904 A, 265, 268.  
 Anonymous 1923 C, 406 (Hesperopithecus).  
     1924 A, 273 (Hesperopithecus).  
 Barbour, E. H. 1925 B, 32.  
 Boule and Thevenin 1920 A, 165.  
 Gregory, W. K. 1927 F, 397 (Hesperopithecus).  
     1927 H, 579 (Hesperopithecus); 580 (Prosthenennops).  
 Gregory and Hellman 1923 A, 1 (Hesperopithecus).  
     1923 B, 509-530 (Hesperopithecus).  
 Haug, E. 1911 A, 1706.  
 Matthew, W. D. 1907 A, 217.

- Matthew, W. D. 1909 C, 119.  
     1910 G, 155.  
     1915 A, 242.  
     1923 C, 410, 412 (Hesperopithecus).  
     1924 C, 177, 178.  
     1928 B, 981, fig. 16.  
 Merriam, J. C. 1914 C, 644 (This genus?).  
     1915 E, 107 (This genus?).  
 Müller, G. S. 1923 B.  
 O'Harra, C. C. 1910 A, 105, 133.  
 Osborn, H. F. 1909 D, 80, 81.  
     1910 B, 629.  
     1918 A, 23.

- Osborn, H. F. 1922 A, 1 (*Hesperopithecus*, type *H. haroldcooki* Osborn).  
 1922 C, 464 (*Hesperopithecus*).  
 1922 E, 281 (*Hesperopithecus*).  
 1928 B, 199, fig. 3 (*Hesperopithecus*).  
 Peterson, O. A. 1914 C, 115 (*Prostenops*).  
 Scott, W. B. 1913 A, 361.  
 Smith, G. E. 1922 A, 944, figs. (*Hesperopithecus*).  
 Thacker, A. G. 1923 A, 285 (*Hesperopithecus*).  
 Thorpe, M. R. 1924 C, 393.  
 Woodward, A. S. 1922 A, 750 (*Hesperopithecus*).  
 Zittel and Schlosser 1911 A, 474.  
 1923 A, 561, 673, 679 (*Prosthennops*); 647, 650, 652 (*Hesperopithecus*).
- Prosthennops crassigenis* Gidley.**  
 Gidley, J. W. 1904 A, 245, 265, figs. 14, 15.  
 Barbour, E. H. 1925 B, 27 (*P. crassigenis*).  
 Cook, H. J. 1912 D, 44 (*This species?*).  
 1922 B, 12 (*Prosthennops*).  
 Frick, C. 1921 A, 352.  
 Matthew, W. D. 1909 C, 117.  
 1918 A, 186, 215 (*This species?*).  
 1924 C, 67, 177, 179 [*P. (Macrogenis)*].  
 Merriam, J. C. 1911 B, 274.  
 1917 A, 436 (*This species?*).  
 Merriam, Stock, Moody 1925 A, 84.  
 O'Hara, C. C. 1920 A, 159.  
 Sinclair, W. J. 1915 A, 77 (*This species?*).  
 Thorpe, M. R. 1924 C, 396.  
 Upper Miocene (Little White River); South Dakota: Lower Pliocene (Upper Snake Creek); Nebraska.
- Prosthennops edensis* Frick.**  
 Frick, C. 1921 A, 350, figs. 58-63.  
 Stock, C. 1925 A, 21.  
 Pliocene (Eden); California.
- Prosthennops haroldcooki* (Osborn).**  
 Unless otherwise indicated the writers, as cited, use for this species the generic name *Hesperopithecus*.  
 Osborn, H. F. 1922 A, 2, figs. 1-3.  
 Abel, O. 1926 B, 299, 365, 446.  
 Anonymus 1923 B, 412 (*"Hesperopithecus"*).  
 Cook, H. J. 1926 D, 336 (*"Hesperopithecus"*).  
 1927 A, 114 (*"anthropoid"*).  
 Gregory, W. K. 1927 H, 530 (Syn.? of *P. serus*).  
 Gregory and Hellman 1923 A, 1, figs.  
 1923 B, 509-530, figs. 3-6, 11-13.  
 Matthew, W. D. 1923 A, 12 (*"Hesperopithecus"*).  
 1924 C, 65.  
 Mollison, T. 1924 A, 715.  
 Osborn, H. F. 1922 C, 464.  
 1922 E, 282, fig. 2.  
 Pycraft, W. P. 1922 A, 707.  
 Thacker, A. G. 1923 A, 384.
- Weber and Abel 1928 A, 831.  
 Woodward, A. S. 1922 A, 750.  
 Lower Pliocene (Upper Snake Creek); Nebraska.
- Prosthennops longirostris* Thorpe.**  
 Thorpe, M. R. 1924 C, 393, figs. 1-4.  
 Pliocene; Oregon.
- Prosthennops serus* (Cope).**  
 Hay, O. P. 1902 A, 659 (Tayassu).  
 Barbour, E. H. 1925 B, 27.  
 Cook, H. J. 1922 B, 12 (*Prosthennops*).  
 Gidley, J. W. 1904 A, 265.  
 Gregory, W. K. 1927 H, 580.  
 Matthew, W. D. 1909 C, 117.  
 1918 A, 215, fig. 15.  
 1923 A, 12 (*This species?*).  
 1924 C, 67, 177, 178.  
 Matthew and Cook 1909 A, 390.  
 Merriam, J. C. 1917 A, 438.  
 Merriam and Stock 1928 A, 19.  
 Merriam, Stock, Moody 1925 A, 85.  
 Thorpe, M. R. 1924 C, 396.  
 Trouessart, E. L. 1905 A, 658 (Tayassu).  
 Lower Pliocene (Republican River); Kansas: (Upper Snake Creek); Nebraska.
- Prosthennops xiphidonticus* Barbour.**  
 Barbour, E. H. 1925 B, 25, figs. 12, 13.  
 Pliocene (Valentine); Nebraska.
- Prosthennops* sp. indet.**  
 Barbour and Cook 1917 B, 180. Pliocene (Valentine); Nebraska.  
 Cook, H. J. 1922 B, 12 (*Prosthennops*). Pliocene (Snake Creek); Colorado.  
 Freudenberg, W. 1922 A, 4 (*This genus?*). Pliocene; Mexico.  
 Merriam, J. C. 1911 B, 272, figs. 52-53 (*This genus?*). Pliocene (Thousand Creek); Nevada.  
 1913 E, 378, fig. 5 (*This genus?*). Pliocene (Siestan); California.  
 1915 E, 201, fig. 15 (*This genus?*). Pliocene (Chanac); California.  
 1916 C, 126. Pliocene (Chanac); California.  
 1917 A, 426. Pliocene (Chanac); California: 428 (Rattlesnake); Oregon; 436 (Snake Creek); Nebraska.  
 1919 A, 450, 507, 527, fig. 83 (*This genus?*). Miocene (Barstow); California.  
 Merriam and Stock 1928 A, 19, text-fig. 12. Pliocene (Thousand Creek); Nevada.  
 Merriam, Stock, Moody 1925 A, 54, 59, 83, figs. 37-40 (*This genus?*). Pliocene (Rattlesnake); Oregon.  
 Stock, C. 1925 A, 18. Lower Pliocene (Rattlesnake); Oregon.

#### HESPERHYS Douglass. Type *H. vagrans* Douglass.

- Douglass, E. 1903 A, 174.  
 Matthew, W. D. 1909 C, 119.  
 Zittel and Schlosser 1923 A, 561, 673 (*Hesperhys*).

#### *Hesperhys vagrans* Douglass.

- Douglass, E. 1903 A, 153, 175, fig. 17.  
 Matthew, W. D. 1909 C, 115.  
 Middle Miocene (Flint Creek); Montana.

#### PLATYGONUS Le Conte. Type *P. compressus* Le Conte.

- Hay, O. P. 1902 A, 660.  
 Baker, F. C. 1920 A, 354.

- Barbour, E. H. 1925 B, 32.  
 Behlen, H. 1906 A, 208.

- Boule and Thevenin 1920 A, 164.  
 Brown, B. 1908 A, 200.  
 Case, E. C. 1899 B, 172.  
 Cope, E. D. 1880 U, 158 (Dicotyles).  
 1895 G, 596.  
 Felix and Lenk 1891 A, 127.  
 Frech and Geinitz 1903 A, 36.  
 Gidley, J. W. 1904 A, 268 (Platygonus).  
 1912 C, 19.  
 1920 A, 656, 657.  
 Giebel, C. G. 1855 A, 73.  
 1883 A, 124.  
 Haug, E. 1911 A, 1706, 1886.  
 Hay, O. P. 1910 D, 374.  
 1912 D, 595, 597.  
 1914 A, 212, 217.  
 Heilprin, A. 1887 A, 374.  
 Holland, W. J. 1912 B, 750.  
 Lull, R. S. 1904 C, 7.  
 Matthew, W. D. 1907 A, 217.  
 1910 G, 155.  
 1915 A, 241, 242.  
 1915 K, 403.  
 1924 C, 178.  
 1924 E, 748.  
 1928 B, 981, fig. 16.  
 Matthew and Cook 1909 A, 367.  
 Osborn, H. F. 1905 I, 109.  
 1907 G, 171, fig. 153.  
 1909 D, 133.  
 1910 B, 627.  
 1912 G, 251.  
 1918 A, 30.  
 1925 D, 532.  
 Palacký, J. 1903 B, 317.  
 Peterson, O. A. 1912 B, 167.  
 Rogers, A. F. 1924 A, 544.  
 Scharff, R. F. 1911 A, 153.  
 Schlosser, M. 1902 K, 475.  
 Scott, W. B. 1913 A, 202, 222, 364.  
 Thorpe, M. R. 1924 C, 395.  
 Trouessart, E. L. 1905 A, 658.  
 Upham, W. 1902 A, 149 ("peccaries").  
 1903 C, 22679 ("peccaries").  
 Wallace, A. R. 1876 A, i, 130; ii, 215.  
 Weber, M. 1904 A, 653.  
 Weber and Abel 1928 A, 554.  
 Zittel and Schlosser 1911 A, 474.  
 1923 A, 561, 680-682.
- Platygonus alemanii Dugès.**  
*Dugès, A.* 1891 A, 16, pls. i, ii.  
*Hay, O. P.* 1902 A, 661 (Syn. of *P. vetus*).  
*Freudenberg, W.* 1921 A, 139 (E. alemanii).  
 1922 A, 5.  
*Furlong, E. L.* 1925 A, 139 (*P. alemanii*).  
*Gidley, J. W.* 1920 A, 658 (*P. alemanii*).  
*Villada, M. M.* 1903 A, 449, pl. vi (*P. alemanii*).  
 Pleistocene; Mexico.
- Platygonus bicalcaratus Cope.**  
*Hay, O. P.* 1902 A, 660.  
*Cope, E. D.* 1893 A, 63, pl. xiii, fig. 5.  
*Dumble, E. T.* 1894 A, 569.  
*Frick, C.* 1921 A, 355.  
*Gidley, J. W.* 1903 A, 477, fig. 1.  
 1903 C, 627.  
*Matthew, W. D.* 1909 C, 120.

- Matthew, W. D.* 1924 C, 178.  
*Mernam, J. C.* 1917 A, 435.  
*Montgomery, T. H.* 1904 A, 57.  
*Trouessart, E. L.* 1905 A, 658.  
 Upper Pliocene (Blanco); Texas.

**Platygonus compressus Le Conte.**

- Hay, O. P.* 1902 A, 660 (*P. compressus*); 661 (*P. leptorhinus*).  
*Baker, F. C.* 1920 A, 468.  
*Barton, B. S.* 1906 C, 153 ("peccary").  
*Felix and Lenk* 1891 A, 136 (*P. compressus*?)  
*Frech and Geinitz* 1903 A, 35.  
*Gervais, P.* 1859 A, 365 (Dicotyles).  
*Gidley, J. W.* 1920 A, 657 (*P. compressus*), 659 (*P. leptorhinus*).  
*Hartnagel and Bishop* 1921 A, 85, pls. xxii-xxiv.  
*Haug, E.* 1911 A, 1886.  
*Hay, O. P.* 1910 D, 373 ("peccaries").  
 1912 D, 599, pls. iii, iv, figs. 3-6; pl. v; text-figs. 40, 41.  
 1914 A, 26, 38, 218, pls. xv, xvi, figs. 3-8; pls. xxii-xxv, figs. 1-3; text-fig. 84 (*P. leptorhinus*).  
 1920 A, 311 ("peccaries").  
 1920 B, 110.  
 1923 A, 494.  
 1924 D, 376 (Dicotyles); 384 (*Platygonus*); 158, 270 (*P. leptorhinus*).  
 1927 D, 299.  
 1928 C, 425.  
*Leidy, J.* 1850 J, 184 ("peccary").  
*Matthew, W. D.* 1902 F, 318.  
*Merriam and Stock* 1921 B, 10 (*P. compressus*, *P. leptorhinus*); 10, figs. 1-8 (*P. "possibly n. sp. or n. sub sp."*).  
*Osborn, H. F.* 1904 F, 33 (*P. leptorhinus*)  
 1909 D, 88.  
 1910 B, 463, figs. 201, 202 (*P. leptorhinus*).  
 1925 D, 541.  
*Palacký, J.* 1903 B, 317, 324.  
*Peterson, O. A.* 1906 A, 310 (*P. leptorhinus*).  
 1914 C, 114, pl. xxix (*Platygonus leptorhinus*).  
*Rath, G.* 1886 A, 106 (This species?).  
*Ruschenberger and Tryon* 1879 A, 89 (Dicotyles depressifrons, *D. cristatus*, *Protochærus prismaticus*).  
*Stock, C.* 1923 B, 25, figs. 1-6 (This species?).  
*Trouessart, E. L.* 1905 A, 658.  
*Troxell, E. L.* 1915 A, 616, fig. 24.  
 1917 A, 86 ("peccaries").  
*Villada, M. M.* 1903 A, 449.  
*Wagner, G.* 1903 A, 777, figs. 1-4.  
*Whitney, J. D.* 1892 A, 134 (Dicotyles).  
*Williston, S. W.* 1905 A, 335.  
*Worthen, A. H.* 1866 A, 38 ("peccary").  
 Pleistocene; Illinois, Indiana, Kentucky, Ohio, New York, Missouri, Iowa, Kansas.
- Platygonus condoni Marsh.**  
*Hay, O. P.* 1902 A, 660.  
*Dall and Harris* 1892 A, 282 (Dicotyles).  
*Matthew, W. D.* 1924 C, 178.  
*Thorpe, M. R.* 1924 C, 396 (This genus?).  
*Trouessart, E. L.* 1905 A, 658.  
 Miocene (Mascall); Oregon.

**Platygonus cumberlandensis** Gidley.

Gidley, J. W. 1920 A, 659, pls. liv, lv; text-figs 1-3.

Hay, O. P. 1920 B, 102.

1923 A, 494.

1928 C, 429 (This species?).

Gidley, J. W. 1920 B, 283, pl. vi.

Leighton, M. M. 1921 A, 513 (This species?).

Pleistocene (Middle); Maryland, Illinois.

**Platygonus francisi** Hay.

Hay, O. P. 1927 D, 298, 299, pl. xi, figs. 1-4.

Pleistocene; Texas

**Platygonus intermedius** Gidley.

Gidley, J. W. 1920 A, 660, text-figs. 4-6.

1920 B, 283 ("peccaries").

Hay, O. P. 1920 B, 102.

1923 A, 494.

1927 D, 299.

Pleistocene (Middle); Maryland.

**Platygonus rex** Marsh.

Hay, O. P. 1902 A, 661.

Gidley, J. W. 1903 A, 479.

Matthew, W. D. 1924 C, 178.

Merriam, J. C. 1911 B, 230.

Merriam and Sinclair 1907 A, 195, 198.

Merriam, Stock, Moody 1925 A, 59, 86 (This formation?).

Osborn, H. F. 1918 A, 30.

Thorpe, M. R. 1924 C, 397.

Trouessart, E. L. 1905 A, 658.

Upper Miocene (Rattlesnake?); Oregon.

**Platygonus setiger** Hay.

Hay, O. P. 1920 B, 84, pl. iii, figs. 21-23.

1923 A, 491 (Mylohyus, *errore*).

Pleistocene (Middle); Tennessee.

**Platygonus striatus** Marsh.

Hay, O. P. 1902 A, 661.

1924 D, 159.

Matthew, W. D. 1909 C, 117 (This genus?).

Trouessart, E. L. 1905 A, 658.

Upper Miocene (Arikaree?); Nebraska?

**Platygonus tetragonus** (Cope).

Hay, O. P. 1902 A, 660 (Tayassu).

Baker, F. C. 1920 A, 208, 213, 395 (Tayassu = Mylohyus).

Boule and Thevenin 1920 A, 166.

Gidley, J. W. 1920 A, 675 (Mylohyus).

Hay, O. P. 1920 B, 101, pl. iv, figs. 16, 17 (This species?).

1923 A, 496 (Tagassu).

Rhoads, S. N. 1903 A, 238 (Mylohyus).

Scharff, R. F. 1911 A, 156 (Tayassu).

Schlosser, M. 1902 H, 143 (Mylohyus).

Trouessart, E. L. 1905 A, 659 (Tayassu).

Pleistocene (Middle); Pennsylvania, Maryland.

**Platygonus texanus** Gidley.

Gidley, J. W. 1903 A, 478, figs. 2, 5.

Frick, C. 1921 A, 356.

Gidley, J. W. 1903 C, 621.

Matthew, W. D. 1909 C, 120.

Merriam, J. C. 1917 A, 435.

Merriam, Stock, Moody 1925 A, 87.

Osborn, H. F. 1910 B, 365, 458.

Trouessart, E. L. 1905 A, 658

Upper Pliocene (Blanco); Texas.

**Platygonus vetus** Leidy.

Hay, O. P. 1902 A, 661.

Baker, F. C. 1920 A, 468.

Frick, C. 1921 A, 356.

Gidley, J. W. 1903 A, 479, figs. 3, 4.

1913 B, 96 (This species?).

1920 A, 658.

1922 B, 120 (This species?).

Hay, O. P. 1912 D, 605, pl. iv, fig. 1.

1914 A, 26.

1920 B, 102, pl. iv, figs. 18, 19 (This species?).

1923 A, 494.

1924 D, 160.

McCormack, E. C. 1920 A, 23 (P. sp. a).

Matthew, W. D. 1902 F, 318, 320.

Miller, L. H. 1912 A, 81 (This species?).

Rhoads, S. N. 1903 A, 239 (Platigonus).

Stock, C. 1925 A, 195 (This species?).

Trouessart, E. L. 1905 A, 658.

**Platygonus zieglerei** Marsh.

Hay, O. P. 1902 A, 661.

Matthew, W. D. 1924 C, 178.

Trouessart, E. L. 1905 A, 658.

Horizon unknown

**Platygonus sp. indet.**

Cope, E. D. 1893 A, 87. Pleistocene; Oregon.

Frick, C. 1921 A, 354, figs. 64, 65 (This genus?).

Pliocene (Eden); California.

Gidley, J. W. 1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1923 A, 354. Pleistocene; Virginia.

1924 D, 382. Pleistocene; Nebraska, Texas.

1927 D, 311. Pleistocene; California, Florida, Oregon.

1928 C, 425.

McCormack, E. C. 1920 A, 23 (P. sp. b). Pleistocene (Fossil Lake); Oregon.

Matthew, W. D. 1902 F, 320. Oregon.

1918 A, 227, 228. Pleistocene (Sheridan); Nebraska.

1924 C, 181. Middle Miocene (Sheep Creek); Nebraska.

Merriam, J. C. 1915 E, 222, 227, figs. 32, 41. (Mylohyus or Platygonus): Pleistocene? (Etchegoin); California.

1917 A, 425 (This genus?). Pliocene (Etchegoin); California.

Merriam and Stock 1925 A, 10, 11 (This genus?).

Pleistocene (Potter Creek cave); California.

Miller, L. H. 1912 A, 70, 81 (This genus?).

Pleistocene (Potter Creek cave); California:

(Fossil Lake); Oregon.

Moodie, R. L. 1923 B, 253.

Osborn, H. F. 1925 D, 531 (This genus?). Pleistocene (La Brea); California.

Sinclair, W. J. 1904 A, 18 (This genus?). Pleistocene (cave); California.

1905 B, 149, fig. 1 (This genus?). Pleistocene; California.

Stock, C. 1925 A, 21 (This genus?). Lower Pliocene (Eden); California: 30, 113. Pleistocene (La Brea, Potter Creek Cave); California 195 (Fossil Lake); Oregon

Wyman, L. E. 1922 A, 30. Pleistocene (La Brea); California

**MYLOHYUS** Cope. Type *Dicotyles nasutus* Leidy.

Cope, E. D. 1889 G, 134.

Hay, O. P. 1902 A, 659 (Tayassu, in part).

Barbour, E. H. 1925 B, 32.

Boule and Thevenin 1920 A, 165

Brown, B. 1908 A, 200.

Diener, C. 1912 A, 216.

Frech and Geinitz 1903 A, 36.

Gidley, J. W. 1904 A, 268.

1920 A, 656, 673.

Haug, E. 1911 A, 1887.

Hay, O. P. 1912 D, 595, 607.

1914 A, 212, 225.

Matthew, W. D. 1907 A, 217.

1915 A, 241, 242.

1915 K, 403.

1924 C, 177, 178.

Merriam, J. C. 1915 E, 227.

Osborn, H. F. 1909 D, 87.

1910 B, 440, 466, 470, 471, 488, 549.

Palmer, T. S. 1904 A, 438, 930.

Peterson, O. A. 1912 B, 167.

1914 C, 115.

Thorpe, M. R. 1924 C, 393.

Trouessart, E. L. 1905 A, 658 (Tayassus).

Zittel and Schlosser 1911 A, 474.

1923 A, 561, 680, 681.

**Mylohyus browni** Gidley.

Gidley, J. W. 1920 A, 675.

Brown, B. 1908 A, 201, pl. xxiv (Mylohyus sp. a.).

Hay, O. P. 1924 D, 157, 251.

Simpson, G. G. 1928 H, 3, 16, fig. 11 (This species?).

Pleistocene (Middle); Arkansas: Pleistocene (Early?); Florida.

**Mylohyus exortivus** Gidley.

Gidley, J. W. 1920 A, 676, figs. 11-13.

1920 B, 283 ("peccaries").

Hay, O. P. 1920 B, 98, pl. lv, figs. 4-13.

1923 A, 491.

Pleistocene (Middle); Maryland.

**Mylohyus nasutus** (Leidy).

Hay, O. P. 1902 A, 659 (Tayassu).

Baker, F. C. 1920 A, 464.

Cope, E. D. 1887 F, 138 ("peccary").

Gidley, J. W. 1920 A, 674.

Hay, O. P. 1912 D, 607, text-figs. 42, 43.

1914 A, 226, pl. xxv, figs. 4-6; pl. xxvi, figs. 1, 2.

1920 B, 90, pl. iii, figs. 12, 13; 98, pl. iv, figs. 2, 3.

1923 A, 491.

Palacký, J. 1903 B, 324 ("nasutus").

Rhoads, S. N. 1903 A, 238.

Schlosser, M. 1902 H, 143.

Trouessart, E. L. 1905 A, 659 (Tayassus).

Pleistocene (Middle); Indiana, Virginia, New Jersey?, Tennessee.

**Mylohyus obtusidens** Hay.

Hay, O. P. 1920 B, 100, pl. iv, figs. 14, 15.

1923 A, 220, 348.

Pleistocene (Middle); Maryland.

**Mylohyus pennsylvanicus** (Leidy).

Hay, O. P. 1902 A, 659 (Tayassu).

Allen, G. M. 1926 A, 449.

Baker, F. C. 1920 A, 208, 213, 395.

Gidley, J. W. 1920 A, 674.

Haug, E. 1911 A, 1886.

Hay, O. P. 1923 A, 491.

Holland, W. J. 1908 A, 231 (Tayassu).

1912 B, 750 (Dicotyles).

Osborn, H. F. 1910 B, 471 (Tayassu).

Peterson, O. A. 1926 A, 256, pl. xviii, figs. 1, 2.

Rhoads, S. N. 1903 A, 238.

Schlosser, M. 1902 H, 143.

Trouessart, E. L. 1905 A, 658 (Syn. of *Platygonus vetus*).

Pleistocene (Middle); Pennsylvania.

**Mylohyus? temerarius** Hay.

Hay, O. P. 1914 A, 26, 227, pl. xxi, figs. 1, 2.

Baker, F. C. 1920 A, 464.

Hay, O. P. 1920 B, 85.

1924 D, 148, 158, 298.

Pleistocene (Aftonian); Iowa.

**Mylohyus** sp. indet.

Brown, B. 1908 A, 200, 201, pl. xxiv ("M. sp. b. c."). Pleistocene (Middle); Arkansas. (M. sp. a = M. browni Gidley).

Gidley, J. W. 1915 C, 12, fig. 13. Pleistocene; Maryland.

1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1914 A, 32, 226, pl. xxvi, figs. 3-5; pl. xxvii, fig. 1. Pleistocene; Arkansas.

1921 A, 621. Pleistocene; Washington.

1923 A, 9. Pleistocene (Nebraskan?); Arizona.

1924 D, 157, 251. Pleistocene; Arkansas.

1927 D, 309. Pleistocene; California, Florida, Nebraska.

Merriam, J. C. 1915 E, 226, fig. 40. Pleistocene? (Etchegoin); California.

1917 A, 425 (This genus?). Pleistocene? (Etchegoin); California.

Sellards, E. H. 1916 C, 149, 158, pl. xxx, fig. 2 ("peccary." This genus?). Pleistocene, Florida

**TAYASSU** Fischer. Type *T. pecari* Fischer.

Unless otherwise indicated the authors as quoted below, use the generic name *Dicotyles*.  
Hay, O. P. 1902 A, 659 (Tayassu).

Abel, O. 1906 A, 58.

1912 F, 237, fig. 168.

Adams, C. C. 1905 A, 54 ("peccary").

- Allen, J. A. 1892 A.  
1902 A, 164 (Tayassu).
- Ameghino, F. 1885 A, 203 (Dicotyle).  
1899 A, 1010.  
1905 A.
- Ardt, T. 1907 D, 259.
- Barbour, E. H. 1925 B, 32 (Dicotyles=Tagassu).
- Behlen, H. 1906 A, 190.
- Boas, J. E. V. 1884 B, 395.
- Boule and Thevenin 1920 A, 163.
- Bronn, H. G. 1849 A, 705.
- Brown, B. 1908 A, 201 (Tayassu).
- Burmeister, H. 1879 B, 471.
- Cope, E. D. 1895 G, 596 (Dicotyles).
- Doran, A. H. G. 1878 A, 423, pl. lxi (Dicotyles).
- Elliot, D. G. 1901 A, 33, pl. xi.
- Fischer, J. B. 1829 A, 419 (Dicotyles).
- Gidley, J. W. 1904 A, 267 (Tayassu).  
1920 A, 655 (Tayassu).
- Giebel, C. G. 1855 A, 71.  
1883 A, pl. xlii.
- Gill, T. 1902 B, 38 (Tayassu).
- Gregory, W. K. 1920 A, 191, fig. 165.
- Hay, O. P. 1912 D, 595, 596 (Tayassu).  
1914 A, 212, 213, pl. xix (T. angulatus).
- Heilprin, A. 1887 A, 374.
- Hensel, R. 1879 A, 535.
- Hoever, R. 1911 A, 90.
- Kampfen, P. N. 1905 A, 584, fig. 68 (Dicotyles).
- Knottnerus-Meyer, T. 1907 A, 6, pl. 1, fig. 1 (Tayassus).
- Leche, W. 1887 A.  
1912 A, 82.
- Leunis and Ludwig 1883 A, 241 (Dicotyles).
- Leuthardt, F. 1891 A, 136 (Dicotyles).
- Lull, R. S. 1904 C, 7.
- Matthew, W. D. 1907 A, 217.  
1924 C, 177, 178 (Dicotyles).
- Merriam, C. H. 1892 A, 60.
- Miller, G. S. 1912 B, 384 (Tayassu).  
1924 C, 482.
- Osborn, H. F. 1907 G, 197, fig. 99.  
1910 B, 472, 549.  
1910 D, 466, 470, 488 (Mylohyus).
- Owen, R. 1866 A, 458, 470 (Pecari).  
1868 A, 877.
- Palmer, T. S. 1904 A, 666, 930 (Tayassu); 955 (Tagassu).
- Pearson, H. S. 1923 A, 65.
- Peterson, O. A. 1912 B, 167 (Tayassu).
- Pictet, F. J. 1853 A, 326 (Dicotyles).
- Retzius, A. 1849 A, 659.
- Schlosser, M. 1902 K, 466, 469, 472.
- Schmidt, O. 1886 A, 130, fig. 12 ("peccary").
- Scott, W. B. 1913 A, 236, 364 (Tagassu).
- Strecker, C. 1887 A, 311 (Dicotyles).
- Thomas, O. 1902 A, 153 (Tayassu).  
1902 B, 197 (Tayassu).
- Thomas and Miller 1905 A, 463 (Tagassu rejected).
- Trouessart, E. L. 1905 A, 658 (Tayassus).
- Turner, H. N. 1850 B, 105 ("peccary").
- Wagner, R. 1843 A.
- Wallace, A. R. 1876 A, 1, 493 (Dicotyles).
- Weber, M. 1904 A, 629, 652, 653, fig. 453.
- Weber and Abel 1928 A, 520, 553, fig. 348 (Dicotyles).
- Weber and Burlet 1927 A, 78, fig. 190 (Dicotyles).
- Williston, S. W. 1902 L, 918.
- Wright, R. R. 1883 A, 267 (Dicotyles).
- Zittel and Schlosser 1911 A, 473.  
1923 A, 561, 682 (Dicotyles).
- Tayassu hesperius (Marsh).**  
Hay, O. P. 1902 A, 659.  
Trouessart, R. L. 1905 A, 659 (Tayassus).  
"Pliocene"; Oregon.
- Tayassu lenis (Leidy).**  
Hay, O. P. 1902 A, 659 (Tayassu tajacu, in part).  
Baker, F. C. 1920 A, 473.  
Cope, E. D. 1867 F, 138 ("peccary").  
Hay, O. P. 1912 D, 596, pl. iv, fig. 2.  
1914 A, 38, 213  
1917 E, 45, 48, pl. iii, figs. 2, 3.  
1918 C, 346 (Tayassu).  
1919 D, 367 (Tagassu).  
1923 A, 496 (Tagassu).  
1924 B, 261 ("peccary").  
1924 D, 159, 287 (Tagassu, Dicotyles).  
1927 D, 274.
- Holmes, F. S. 1859 A, 184 ("peccary").  
1860 A, iv, vi, vii ("peccary").
- Loomis, F. B. 1924 C, 506.
- Whitney, J. P. 1866 A, 162 ("peccary").  
Wisconsin, Iowa, Illinois?, Indiana, Kentucky?, Maryland, South Carolina, Florida.
- Tayassu sp. indet.**  
Hay, O. P. 1902 A, 660.  
Cope, E. D. 1867 C, 152 (Cynorca protervus, in part). Miocene (Calvert); Maryland.  
1868 I, 185 (Dicotyles, canine).  
Freudenberg, W. 1921 A, 139 (Dicotyles), Pleistocene; Mexico.  
1922 A, 5 (Dicotyles).
- Gidley, J. W. 1927 E, 274. Pleistocene; Florida.
- Hay, O. P. 1923 A, 222, 363 (Tagassu). Pleistocene; Maryland, Florida.  
1927 D, 274. Pleistocene; Florida.
- MacCurdy, G. G. 1917 A, 267 ("peccary"). (This genus?) Pleistocene; Florida.
- Merriam, J. C. 1917 A, 425 (This genus?). Pleistocene? (Etchegoin); California.
- Sellards, E. H. 1916 E, 16 ("peccary, indet."). Pleistocene; Florida.

# PECARI Reichenbach. Type *Sus torquatus* (Cuvier).

- Reichenbach, H. G. L. 1835, Bildergallerie der Tierwelt, etc., 2te Aufl., Heft vi, pl. xxi, fig. 2.
- Miller, G. S. 1912 B, 383.  
1924 C, 481.
- Palmer, T. S. 1904 A, 518, 930.
- Pecari sp. indet.**  
Gidley, J. W. 1927 E, 274. Pleistocene; Florida.



THINOTHERIUM Cope. Type *T. annulatum* Cope. Not of March 1872.

Hay, O. P. 1902 A, 661.  
Palacký, J. 1903 B, 312.  
Palmer, T. S. 1904 A, 674, 926.  
Trouessart, E. L. 1905 A, 658.

**Thinotherium annulatum** Cope.

Hay, O. P. 1902 A, 661.  
Clark and Miller 1912 A, 167, 168.  
Miocene (Yorktown); Virginia.

### Suborder AGRIOCHÆRIFORMES, new name.

Osborn, H. F. 1910 B, 549 (Oreodonta).

#### Superfamily AGRIOCHÆROIDÆ, new name.

Gill, T. 1872 B, 10 (Oreodontoidea).

#### AGRIOCHÆRIDÆ Leidy.

Leidy, J. 1869 A, 131.  
Hay, O. P. 1902 A, 662.  
Abel, O. 1913 B, 729, 741 (Oreodontidæ).  
1914 A, 121, 165 (Oreodontidæ).  
Arlt, T. 1907 D, 669 (Oreodontidæ).  
1912 A, 700, 746.  
Dollo, L. 1889 D, 681 (Creodontidæ, error for Oreodontidæ).  
Douglass, E. 1901 B, 257 (Oreodontidæ).  
Loomis, F. B. 1925 E, 592 ("agriochærids").

Matthew, W. D. 1908 A, 559, 560.  
1909 C, 113, 115, 117, 118.  
1924 C, 181.  
O'Harra, C. C. 1920 A, 123 (Oreodontidæ).  
Osborn, H. F. 1909 D, 63.  
Peterson, O. A. 1906 C, 30.  
Scott, W. B. 1913 A, 250, 361, 383, 675.  
Weber and Abel 1928 A, 609 (Oreodontidæ).  
Winge, H. 1906 A, 70 (Oreodontini).  
Zittel and Schlosser 1911 A, 482 (Oreodontidæ).  
1923 A, 571, 602 (Oreodontidæ).

#### AGRIOCHÆRINÆ Gill.

Gill, T. 1872 B, 10.  
Hay, O. P. 1902 A, 662.  
Abel, O. 1913 B, 729, 741.  
1914 A, 165.  
1919 A, 805.  
Arlt, T. 1907 D, 256.  
Kampfen, P. N. 1905 A, 593

Matthew, W. D. 1901 B, 371, 395.  
Osborn, H. F. 1893 M, 96 (Artionychia).  
Trouessart, E. L. 1905 A, 666.  
Weber and Abel 1928 A, 609.  
Winge, H. 1906 A, 134 (Agriochæri).  
Zittel and Schlosser 1911 A, 482.  
1923 A, 571.

#### PROTAGRICHÆRUS Scott. Type *P. annectens* Scott.

Hay, O. P. 1902 A, 662.  
Loomis, F. B. 1924 B, 15.  
Matthew, W. D. 1909 C, 103.  
1910 H, 474.  
Osborn, H. F. 1905 I, 101.  
1910 B, 170, 549.  
Palmer, T. S. 1904 A, 577, 912.  
Peterson, O. A. 1919 A, 86.  
Scott, W. B. 1913 A, 383, 385.  
Stehlin, H. G. 1908 A, 835.  
Thorpe, M. R. 1925 A, 70, 74, 82.

Weber, M. 1904 A, 664.  
Weber and Abel 1928 A, 609.  
Zittel and Schlosser 1911 A, 482.  
1923 A, 571, 669.

#### **Protagrichærus annectens** Scott.

Hay, O. P. 1902 A, 662.  
Matthew, W. D. 1909 C, 100.  
Peterson, O. A. 1919 A, 76, 86, pl. xl, figs. 19-27.  
Trouessart, E. L. 1905 A, 666.  
Upper Eocene (Uinta); Utah.

#### AGRIOCHÆRUS Leidy. Type *A. antiquus* Leidy.

Hay, O. P. 1902 A, 662.  
Abel, O. 1914 A, 167.  
Beddard, F. E. 1902 A, 211, 331.  
Douglass, E. 1905 A, 211.  
Flower, W. H. 1873 B, 102.  
Gaudry, A. 1891 C, 146.  
Giebel, C. G. 1883 A, 133.  
Gregory, W. K. 1920 A, 188, fig. 155.  
Haug, E. 1911 A, 1528, 1529, 1705.  
Heilprin, A. 1887 A, 383.  
Kampfen, P. N. 1905 A, 591.  
Koken, E. 1901 B, 224 (Artionyx).  
Lambe, L. M. 1905 A, 370A.  
Lobley, J. L. 1908 A, 213 (Agriochaetus).  
Loomis, F. B. 1925 E, 591, figs. 5, 6.  
Lucas, F. A. 1901 F, 482.  
Lull, R. S. 1917 B, 338.

Major, C. J. F. 1880 A, 33.  
Matthew, W. D. 1901 B, 370.  
1909 C, 111.  
1910 H, 474.  
1911 C, 163.  
1915 K, 420.  
1917 A, 573.  
1924 E, 743.  
Merriam and Sinclair 1907 A, 193.  
Moodie, R. L. 1913 A, 186.  
O'Harra, C. C. 1910 A, 109, 145.  
Osborn, H. F. 1893 M, 95 (Artionyx).  
1905 H, 201.  
1909 D, 68.  
1910 B, 214, 220, 222, 231, 549.  
1912 G, 246.  
Palmer, T. S. 1904 A, 84, 911.

Peterson, O. A. 1919 A, 84.

Schlosser, M. 1898 F, 127.

1899 H, 550.

Scott, W. B. 1896 D, 50.

1913 A, 252 (fig. 133), 384, 675.

Sinclair, W. J. 1924 A, 126.

Stehlin, H. G. 1908 A, 835.

Thorpe, M. R. 1921 E, 111.

1923 E, 243.

1924 B, 219.

1925 A, 72, 82.

Trouessart, E. L. 1905 A, 666.

Wallace, A. R. 1876 A, i, 138.

Weber, M. 1904 A, 664.

Weber and Abel 1928 A, 608, 609.

Winge, H. 1906 A, 132.

Zittel and Schlosser 1911 A, 482.

1923 A, 571, 671, 672.

### **Agriochœrus antiquus Leidy.**

Hay, O. P. 1902 A, 663.

Cook, H. J. 1912 D, 37.

Douglass, E. 1907 A, 822 (This species?).

Gervais, P. 1859 A, 360.

Lambe, L. M. 1905 D, 367A (This species?).

1908 A, 10, 28, pl. ii, figs. 16, 17.

Major, C. J. F. 1880 A, 33.

Matthew, W. D. 1901 B, 369.

1909 C, 106.

O'Harra, C. C. 1920 A, 153, pl. xli.

Scott, W. B. 1913 A, 384, fig. 206.

Sinclair, W. J. 1924 A, 102, 126.

Thorpe, M. R. 1921 E, 112.

1924 B, 219.

Middle Oligocene (Brule); Nebraska, South Dakota.

### **Agriochœrus antiquus dakotensis**

Thorpe.

Thorpe, M. R. 1921 E, 112, fig. 1.

Middle Oligocene (Brule); South Dakota.

### **Agriochœrus auritus Leidy.**

Hay, O. P. 1902 A, 663.

Thorpe, M. R. 1921 E, 118.

1924 B, 219.

Upper Oligocene (Protoceras beds); South Dakota.

### **Agriochœrus bullatus Thorpe.**

Thorpe, M. R. 1921 E, 115, figs. 2-4.

Upper Oligocene (Upper John Day); Oregon.

### **Agriochœrus ferox (Cope).**

Hay, O. P. 1902 A, 663.

Cope and Matthew 1915 A, pl. cxiii (Coloreodon; Agriochœrus).

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 187, 191, 192.

Thorpe, M. R. 1921 E, 117.

Upper Oligocene (John Day); Oregon.

### **Agriochœrus gaudryi (Osborn and Wortman).**

Hay, O. P. 1902 A, 663.

Cook, H. J. 1912 D, 39.

Matthew, W. D. 1909 C, 109.

O'Harra, C. C. 1920 A, 154.

Upper Oligocene (Brule); South Dakota.

### **Agriochœrus guyotianus Cope.**

Hay, O. P. 1902 A, 663.

Cope and Matthew 1915 A, pl. cxii; pl. cxiii, figs. 1, 2 (A. guotianus; A. guyotianus).

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 187, 188, 190.

Peterson, O. A. 1928 B, 142.

Thorpe, M. R. 1921 E, 118.

Upper Oligocene (John Day); Oregon.

### **Agriochœrus latifrons Leidy.**

Hay, O. P. 1902 A, 663.

Beddard, F. E. 1902 A, 332, fig. 178.

Cook, H. J. 1912 D, 37.

Giebel, C. G. 1883 A, pl. xlv.

Loomis, F. B. 1924 B, 3, figs. 2, 3.

Matthew, W. D. 1909 C, 106.

O'Harra, C. C. 1910 A, 110, fig. 16.

1920 A, 124, 152, fig. 62.

Peterson, O. A. 1914 E, 133.

1928 B, 150, 158.

Scott, W. B. 1913 A, 383 (fig. 205), 385 (fig. 207).

Sinclair, W. J. 1924 A, 126.

Thorpe, M. R. 1921 E, 117.

Weber and Abel 1928 A, 609, fig. 402.

Zittel and Schlosser 1911 A, 482, fig. 672.

1923 A, 571, fig. 713.

Middle Oligocene (Brule); South Dakota.

### **Agriochœrus macrocephalus (Cope).**

Hay, O. P. 1902 A, 663.

Cope and Matthew 1915 A, pl. cxiii, figs. 3, 4 (Coloreodon, Agriochœrus).

Matthew, W. D. 1909 C, 109.

Thorpe, M. R. 1921 E, 117.

Upper Oligocene (John Day); Oregon.

### **Agriochœrus major Leidy.**

Hay, O. P. 1902 A, 664.

Abel, O. 1914 A, 167, fig. 121.

Cook, H. J. 1912 D, 39.

Matthew, W. D. 1909 C, 109.

O'Harra, C. C. 1920 A, 154.

Thorpe, M. R. 1924 B, 219.

Weber, M. 1904 A, 663, fig. 477.

Weber and Abel 1928 A, 609, fig. 403.

Upper Oligocene (Brule); South Dakota, Nebraska, Wyoming.

### **Agriochœrus maximus Douglass.**

Douglass, E. 1901 B, 242, 267, pl. ix, fig. 4.

1903 A, 150.

1907 A, 822 (This genus?).

Matthew, W. D. 1909 C, 104.

Thorpe, M. R. 1921 E, 118.

Trouessart, E. L. 1905 A, 666.

Lower Oligocene (Pipestone Creek); Montana.

### **Agriochœrus migrans (Marsh).**

Hay, O. P. 1902 A, 664.

Cook, H. J. 1912 D, 39.

Matthew, W. D. 1909 C, 109.

O'Hara, C. C. 1920 A, 154.  
 Thorpe, M. R. 1921 E, 114.  
 Upper Oligocene (Brule); South Dakota or Nebraska.

**Agriochœrus minimus** Douglass.

Douglass, E. 1901 B, 242, 268.

1903 A, 149.

1907 A, 822.

Matthew, W. D. 1909 C, 104.

Thorpe, M. R. 1921 E, 118.

Lower Oligocene (Pipestone Creek); Montana.

**Agriochœrus ryderanus** Cope.

Hay, O. P. 1902 A, 664.

Cope and Matthew 1915 A, pl. cxi, fig. 4  
 (Coloreodon, *Agriochœrus*).

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 187.

Thorpe, M. R. 1921 E, 117.

Upper Oligocene (John Day); Oregon.

**Agriochœrus trifrons** Cope.

Hay, O. P. 1902 A, 664.

Matthew, W. D. 1909 C, 109.

Merriam and Sinclair 1907 A, 187.

Thorpe, M. R. 1921 E, 117.

Upper Oligocene (John Day); Oregon.

**Agriochœrus** sp. indet.

Cook, H. J. 1912 D, 35. Lower Oligocene  
 (Chadron); South Dakota or Nebraska.

Matthew, W. D. 1909 C, 104. Lower Oligocene  
 (Chadron); South Dakota or Nebraska.

Merriam and Sinclair 1907 A, 188, 190. Upper  
 Oligocene (John Day); Oregon.

PROTOREODONTINÆ Scott.

Scott, W. B. 1890 B, 320, 361.

Hay, O. P. 1902 A, 664.

Kampfen, P. N. 1905 A, 593.

Matthew, W. D. 1901 B, 395.

Palacký, J. 1903 B, 306, 307 ("protoreodontiden").

Palmer, T. S. 1904 A, 766, 911 (Protoreodontinæ,  
 Protoreodontinæ).

Scott, W. B. 1890 A, 503 (Protoreodontidæ).

Trouessart, E. L. 1905 A, 666.

PROTOREODON Scott and Osborn. Type *P. parvus* Scott and Osborn.

Hay, O. P. 1902 A, 664 (Protoreodon, Eomeryx).

Beddard, F. E. 1902 A, 332.

Haug, E. 1911 A, 1528.

Kampfen, P. N. 1905 A, 591.

Loomis, F. B. 1924 B, 15 (Oreodontoides,  
 Eomeryx).

Matthew, W. D. 1909 C, 103.

1910 H, 474.

1924 E, 748.

Osborn, H. F. 1905 I, 101.

1910 B, 170, 549.

Palmer, T. S. 1904 A, 584, 912 (Protoreodon);  
 363, 911 (Eomeryx).

Peterson, O. A. 1919 A, 86.

Schlosser, M. 1899 H, 550.

1901 D, 462.

1903 A, 290 (Eomeryx); 291 (Protoreodon).

1904 C, 95.

Scott, W. B. 1913 A, 267, 380.

Stehlin, H. G. 1908 A, 835.

Thorpe, M. R. 1925 A, 70.

Trouessart, E. L. 1905 A, 666.

Weber, M. 1904 A, 663, 664.

Weber and Abel 1928 A, 609.

Winge, H. 1906 A, 132.

Woodward, A. S. 1898 D, 330.

Zittel and Schlosser 1911 A, 482.

1923 A, 572, 669 (Protoreodon, Eomeryx).

**Protoreodon medius** Peterson.

Peterson, O. A. 1919 A, 82, pl. xl, figs. 1-16;  
 text-fig. 13.

Loomis, F. B. 1924 B, 6, fig. 4.  
 Upper Eocene (Uinta); Utah.

**Protoreodon minor** Scott.

Hay, O. P. 1902 A, 664

Matthew, W. D. 1909 C, 100.

Trouessart, E. L. 1905 A, 666.

Upper Eocene (Uinta); Utah.

**Protoreodon paradoxicus** Scott.

Hay, O. P. 1902 A, 664.

Matthew, W. D. 1909 C, 100.

Trouessart, E. L. 1905 A, 666.

Upper Eocene (Uinta); Utah.

**Protoreodon parvus** Scott and Osborn.

Hay, O. P. 1902 A, 664.

Granger, W. 1910 A, 240 (This species?).

Matthew, W. D. 1909 C, 100.

Scott, W. B. 1913 A, 380, fig. 203.

Trouessart, E. L. 1905 A, 666.

Upper Eocene (Uinta); Utah.

**Protoreodon pumilis** (Marsh).

Hay, O. P. 1902 A, 665 (Eomeryx).

Matthew, W. D. 1909 C, 100.

Trouessart, E. L. 1905 A, 666.

Upper Eocene (Uinta); Utah.

**Protoreodon** sp. indet.

Hay, O. P. 1902 A, 664. Upper Eocene (Uinta);  
 Utah.

HYOMERYX Marsh. Type *H. breviceps* Marsh.

Hay, O. P. 1902 A, 665.

Haug, E. 1911 A, 1528.

Matthew, W. D. 1909 C, 103.

Palmer, T. S. 1904 A, 333, 911.

Stehlin, H. G. 1908 A, 835.

Weber and Abel 1928 A, 609.

Zittel and Schlosser 1911 A, 482 (Syn. of Protoreodon).

1923 A, 572 (Syn. of Protoreodon).

# MERYCOIDODONTINÆ.

Unless otherwise indicated the authors quoted employ the name Oreodontidae.

Hay, O. P. 1902 A, 665 (Merycoidodontinæ).

Abel, O. 1913 B, 729, 742 (Oreodontinæ).

1914 A, 165 (Oreodontinæ).

1919 A, 805 (Oreodontinæ, Oreodontidæ).

1920 A, 436 ("oreodontiden").

Ameghino, F. 1889 A, 1020.

Ardt, T. 1907 D, 256 (Oreodontinæ).

Beddard, F. E. 1902 A, 330.

Behlen, H. 1907 A, 278 ("oreodontiden").

Case, E. C. 1899 B, 172

Cope, E. D. 1880 U, 152 ("oréodontides").

Flower, W. H. 1873 B, 102.

Giebel, C. G. 1883 A, 132 ("oreodontiden").

Gregory, W. K. 1920 A, 188.

Hoernes, R. 1886 A, 674.

Howes, G. B. 1902 A, 523.

Kampfen, P. N. 1905 A, 591 (Oreodontinæ).

Koken, E. 1893 B, 481 ("oreodontiden").

Loomis, F. B. 1920 A, 281, 286 (Oreodontidæ, Oreodontinæ).

1924 A, 369 (Oreodontidæ).

1924 B, 1, 5, 14 (Oreodontidæ).

1925 E, 585, 594 ("oreodonts").

McClung, C. E. 1906 A, 70 ("oreodonts").

Matthew, W. D. 1901 B, 371, 395 (Oreodontinæ).

1910 H, 475 ("oreodonts").

1911 C, 163 ("oreodonts").

1915 A, 254 ("oreodonts").

1915 K, 459 ("oreodonts").

# BATHYGENYS Douglass.

Douglass, E. 1901 B, 256.

Loomis, F. B. 1924 B, 15.

Matthew, W. D. 1909 C, 111.

1910 H, 474.

1915 K, 420.

Zittel and Schlosser 1911 A, 482.

1923 A, 572.

# Hyomeryx breviceps Marsh.

Hay, O. P. 1902 A, 665.

Matthew, W. D. 1909 C, 100.

Upper Eocene (Uinta); Utah.

Matthew, W. D. 1924 E, 745

1928 B, 968, 981, fig. 16 ("oreodonts").

Matthew and Cook 1909 A, 391 (Oreodontinæ).

Merriman, J. C. 1901 B, 589 ("oreodonts").

O'Harra, C. C. 1910 A, 108.

Osborn, H. F. 1905 H, 219.

1905 I, 101.

1909 D, 57, 132.

1910 B, 625.

Palacký, J. 1903 B, 306, 310 ("oreodontiden").

Peterson, O. A. 1928 B, 166 ("oreodonts").

Schlosser, M. 1902 J, 257 ("oreodontiden").

1904 C, 95 ("oreodontiden").

1911 A, 165 ("oreodontiden").

Schwarz, E. 1924 A, 420 ("oreodonts").

Scott, W. B. 1913 A, 361, 372.

Stehlen, H. G. 1908 A, 835 ("oreodontiden").

1910 A, 1088 ("oreodontiden").

Thorpe, M. R. 1921 D, 94.

1923 E, 239 (Merycoidodontidæ).

1925 A, 69 ("oreodonts").

Trouessart, E. L. 1905 A, 667.

Weber, M. 1904 A, 662.

Weber and Abel 1928 A, 426, 608, 609.

Winge, H. 1906 A, 70, 134 (Oreodontes).

Woodward, A. S. 1898 B, 354.

1923 C, 39.

Zittel, K. A. 1897 A, 126 ("oreodontiden").

Zittel and Schlosser 1911 A, 482 (Oreodontidæ, Oreodontinæ).

1923 A, 572, 669, 670 (Oreodontinæ).

# Type *B. alpa* Douglass.

## Bathygenys alpha Douglass.

Douglass, E. 1901 B, 258, pl. ix, figs. 7, 8.

1907 A, 822.

Matthew, W. D. 1903 B, 220, fig. 14.

1909 C, 104.

Trouessart, E. L. 1905 A, 669.

Lower Oligocene (Pipestone Creek); Montana.

# MERYCODODON Leidy. Type *M. culbertsonii* Leidy.

Hay, O. P. 1902 A, 665.

Abel, O. 1926 B, 453 (Oreodon).

Beddard, F. E. 1902 A, 330 (Oreodon).

Black, D. 1920 A, 271-314, figs. 1-48 (Oreodon).

Dall and Harris 1892 A, 289 (Oreodon).

Douglass, E. 1906 A, 565.

1907 B, 86.

1909 C, 231.

Fairchild, H. L. 1894 A, 208 (Oreodon).

Frech, F. 1906 A, 492 (Oreodon).

Gaudry, A. 1891 C, 146 (Oreodon).

1896 A, 87, 183, figs. 61, 177 (Oreodon).

Giebel, C. G. 1883 A, 132 (Oreodon).

Gregory, W. K. 1912 F, 286 (Oreodon).

1920 A, 188, fig. 156 (Oreodon).

Grinnell, G. B. 1923 A, 334 (Oreodon).

Haug, E. 1911 A, 1528, 1705 (Oreodon).

Hayden, F. V. 1871 A, 105 ("ruminants").

Heilprin, A. 1887 A, 382 (Oreodon).

Hoernes, R. 1886 A, 674 (Oreodon).

Kampfen, P. N. 1905 A, 591 (Oreodon).

Kingsley, J. S. 1925 A, 213, fig. 227 (Oreodon).

Loomis, F. B. 1924 A, 369.

1924 B, 7, 14, 15.

1925 A, 244.

1925 B, 226 ("oreodonts").

1925 E, 589, figs. 3, 4, 6.

1926 A, 103.

1928 A, 142.

Matthew, W. D. 1901 B, 369, 395 (Oreodon).

1903 B, 221 (Oreodon).

1910 H, 474 (Oreodon).

1915 K, 420 (Oreodon).

1917 A, 573 (Oreodon).

- Matthew, W. D. 1924 E, 748 (Oreodon).  
1928 B, 964 (Oreodon).  
Merriam, J. C. 1915 F, 259 ("oreodon").  
O'Harra, C. C. 1920 A, 124 (Oreodon).  
Osborn, H. F. 1909 D, 23, 87 (Oreodon).  
1910 B, 218 (Merycoidodon); 625, fig. 104 (Oreodon).  
Palmer, T. S. 1904 A, 412, 912.  
Peterson, O. A. 1914 E, 181.  
1919 A, 84, 87.  
1923 C, 98.  
1928 B.  
Rogers, A. F. 1924 A, 545 (Oreodon).  
Schlosser, M. 1899 H, 547 (Oreodon).  
1901 A, 492 (Oreodon).  
1901 D, 462 (Oreodon).  
1903 A, 290 (Oreodon).  
1904 C, 96 (Oreodon).  
Schuchert and Levene 1927 A, 335, fig.  
Scott, W. B. 1913 A, 252, 258, 379, fig. 133.  
Seeley, H. G. 1878 A, 223 (Oreodon).  
Sinclair, W. J. 1921 A, 458, 462 (Oreodon).  
1924 A, 127 (Oreodon).  
Stehlin, H. G. 1908 A, 335 (Oreodon).  
Stemmann, G. 1907 A, 496 (Oreodon).  
Thorpe, M. R. 1921 A, 223 (Oreodon).  
1921 G, 334.  
1923 C, 226.  
1923 E, 239.  
1924 A, 318.  
1924 D, 122 (Oreodon, Merycoidodon).  
1925 A, 71, 81, 82.  
Trouessart, E. L. 1905 A, 667.  
Weber, M. 1904 A, 663 (Oreodon).  
Weber and Abel 1928 A, 609.  
Williston, S. W. 1902 L, 918 (Oreodon).  
Winge, H. 1906 A, 132 (Oreodon).  
Zittel and Schlosser 1911 A, 483 (Oreodon).  
1923 A, 558, 572, fig. 691 (Oreodon).
- Merycoidodon affinis (Leidy).**  
Hay, O. P. 1902 A, 665.  
Cook, H. J. 1912 D, 35.  
Matthew, W. D. 1909 C, 104 (Oreodon).  
O'Harra, C. C. 1920 A, 150 (Oreodon).  
Thorpe, M. R. 1921 G, 339, 341.  
Oligocene (Chadron); Nebraska, Colorado.
- Merycoidodon culbertsonii Leidy.**  
Hay, O. P. 1902 A, 666.  
Abel, O. 1928 B, 321, 344, figs. 214, 228 (Oreodon).  
Barbour and Cook 1917 A, 165, 171, figs. 4, 6 (Oreodon, Merycoidodon).  
Black, D. 1920 A, 272 (Oreodon).  
Cook, H. J. 1912 D, 37 (M. culbertsoni).  
Darton, N. H. 1901 A, 543 (Oreodon culbertsoni).  
1905 A, 45, 173 (Oreodon).  
Darton and Siebenthal 1910 A, 11 (M. culbertsoni).  
Douglass, E. 1901 B, 253 (Oreodon culbertsoni?).  
1907 A, 822 (This species?).  
1909 C, 283.  
Gervais, P. 1859 A, 360 (Oreodon).  
Giebel, C. G. 1883 A, pl. xlv (Oreodon).  
Gregory, W. K. 1920 A, 188, fig. 156 (Oreodon).
- Hoernes, R. 1886 A, 675, fig. 649 (Oreodon culbertsoni).  
Kampfen, P. N. 1905 A, 592 (Oreodon).  
Lambe, L. M. 1905 D, 387 A (Oreodon).  
1908 A, 10, 29, pl. 11, figs. 18-26.  
Loomis, F. B. 1924 B, 2, figs. 1-4.  
1925 E, 586, figs. 1, 3.  
Matthew, W. D. 1901 B, 358 (Oreodon).  
1909 C, 106 (O. culbertsoni, O. periculorum).  
1910 H, 474 (Oreodon).  
Merrill, G. P. 1907 A, 50 (Oreodon).  
Moodie, R. L. 1915 I, 174, fig. 14.  
1922 C, 365 (Oreodon).  
O'Harra, C. C. 1910 A, 109, 111, pl. xliii, fig. 2 (Oreodon).  
1920 A, 128, pls. xii, xxiv, xl (Oreodon culbertsoni).  
Osborn, H. F. 1904 F, 12, 34 (Oreodon).  
1910 B, 218, fig. 106.  
Peterson, O. A. 1914 E, 167.  
1923 C, 102.  
1928 B, 133, 134.  
Scott, W. B. 1913 A, 259, 378, 382, figs. 136, 202, 204.  
Sinclair, W. J. 1924 A, 101, 102, 127 (Oreodon).  
Stromer, E. 1912 A, 190, fig. 132 (M. culbertsoni).  
Thorpe, M. R. 1921 G, 334, 335, 341.  
1923 C, 225, fig. 1.  
1923 D, 91, 98, figs. 5, 6.  
Trouessart, E. L. 1905 A, 667.  
Weber, M. 1904 A, 663, fig. 476 (Oreodon).  
Weber and Abel 1928 A, 612, fig. 408.  
Zittel and Schlosser 1911 A, 483, figs. 673, 674.  
1923 A, 572, figs. 714, 715 (Oreodon).  
Middle Oligocene (Brule), Montana, Colorado, Nebraska, South Dakota, Wyoming.
- Merycoidodon culbertsonii periculorum (Cope).**  
Cope, E. D. 1884 M, 511, 513 (Oreodon).  
Hay, O. P. 1902 A, 666 (M. culbertsonii, part).  
Sinclair, W. J. 1924 A, 101, 102, 128 (Oreodon).  
Thorpe, M. R. 1921 F, 337, 341.  
Wanless, H. R. 1923 A, 220, pl. iii, fig. 1 (Oreodon).  
Oligocene (Middle); Colorado, Nebraska, Wyoming.
- Merycoidodon gracilis Leidy.**  
Hay, O. P. 1902 A, 666.  
Abel, O. 1919 A, 806 (Oreodon).  
Cook, H. J. 1912 D, 37.  
Darton, N. H. 1905 A, 173 (Oreodon).  
Douglass, E. 1901 B, 260 (Oreodon).  
Gervais, P. 1859 A, 360 (Oreodon).  
Gilmore, C. W. 1906 C, 513, pl. xii.  
Matthew, W. D. 1901 B, 358 (Oreodon).  
1909 C, 106 (Oreodon coloradensis, O. gracilis).  
Merrill, G. P. 1907 A, 50 (Oreodon).  
Moodie, R. L. 1922 C, 365 (Oreodon).  
O'Harra, C. C. 1910 A, 109, 111, pl. xliii (Oreodon).  
1920 A, 128, 153 (Oreodon); pls. xxi, xxxix (Merycoidodon).

- Peterson, O. A. 1914 E, 204.  
 Sinclair, W. J. 1924 A, 102, 128 (Oreodon).  
 Thorpe, M. R. 1921 G, 338, 341.  
     1923 D, 91, figs. 1, 2.  
     1925 A, pls. vi, vii.  
     Oligocene (Lower Brule); Colorado, Wyoming, South Dakota, Nebraska.

**Merycoidodon hybridus** (Leidy).

- Hay, O. P. 1902 A, 666.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 104 (Oreodon)  
 O'Harra, C. C. 1920 A, 150 (Oreodon).  
 Thorpe, M. R. 1924 B, 221 (Eporeodon).  
     Lower Oligocene (Chadron); South Dakota, Nebraska?. Upper Oligocene: Colorado.

**Merycoidodon macrorhinus** Douglass.

- Douglass, E. 1903 A, 149, 163, fig. 8 (Oreodon).  
     1901 B, 243, 253, 264 (Oreodon robustum, preoccupied).  
     1907 A, 822.  
 Matthew, W. D. 1909 C, 106 (Oreodon).  
 Thorpe, M. R. 1921 G, 338, 341.  
     Middle Oligocene (White River); Montana.

**Merycoidodon minor** Cope.

- Hay, O. P. 1902 A, 666.  
     A nomen nudum.

**Merycoidodon platycephalus** Thorpe.

- Thorpe, M. R. 1921 F, 339, 341, figs. 1, 2.  
     Middle Oligocene (Brule); Nebraska.

**Merycoidodon** sp. indet.

- Matthew, W. D. 1901 B, 369 (Oreodon). Oligocene (White River); Nebraska  
 Wanless, H. R. 1923 A, 220 (Oreodon).

PAROREODON Thorpe. Type *P. marshi* Thorpe.

- Thorpe, M. R. 1921 D, 109.  
 Loomis, F. B. 1924 B, 14, 15.  
 Thorpe, M. R. 1923 E, 241.

**Paroreodon marshi** Thorpe.

- Thorpe, M. R. 1921 D, 109, figs. 14-16.  
 Loomis, F. B. 1924 B, 30.  
     Upper Oligocene (Middle John Day); Oregon.

EUCROTAPHUS Leidy. Type *E. jacksoni* Leidy.

- Hay, O. P. 1902 A, 666.  
 Douglass, E. 1906 A, 566.  
 Loomis, F. B. 1924 A, 369.  
 Matthew, W. D. 1910 H, 474.  
 Thorpe, M. R. 1924 B, 219.  
     1924 D, 124.  
 Trouessart, E. L. 1905 A, 668.  
 Weber and Abel 1923 A, 609.  
 Zittel and Schlosser 1911 A, 483 (Syn. of Eporeodon).  
     1923 A, 572 (Syn. of Eporeodon).

**Eucrotaphus dickinsonensis** Douglass.

- Douglass, E. 1907 C, 99, pl. xxii.  
 Loomis, F. B. 1924 B, 8, fig. 5 (Eporeodon).  
 Thorpe, M. R. 1924 B, 222 (Eporeodon).  
     Oligocene (Oreodon); North Dakota.

**Eucrotaphus helenæ** Douglass.

- Douglass, E. 1901 B, 243, 253, 265.  
     1903 A, 149.  
     1907 A, 822.

- Thorpe, M. R. 1924 B, 221 (Eporeodon).  
 Trouessart, E. L. 1905 A, 668.  
     Oligocene (White River); Montana.

**Eucrotaphus jacksoni** Leidy.

- Hay, O. P. 1902 A, 666.  
 Cook, H. J. 1912 D, 39 (Eucrotaphus).  
 Gervais, P. 1859 A, 360 (E. jacksoni).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187 (E. occidentalis, in part).  
 Thorpe, M. R. 1924 B, 219.  
 Trouessart, E. L. 1905 A, 668.  
     Oligocene (Upper): (Brule); Nebraska.

**Eucrotaphus montanus** Douglass.

- Douglass, E. 1907 C, 100, pl. xxiii.  
     1907 A, 822.  
 Loomis, F. B. 1924 B, 37 (Eporeodon).  
 Thorpe, M. R. 1924 B, 222 (Eporeodon).  
     Miocene (Lower) or Oligocene (Upper); Montana.

OREODONTOMES Thorpe. Type *O. oregonensis* Thorpe.

- Thorpe, M. R. 1921 D, 107.  
     1923 E, 241.  
     1924 A, 316.

**Oreodontoides oregonensis** Thorpe.

- Thorpe, M. R. 1921 D, 107, figs. 9, 10.  
 Loomis, F. B. 1924 B, 14, 30, 31.  
 Thorpe, M. R. 1924 A, 316, figs. 1-3.  
     Upper Oligocene (Upper John Day); Oregon.

EPOREODON Marsh. Type *Oreodon occidentalis* Marsh.

- Hay, O. P. 1902 A, 667.  
 Condon, T. 1902 A, 114, pls. viii-x, xii ("oreodons").

- Condon, T. 1910 A, 96, pls. viii-x, xii ("oreodons").  
 Douglass, E. 1901 B, 266.

- Douglass, E. 1906 A, 566.  
 Gregory, W. K. 1920 A, 139, fig. 158.  
 Haug, E. 1911 A, 1529, 1705.  
 Loomis, F. B. 1924 B, 9, 15, 36.  
 Matthew, W. D. 1901 B, 370, 373, 396, 398.  
     1901, in Merriam, J. C. 1901 A, 296  
     1907 A, 172, 176.  
     1909 C, 111, 119.  
     1910 H, 474.  
     1924 E, 748.  
 Merriam, J. C. 1901 A, 297 (Paracotylops).  
     1915 E, 233.  
 Osborn, H. F. 1909 D, 64, 125.  
     1910 B, 220, 231, 549.  
     1912 G, 246.  
 Palmer, T. S. 1904 A, 268, 911.  
 Peterson, O. A. 1928 B, 141.  
 Rogers, A. F. 1924 A, 545.  
 Scott, W. B. 1913 A, 375, 379.  
 Sinclair, W. J. 1924 A, 127.  
 Sternberg, C. 1881 A, 541 ("Oreodon").  
     1884 B, 676 ("Oreodon").  
 Thorpe, M. R. 1921 D, 93.  
     1923 E, 241 (Oreodontoides).  
     1924 B, 220  
     1924 D, 126.  
     1925 A, 72, 82.  
 Trouessart, E. L. 1905 A, 668.  
 Wallace, A. R. 1876 A, 1, 138  
 Weber, M. 1904 A, 623.  
 Weber and Abel 1928 A, 610.  
 Winge, H. 1906 A, 133.  
 Zittel and Schlosser 1911 A, 433.  
     1923 A, 572, 672.

### **Eporeodon bullatus (Leidy).**

- Hay, O. P. 1902 A, 665 (Merycoidodon).  
 Cook, H. J. 1912 D, 37 (Merycoidodon. This species?).  
 Kampfen, P. N. 1905 A, 592 (Oreodon).  
 Matthew, W. D. 1909 C, 104, 106 (Oreodon. This species?).  
     1910 H, 474 (Oreodon).  
 O'Hara, C. C. 1920 A, 150 (Oreodon).  
 Peterson, O. A. 1928 B, 165 (Merycoidodon).  
 Sinclair, W. J. 1924 A, 102, 127.  
 Stromer, E. 1912 A, 199, fig. 183 (Merycoidodon bullatum).  
 Thorpe, M. R. 1921 D, 104.  
     1924 B, 220.  
 Trouessart, E. L. 1905 A, 667 (Merycoidodon).  
 Wanless, H. R. 1923 A, 224 (Oreodon).  
     Oligocene (Chadron and Lower Brule); Nebraska.

### **Eporeodon cedrensis Matthew.**

- Matthew, W. D. 1901 B, 396 (E. major cedrensis).  
     1909 C, 109.  
 Thorpe, M. R. 1924 B, 224 (E. major cedrensis).  
 Trouessart, E. L. 1905 A, 668.  
     Upper Oligocene (Brule); Colorado.

### **Eporeodon condoni Thorpe.**

- Thorpe, M. R. 1921 C, 104, figs. 6-8.  
     Upper Oligocene (Middle John Day); Oregon.

### **Eporeodon leptacanthus (Cope).**

- Cope, E. D. 1884 M, 519 (Euclotaphus jacksoni leptacanthus).  
 Hay, O. P. 1902 A, 666 (Euclotaphus jacksoni, in part).  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 189, 190 (E. occidentalis leptacanthus).  
 Thorpe, M. R. 1921 D, 95, 97.  
 Trouessart, E. L. 1905 A, 668 (E. occidentalis leptacanthus).  
     Oligocene (Upper); Oregon.

### **Eporeodon longifrons (Cope).**

- Hay, O. P. 1902 A, 667.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 191, 192 (E. major longifrons).  
 Thorpe, M. R. 1921 D, 103.  
 Trouessart, E. L. 1905 A, 668.  
     Oligocene (Upper); Oregon.

### **Eporeodon major (Leidy).**

- Hay, O. P. 1902 A, 667 (Eporeodon?).  
 Cook, H. J. 1912 D, 39 (This genus?).  
 Giebel, C. G. 1883 A, pl. xlv (Oreodon).  
 Kampfen, P. N. 1905 A, 592.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187 (E. occidentalis, in part).  
 O'Hara, C. C. 1910 A, 109, pl. xlv.  
     1920 A, 154, pl. xxii.  
 Sinclair, W. J. 1924 A, 127.  
 Thorpe, M. R. 1921 D, 103.  
     1924 B, 223 (E. major major).  
     1924 D, 129 (Euclotaphus).  
 Trouessart, E. L. 1905 A, 668.  
 Wanless, H. R. 1923 A, 231.  
     Upper Oligocene (Brule); North Dakota, Nebraska.

### **Eporeodon occidentalis Marsh.**

- Hay, O. P. 1902 A, 667.  
 Loomis, F. B. 1924 B, 37.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 188, 190.  
 Thorpe, M. R. 1921 D, 95, 96, figs. 1-3.  
 Trouessart, E. L. 1905 A, 668.  
     Middle Oligocene (John Day); Oregon.

### **Eporeodon pacificus (Cope).**

- Hay, O. P. 1902 A, 667.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 188, 190 (E. occidentalis pacificus).  
 Thorpe, M. R. 1921 D, 95, 98 (Subsp. of E. leptacanthus).  
 Trouessart, E. L. 1905 A, 668 (E. occidentalis pacificus).  
     Middle Oligocene (John Day); Oregon.

### **Eporeodon perbullatus Thorpe.**

- Thorpe, M. R. 1921 D, 106, figs. 9, 10.  
     Upper Oligocene (Upper John Day); Oregon.

### **Eporeodon relictus Loomis.**

- Loomis, F. B. 1924 B, 36, fig. 28.  
     Miocene (Lower Rosebud); South Dakota.

**Eporeodon socialis** Marsh.

- Hay, O. P. 1902 A, 667.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187.  
 Peterson, O. A. 1928 B, 164.  
 Thorpe, M. R. 1921 F, 309, pl. i, text-figs. 2-4.  
     1923 D, 99.  
     1924 B, 224.  
 Trouessart, E. L. 1905 A, 668.  
     Upper Oligocene (Upper Brule); Nebraska.

**Eporeodon trigonocephalus** (Cope).

- Hay, O. P. 1902 A, 667.  
 Matthew, W. D. 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 191, 192.

- Peterson, O. A. 1928 B, 164.  
 Thorpe, M. R. 1921 D, 95, 101.  
     Upper Oligocene (John Day); Oregon.

**Eporeodon trigonocephalus parvus** Thorpe.

- Thorpe, M. R. 1921 D, 101, figs. 4, 5  
     Upper Oligocene (Upper John Day); Oregon.

**Eporeodon** sp. indet.

- Matthew, W. D. 1909 C, 109, 113. Miocene (Lower); South Dakota.  
 Merriam, J. C. 1901 B, 587, fig. 6 ("Oreodon").  
 Merriam and Sinclair 1907 A, 192. Miocene (John Day); Oregon.

**MESOREODON** Scott. Type *M. chelonys* Scott.

- Hay, O. P. 1902 A, 667.  
 Beddard, F. E. 1902 A, 330.  
 Douglass, E. 1906 A, 566.  
 Haug, E. 1911 A, 1705.  
 Howes, G. B. 1902 A, 523.  
 Kampfen, P. N. 1905 A, 591.  
 Loomis, F. B. 1924 B, 9, 15.  
     1925 A, 248.  
 Matthew, W. D. 1901 B, 395.  
     1907 A, 172, 178.  
     1909 C, 119.  
     1910 H, 474.  
 Osborn, H. F. 1909 D, 72, 73, 75.  
     1910 B, 233, 550.  
     1912 G, 247, 249.  
 O'Harra, C. C. 1910 A, 109, 132.  
 Palmer, T. S. 1904 A, 415, 912.  
 Peterson, O. A. 1906 C, 24.  
     1928 B, 141.  
 Scott, W. B. 1913 A, 372, 378.  
 Thorpe, M. R. 1925 A, 75.  
 Trouessart, E. L. 1905 A, 668.  
 Weber, M. 1904 A, 663.  
 Weber and Abel 1928 A, 610.

- Zittel and Schlosser 1911 A, 483.  
     1923 A, 572, 670, 673, 679.  
**Mesoreodon chelonys** Scott.  
 Hay, O. P. 1902 A, 667.  
 Douglass, E. 1903 A, 151.  
     1907 C, 102.  
 Loomis, F. B. 1924 B, 9.  
 Matthew, W. D. 1909 C, 113.  
     Lower Miocene (Harrison); Montana.

**Mesoreodon intermedius** Scott.

- Hay, O. P. 1902 A, 667.  
 Douglass, E. 1903 A, 151.  
 Matthew, W. D. 1909 C, 113.  
     Lower Miocene (Harrison); Montana.

**Mesoreodon megalodon** Peterson.

- Peterson, O. A. 1906 C, 24, figs. 2, 3.  
 Cook, H. J. 1912 D, 40.  
 Loomis, F. B. 1924 B, 8, 9, fig. 5.  
 Matthew, W. D. 1909 C, 113.  
 O'Harra, C. C. 1920 A, 157.  
     Lower Miocene (Harrison); Nebraska, S. Dakota.

**PROMERYCHOCERUS** Douglass. Type *P. superbus* Douglass.

- Douglass, E. 1901 A, 82.  
     1906 A, 566.  
 Gregory, W. K. 1920 A, 189, fig. 159.  
 Haug, E. 1911 A, 1705.  
 Holland, W. J. 1914 A, 197.  
 Loomis, F. B. 1924 B, 9, 10, 15.  
     1925 A, 248.  
 Matthew, W. D. 1901 B, 374, 395, 396, 398.  
     1903 B, 221.  
     1907 A, 169, 172, 176.  
     1909 C, 111, 119.  
     1910, in Merriam 1901 A, 296 (Paracotylops, type *Oreodon superbus* Leidy).  
     1910 H, 475.  
     1924 E, 748, 751.  
 Merriam, J. C. 1915 E, 233.  
 Merriam and Sinclair 1903 A, 95.  
     1907 A, 192.  
 Moodie, R. L. 1916 E, 139.  
 O'Harra, C. C. 1910 A, 109, 132.  
     1920 A, 126.  
 Ortmann, A. E. 1909 A, 22.

- Osborn, H. F. 1907 F, 872.  
     1909 D, 23, 134.  
     1910 B, 628, fig. 120.  
     1912 G, 245, 249.  
 Palmer, T. S. 1904 A, 572, 912 (Promerychocerus); 511, 912 (Paracotylops).  
 Peterson, O. A. 1914 E, 149.  
     1923 C, 98.  
 Scott, W. B. 1913 A, 235, 250, 267, 375.  
 Sinclair, W. J. 1901 A, 703 (Paracotylops a syn.).  
 Smith and Packard 1919 A, 96.  
 Thorpe, M. R. 1920 A, 207.  
     1921 A, 215.  
     1921 D, 93.  
     1923 E, 242, 244.  
     1924 D, 125, 128.  
     1925 A, 72.  
 Trouessart, E. L. 1905 A, 669.  
 Weber and Abel 1928 A, 610.  
 Zittel and Schlosser 1911 A, 483.  
     1923 A, 572, 672, 673.



**Promerycochoerus carrikeri** Peterson.

- Peterson, O. A. 1906 C, 24, 26, pls. ix, x.  
 Barbour and Cook 1917 A, 171, fig. 8.  
 Cook, H. J. 1912 D, 40.  
 Loomis, F. B. 1923 A, 223.  
 Matthew, W. D. 1909 C, 113.  
 O'Harra, C. C. 1910 A, 110, pl. xlviii.  
 1920 A, 70, 126, 157, figs. 20, 63.  
 Ortmann, A. E. 1909 A, 22, fig.  
 Osborn, H. F. 1909 D, 72.  
 1912 G, 247.  
 Peterson, O. A. 1914 E, 150, 156, pls. xxxiii-xxxix; text-figs. 1-32.  
 1925 B, 144.  
 Schuchert, C. 1915 A, 933, fig. 506.  
 Scott, W. B. 1913 A, 376, fig. 199.  
 Lower Miocene (Monroe Creek); Nebraska.

**Promerycochoerus chelydra** (Cope).

- Hay, O. P. 1902 A, 668 (Merycochoerus).  
 Douglass, E. 1901 A, 82.  
 Loomis, F. B. 1924 B, 23.  
 Matthew, W. D. 1901 B, 398.  
 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 191, 192.  
 Peterson, O. A. 1914 E, 150, pl. xli; pl. xlii, fig. 1.  
 Thorpe, M. R. 1921 A, 220, 225.  
 Upper Oligocene (John Day); Oregon.

**Promerycochoerus curvidens** (Thorpe).

- Thorpe, M. R. 1921 A, 241, fig. 6 (Desmatochonus, subgenus).  
 Upper Oligocene (Middle John Day); Oregon.

**Promerycochoerus grandis** Douglass.

- Douglass, E. 1907 C, 104, pl. xxvii.  
 1907 A, 822.  
 Loomis, F. B. 1924 B, 9, 22, fig. 5.  
 Matthew, W. D. 1909 C, 113.  
 Lower Miocene (Harrison); Montana.

**Promerycochoerus gregoryi** Loomis.

- Loomis, F. B. 1924 B, 23, fig. 12.  
 Miocene (Lower Rosebud); South Dakota.

**Promerycochoerus hatcheri** Douglass.

- Douglass, E. 1907 C, 104, pl. xxvi.  
 1907 A, 822.  
 Matthew, W. D. 1909 C, 113.  
 Lower Miocene (Harrison); Montana.

**Promerycochoerus hollandi** Douglass.

- Douglass, E. 1907 C, 106, pl. xxviii.  
 1907 A, 822.  
 Loomis, F. B. 1924 B, 23.  
 Matthew, W. D. 1909 C, 113.  
 Lower Miocene (Harrison); Montana.

**Promerycochoerus inflatus** Thorpe.

- Thorpe, M. R. 1921 A, 235, fig. 3.  
 Upper Oligocene (Upper John Day); Oregon.

**Promerycochoerus latidens** Thorpe.

- Thorpe, M. R. 1921 A, 232, fig. 2.  
 Loomis, F. B. 1924 B, 22.  
 Upper Oligocene (Upper John Day); Oregon.

**Promerycochoerus leidyi** (Bettany).

- Hay, O. P. 1902 A, 668 (Merycochoerus).  
 Douglass, E. 1901 A, 82.  
 Loomis, F. B. 1924 B, 23.  
 Matthew, W. D. 1901 B, 398.  
 1909 C, 109.  
 Merriam, J. C. 1901 A, 273 ("Merycochoerus").  
 Merriam and Sinclair 1907 A, 187, 191, 192.  
 Thorpe, M. R. 1921 A, 220, 228.  
 Upper Oligocene (John Day); Oregon.

**Promerycochoerus lulli** Thorpe.

- Thorpe, M. R. 1921 A, 232, figs. 1a, 1b.  
 1923 C, 227.  
 Upper Oligocene (Upper John Day); Oregon.

**Promerycochoerus macrostegus** (Cope).

- Hay, O. P. 1902 A, 668 (Merycochoerus).  
 Abel, O. 1919 A, 806, fig. 607.  
 Douglass, E. 1901 A, 82.  
 Loomis, F. B. 1924 B, 22.  
 Matthew, W. D. 1901 B, 398, 399, 404, text-figs. 19, 22.  
 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 191, 192.  
 Osborn, H. F. 1910 B, 231, fig. 115.  
 Thorpe, M. R. 1921 A, 220, 226.  
 Trouessart, E. L. 1905 A, 669.  
 Zittel and Schlosser 1911 A, 483, fig. 675.  
 1923 A, 573, fig. 716.  
 Upper Oligocene (John Day); Oregon.

**Promerycochoerus marshi** Thorpe.

- Thorpe, M. R. 1921 A, 236, fig. 4.  
 Loomis, F. B. 1924 B, 22.  
 Thorpe, M. R. 1925 A, 71, fig. 1.  
 Weber and Abel 1923 A, 610, fig. 405.  
 Upper Oligocene (Upper John Day); Oregon.

**Promerycochoerus microcephalus** Thorpe.

- Thorpe, M. R. 1921 A, 239, fig. 5.  
 Upper Oligocene (Middle John Day); Oregon.

**Promerycochoerus minor** Douglass.

- Douglass, E. 1903 A, 151, 168, fig. 12.  
 1907 A, 822.  
 Matthew, W. D. 1909 C, 109.  
 Upper Oligocene? (Drummond); Montana.

**Promerycochoerus montanus** (Cope).

- Hay, O. P. 1902 A, 668 (Merycochoerus).  
 Dall and Harris 1892 A, 288.  
 Douglass, E. 1901 A, 82.  
 1907 A, 821.  
 Matthew, W. D. 1901 B, 297 (Merycochoerus).  
 1909 C, 115.  
 Peterson, O. A. 1928 B, 149.  
 Middle Miocene (Deep River); Montana.

**Promerycochærus obliquidens** (Cope).

- Hay, O. P. 1902 A, 668 (Merycochærus).  
 Dall and Harris 1892 A, 282 (Merycochærus).  
 Douglass, E. 1901 A, 81, fig. 5 (This species?).  
 Matthew, W. D. 1901 B, 398  
 1909 C, 115 (This genus?).  
 Merriam and Sinclair 1907 A, 196.  
 Middle Miocene (John Day); Oregon.

**Promerycochærus pygmæus** Loomis.

- Loomis, F. B. 1924 B, 27, fig. 13 (P. pygmyus;  
*err. typ.*)  
 Miocene (Lower Rosebud); South Dakota.

**Promerycochærus superbus** (Leidy).

- Hay, O. P. 1902 A, 668 (Merycochærus).  
 Douglass, E. 1901 A, 82.  
 Matthew, W. D. 1901, in Merriam, J. C.  
 1901 A, 296 (Paracotylops).  
 1901 B, 398 (M. superbus, M. temporalis).  
 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187, 191, 192.  
 Thorpe, M. R. 1921 A, 220, 221.  
 1924 D, 126, 127.  
 Trouessart, E. L. 1905 A, 669.

## MERYCOCHÆRUS Leidy.

- Hay, O. P. 1902 A, 667.  
 Abel, O. 1926 B, 353, 360.  
 Barbour and Cook 1917 A, 169.  
 Beddard, F. E. 1902 A, 330.  
 Douglass, E. 1901 A, 73.  
 1901 B, 257.  
 1906 A, 567.  
 1907 B, 84, 90.  
 Frick, C. 1926 A, 21.  
 Giebel, C. G. 1883 A, 133.  
 Gregory, W. K. 1920 A, 189, fig. 180.  
 Haug, E. 1911 A, 1706.  
 Loomis, F. B. 1924 B, 10, 15, 27.  
 1925 E, 594, figs. 7, 8.  
 Matthew, W. D. 1901, in Merriam, J. C. 1901  
 A, 296.  
 1901 B, 365, 366, 370, 374, 395-398.  
 1903 B, 221.  
 1907 A, 173, 176.  
 1910 H, 475.  
 1924 C, 72.  
 1924 E, 748.  
 Merriam, J. C. 1900 B, 220.  
 Moodie, R. I. 1916 E, 135, figs. 1-4.  
 1922 C, 367.  
 Osborn, H. F. 1901 C, 46.  
 1907 F, 872.  
 1909 D, 23, 129.  
 1910 B, 623.  
 1912 G, 247, 248, 249.  
 1918 A, 13, 20.  
 Osburn, R. C. 1903 A, 653.  
 Palmer, T. S. 1904 A, 411, 912.  
 Peterson, O. A. 1906 C, 36.  
 Schlosser, M. 1904 C, 97.  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 685.  
 Steinmann, G. 1907 A, 480.  
 Thorpe, M. R. 1924 D, 121, 127.  
 1925 A, 74, 75.

- Zittel and Schlosser 1911 A, 483, fig. 675.  
 1923 A, 573, fig. 716.

Upper Oligocene (Mascall); Oregon.

**Promerycochærus thomsoni** Loomis.

- Loomis, F. B. 1924 B, 22, figs. 9-11.  
 Miocene (Lower Rosebud); South Dakota.

**Promerycochærus vantasselensis** Peterson.

- Peterson, O. A. 1906 C, 35, 36, pl. xi.  
 Cook, H. J. 1912 D, 41.  
 Loomis, F. B. 1923 A, 223, fig. 1.  
 Matthew, W. D. 1909 C, 113.  
 O'Harra, C. C. 1920 A, 157.  
 Osborn, H. F. 1909 D, 72, 74.  
 1912 G, 247.  
 Peterson, O. A. 1914 E, 198, pl. xl; text-figs.  
 33-41.  
 Lower Miocene (L. Harrison); Nebraska,  
 Wyoming.

**Promerycochærus** sp. indet.

- Matthew, W. D. 1909 C, 113. Miocene  
 (Lower), South Dakota

Type *M. proprius* Leidy.

- Trouessart, E. L. 1905 A, 669.  
 Wallace, A. R. 1876 A, 1, 138.  
 Weber, M. 1904 A, 663.  
 Weber and Abel 1928 A, 611.  
 Winge, H. 1906 A, 133.  
 Zittel and Schlosser 1911 A, 483.  
 1923 A, 572, 672, 673, 679.

**Merycochærus?** buwaldi Merriam, J. C.

- Merriam, J. C. 1919 A, 450, 507, 527, 576, figs.  
 84-89.  
 Upper Miocene (Bartow); California.

**Merycochærus?** californicus Merriam,  
J. C.

- Merriam, J. C. 1919 A, 525, 527, 575, figs. 211-  
 215 [M. (Pronomotherium?)].  
 1917 A, 431 [M. (Pronomotherium)]. No  
 description.  
 Lower Pliocene (Ricardo); California

**Merycochærus cænopus** Scott.

- Hay, O. P. 1902 A, 668.  
 Matthew, W. D. 1909 C, 117 (M. cænopus).  
 Upper Miocene (Arikaree); Nebraska?

**Merycochærus compressidens** Douglass.

- Douglass, E. 1901 A, 79, fig. 4.  
 1907 A, 821 (This genus?).  
 Matthew, W. D. 1901 B, 398.  
 Trouessart, E. L. 1905 A, 669.  
 Miocene; Montana.

**Merycochærus elrodi** Douglass.

- Douglass, E. 1901 A, 78, fig. 3.  
 Matthew, W. D. 1901 B, 398.  
 Trouessart, E. L. 1905 A, 669.  
 Miocene ("Loup Fork"); Montana.

**Merycochærus magnus** Loomis.

Loomis, F. B. 1924 B, 28, figs. 16, 17.

Lower Miocene (Upper Harrison); Nebraska.

**Merycochærus matthewi** Loomis.

Loomis, F. B. 1924 B, 27, figs. 14, 15.

Lower Miocene (Upper Rosebud); South Dakota.

**Merycochærus proprius** Leidy.

Hay, O. P. 1902 A, 668.

Barbour and Cook 1917 A, 171, fig. 7.

Douglass, E. 1901 A, 82.

1907 B, 90.

Loomis, F. B. 1924 B, 27.

Matthew, W. D. 1901 B, 358, 373, 397, 399, 401, 411, text-figs. 18, 20, 21, 23-26.

1909 C, 113, 115.

Merriam, J. C. 1919 A, 508, 578.

Merrill, G. P. 1907 A, 47.

Osborn, H. F. 1910 B, 286, fig. 140.

Peterson, O. A. 1906 C, 63 (This species?).

1914 E, pl. xlii, figs. 2, 3.

Scott, W. B. 1913 A, 373, 382, figs. 197, 204.

Thorpe, M. R. 1924 A, 215.

Trouessart, E. L. 1905 A, 669.

Lower Miocene (Laramie Peak); Wyoming;

? Middle (Pawnee Creek); Colorado.

**Merycochærus rusticus** Leidy.

Hay, O. P. 1902 A, 668.

Douglass, E. 1901 A, 82.

1907 B, 85, 98.

Matthew, W. D. 1901 B, 358, 395, 401, 412, 418, text-figs. 27, 28 (Merycochærus); 397 [M. (Brachycrus)].

1909 C, 113, 115.

Merrill, G. P. 1907 A, 48.

Moodie, R. L. 1918 D, 508, fig. 40.

1923 B, 270, pl. lii.

Peterson, O. A. 1906 C, 65.

Thorpe, M. R. 1924 D, 123, 124.

Trouessart, E. L. 1905 A, 669.

Lower Miocene (Sweetwater River), Wyoming: ? Middle Miocene (Pawnee Creek); Colorado.

**Merycochærus** sp. indet.

Hay, O. P. 1902 A, 668.

Cook, H. J. 1912 D, 42. Miocene (Upper Harrison); Nebraska.

Matthew, W. D. 1909 C, 113, 117. Miocene (Lower); Nebraska, South Dakota.

Merriam, J. C. 1917 A, 438. Pliocene? (Republican River); Nebraska.

Merriam and Sinclair 1907 A, 196. Miocene (Mascall); Oregon.

Merrill, G. P. 1907 A, 48. Pliocene; Wyoming.

**PRONOMOTHERIUM** Douglass. Type *Merycochærus laticeps* Douglass.

Douglass, E. 1907 B, 94.

Barbour and Cook 1917 A, 169.

Douglass, E. 1909 A, 477.

Loomis, F. B. 1924 B, 14, 15.

Matthew, W. D. 1909 C, 119.

1910 H, 475.

1924 C, 72.

Osborn, H. F. 1910 B, 291, 300, 550; fig. 144

Scott, W. B. 1913 A, 231, 374, 381.

Thorpe, M. R. 1924 D.

1925 A, 74.

Weber and Abel 1928 A, 611.

Zittel and Schlosser 1923 A, 572, 679.

**Pronomotherium altiramum** (Douglass).

Douglass, E. 1901 A, 73, fig. 1 (Merycochærus).

1901 B, 256 (Merycochærus?).

1903 A, 154 (Merycochærus).

1906 A, 567 (Merycochærus).

1907 A, 809, 817, 821; figs. 8, 9

1907 B, 97 (Merycochærus?).

Loomis, F. B. 1924 B, 8, fig. 5.

Matthew, W. D. 1909 C, 117 (P. altiramis).

Merriam, J. C. 1919 A, 577, 578.

Thorpe, M. R. 1925 A, 75, fig. 5.

Trouessart, E. L. 1905 A, 669 (Merycochærus altiramis).

Weber and Abel 1928 A, 612, fig. 407.

Upper Miocene (Madison Valley); Montana.

**Pronomotherium laticeps** (Douglass).

Hay, O. P. 1902 A, 668 (Merycochærus).

Douglass, E. 1901 A, 82 (Merycochærus).

1901 B, 238, 256 (Merycochærus?).

1903 A, 153.

1906 A, 567.

1907 A, 818, 821.

Matthew, W. D. 1901 B, 398 (Merycochærus).

1909 C, 115.

Merriam, J. C. 1919 A, 578.

Scott, W. B. 1913 A, 375, fig. 198.

Middle Miocene (Flint Creek); Montana.

**Pronomotherium madisonium** (Douglass).

Douglass, E. 1901 A, 75, fig. 2 (Merycochærus).

1903 A, 154 (Merycochærus).

1907 A, 821.

Matthew, W. D. 1901 B, 398 (Merycochærus).

Trouessart, E. L. 1905 A, 669 (Merycochærus).

Upper Miocene (South Fork); Montana.

**Pronomotherium siouense** Sinclair.

Sinclair, W. J. 1915 A, 77, 86, fig. 11.

Matthew, W. D. 1918 A, 187.

1924 C, 67, 181, 184, figs. 51-53.

Merriam, J. C. 1917 A, 436.

Upper and Middle Miocene (Snake Creek and Sheep Creek); Nebraska.

**MERYCOIDES** Douglass. Type *M. cursor* Douglass.

Douglass, E. 1907 C, 101.

Matthew, W. D. 1909 C, 119.

**Merycoides cursor** Douglass.

Douglass, E. 1907 C, 101, pl. xxiv.

1907 A, 822.

Loomis, F. B. 1924 B, 9, 12.

Matthew, W. D. 1909 C, 113.

Lower Miocene (Canyon Ferry); Montana.

**Merycoides latidens** (Douglass).

Douglass, E. 1907 C, 102, pl. xxv (Mesoreodon).

Loomis, F. B. 1924 B, 9, 12.

Matthew, W. D. 1909 C, 113 (Mesoreodon).

Lower Miocene (Harrison); Montana.

**Merycoides longiceps** (Douglass).

Douglass, E. 1907 A, 809, 811, 822, figs. 1-5 (Mesoreodon).

Loomis, F. B. 1924 B, 9, 12, fig. 6.

Matthew, W. D. 1909 C, 115 (Mesoreodon).

Middle Miocene (Deep River); Montana.

**MERYCHYUS** Leidy. Type *M. elegans* Leidy.

Hay, O. P. 1902 A, 669.

Barbour and Cook 1917 A, 165.

Douglass, E. 1906 A, 567.

Flower, W. H. 1873 B, 102.

Giebel, C. G. 1883 A, 133.

Haug, E. 1911 A, 1705, 1706.

Heilprin, A. 1887 A, 382.

Kampfen, P. N. 1905 A, 591.

Loomis, F. B. 1924 B, 1, 12, 15, 30.

1925 A, 248.

Matthew, W. D. 1901 B, 374, 395, 396, 418.

1903 B, 221.

1909 C, 113, 119 (Merychys).

1910 H, 474

1918 A, 215.

1924 C, 72.

1924 E, 748.

Matthew and Cook 1909 A, 367, 391 (Merychys, Metoreodon).

Merriam, J. C. 1911 B, 207, 215, 217.

O'Harra, C. C. 1910 A, 109, 132.

Osborn, H. F. 1909 D, 129.

1910 B, 623.

1912 G, 249.

Palmer, T. S. 1904 A, 411, 912.

Peterson, O. A. 1906 C, 22.

1928 B.

Riggs, E. S. 1909 A, 196.

Scott, W. B. 1913 A, 232, 372, 373, 382, 685.

Thorpe, M. R. 1925 A, 75.

Trouessart, E. L. 1905 A, 670.

Wallace, A. R. 1876 A, 1, 138.

Weber, M. 1904 A, 663.

Weber and Abel 1928 A, 611.

Winge, H. 1906 A, 133.

Zittel and Schlosser 1911 A, 483.

1923 A, 573, 672, 673, 679.

**Merychys arenarum** Cope.

Hay, O. P. 1902 A, 669.

Matthew, W. D. 1901 B, 395, 420.

1909 C, 113.

1918 A, 215 (M. arenarius. This genus?).

Peterson, O. A. 1923 C, 97.

Trouessart, E. L. 1904 A, 670.

Lower Miocene (Laramie Peak); Wyoming.

**Merychys curtus** Loomis.

Loomis, F. B. 1924 B, 13, 31, figs. 19, 20.

Lower Miocene (Lower Rosebud); South Dakota.

**Merychys delicatus** Loomis.

Loomis, F. B. 1924 B, 33, fig. 22.

Lower Miocene (Lower Rosebud); South Dakota.

**Merychys elegans** Leidy.

Hay, O. P. 1902 A, 669.

Gidley, J. W. 1904 A, 246 (This species?).

Loomis, F. B. 1923 A, 228.

1924 B, 13, 30.

Matthew, W. D. 1901 B, 358, 395, 419.

1909 C, 113 (This species?); 117 (M. elegans).

Matthew and Cook 1909 A, 391, 394.

Merrill, G. P. 1907 A, 47.

Peterson, O. A. 1923 C, 97.

1928 B, 135, 138.

Trouessart, E. L. 1905 A, 670.

? Lower Miocene (Harrison); Nebraska.

Upper Miocene (Arkaree); Nebraska.

**Merychys harrisonensis** Peterson.

Peterson, O. A. 1906 C, 35, 37, figs. 7, 8.

Barbour and Cook 1917 A, 170, fig. 5.

Cook, H. J. 1912 D, 41 (This genus?).

Loomis, F. B. 1923 A, 227, fig. 5 (Ticholeptus).

Matthew, W. D. 1909 C, 113 (This genus?).

O'Harra, C. C. 1920 A, 157.

Peterson, O. A. 1923 C, 97.

Sternberg, C. H. 1913 A, 46.

Lower Miocene (Lower Harrison); Nebraska.

**Merychys leptorhynchus** Cope.

Cope, E. D. 1884 M, 536, 537, 540 (Subsp. of M. arenarum).

Hay, O. P. 1902 A, 669 (M. arenarum, part).

Loomis, F. B. 1920 A, 290 (M. leptorhynchus).

Matthew, W. D. 1901 B, 395, 420.

1909 C, 113.

Peterson, O. A. 1923 C, 97.

1928 B, 135.

Lower Miocene (Laramie Peak); Wyoming.

**Merychys major** Leidy.

Hay, O. P. 1902 A, 669

Matthew, W. D. 1909 C, 117 (This genus?).

Merrill, G. P. 1907 A, 47.

Palacký, J. 1903 B, 317 (Merychys)

Peterson, O. A. 1906 C, 36, 68.  
1923 C, 97.

Trouessart, E. L. 1905 A, 670  
Upper Miocene (Arikaree); Nebraska.

### **Merychys medius** Leidy.

Hay, O. P. 1902 A, 669.

Matthew, W. D. 1901 B, 358.

1909 C, 117 (This genus?).

Merrill, G. P. 1907 A, 47.

Peterson, O. A. 1906 C, 65.

1923 C, 97.

Upper Miocene (Arikaree); Nebraska.

### **Merychys minimus** Peterson.

Peterson, O. A. 1906 C, 67, fig. 16.

Cook, H. J. 1912 D, 42.

Loomis, F. B. 1909 A, 21.

1924 B, 13, 33, fig. 7.

Matthew, W. D. 1909 C, 113.

1918 A, 215 (This genus?).

O'Harra, C. C. 1920 A, 157.

Peterson, O. A. 1923 C, 96, pls. vii, viii, text-figs. 1-8

1928 B, 155.

Lower Miocene (Upper Harrison); Nebraska.

### **Merychys paniensis** Loomis.

Loomis, F. B. 1924 B, 34, figs. 23, 24.

Middle Miocene (Pawnee Creek); Colorado.

### **Merychys pariogonus** Cope.

Hay, O. P. 1902 A, 669.

Dall and Harris 1892 A, 288.

Matthew, W. D. 1909 C, 115.

Peterson, O. A. 1906 C, 68.

1923 C, 97 (M. parigonus).

Middle Miocene (Deep River); Montana.

### **Merychys siouxensis** Loomis.

Loomis, F. B. 1924 B, 31, 33, fig. 21.

Miocene (Lower Harrison); South Dakota.

### **Merychys smithi** Douglass.

Douglass, E. 1903 A, 153, 179, fig. 19.

1907 A, 821 (Ticholeptus).

1907 B, 98.

Matthew, W. D. 1909 C, 115.

Middle Miocene (Flint Creek); Montana.

### **Merychys** sp. indet.

Matthew, W. D. 1901 B, 358, 359.

1909 C, 115, 117. Miocene (Arikaree); South Dakota.

1924 C, 67. Middle Miocene (Sheep Creek); Nebraska.

Merriam, J. C. 1911 B, 276, figs. 48, 49 (This genus?). (Virgin Valley); Nevada.

1917 A, 436 [M. (Metoreodon)]. Miocene (Snake Creek); Nebraska.

Peterson, O. A. 1906 C, 40. Miocene (Lower); Nebraska.

Sinclair, W. J. 1915 A, 77. [M. (Metoreodon)]; Nebraska.

## **METOREODON** Matthew and Cook. Type *M. relictus* Matthew and Cook.

Matthew and Cook 1909 A, 391 (Subgenus of *Merychys*).

Barbour and Cook 1917 A, 165.

Loomis, F. B. 1924 B, 12, 15, 36.

Matthew, W. D. 1910 H, 475.

1918 A, 215.

1924 C, 72.

Osborn, H. F. 1918 A, 29.

Weber and Abel 1928 A, 610.

### **Metoreodon profectus** Matthew and Cook.

Matthew and Cook 1909 A, 394, fig. 15 [*Merychys* (Metoreodon)].

Barbour and Cook 1917 A, 165, figs. 1-3.

Cook, H. J. 1912 D, 45 (Metoreodon relictus profectus).

Loomis, F. B. 1924 B, 36.

Matthew, W. D. 1918 A, 187.

Merriam, J. C. 1917 A, 436 [M. (Metoreodon)].

Sinclair, W. J. 1915 A, 77 [*Merychys* (Metoreodon)].

Lower Pliocene (Snake Creek and Devil's Gulch); Nebraska.

### **Metoreodon relictus** Matthew and Cook.

Matthew and Cook 1909 A, 391, fig. 14 [*Merychys* (Metoreodon)].

Cook, H. J. 1912 D, 45 (Metoreodon).

Loomis, F. B. 1924 B, 11, fig. 6.

Matthew, W. D. 1918 A, 187, 216.

1924 C, 67.

Merriam, J. C. 1917 A, 436 [*Merychys* (Metoreodon)].

Sinclair, W. J. 1915 A, 77 [*Merychys* (Metoreodon)].

Upper Miocene (Lower Snake Creek); Nebraska.

## **LEPTAUCHENIA** Leidy. Type *L. decora* Leidy.

Hay, O. P. 1902 A, 670.

Douglass, E. 1901 B, 257.

Giebel, C. G. 1883 A, 133.

Gregory, W. K. 1920 A, 188, fig. 157.

Haug, E. 1911 A, 1523, 1529.

Kampfen, P. N. 1905 A, 591.

Loomis, F. B. 1924 B, 1, 13, 14, 15.

1925 A, 241, 245

1925 E, 594, figs. 7, 8.

Matthew, W. D. 1901 B, 364, 370, 395, 396.

1907 A, 172, 174, 176.

1909 C, 111, 119.

1910 H, 474.

1924 E, 748.

O'Harra, C. C. 1910 A, 109, 132.

1920 A, 126

Osborn, H. F. 1909 D, 23, 63, 123.

1910 B, 620.

Osborn, H. F. 1912 G, 243, 247, 249.

Peterson, O. A. 1906 C, 24.

1923 C, 98.

1928 B.

Schlosser, M. 1904 C, 97.

Schuchert, C. 1910 A, 599.

Scott, W. B. 1913 A, 258, 377.

Sinclair, W. J. 1910 B, 196.

Thorpe, M. R. 1921 B, 405.

1923 E, 241.

1925 A, 72, 78.

Trouessart, E. L. 1905 A, 670.

Wallace, A. R. 1876 A, I, 138.

Weber and Abel 1928 A, xxiii, 609, 611.

Winge, H. 1906 A, 133.

Zittel and Schlosser 1911 A, 483.

1923 A, 573, 670-672.

### **Leptauchenia decora** Leidy.

Hay, O. P. 1902 A, 670.

Abel, O. 1914 A, 167, fig. 122.

1919 A, 807, fig. 608.

1920 A, 436, fig. 661.

Giebel, C. G. 1883 A, pl. xliv.

Loomis, F. B. 1924 B, 13.

1925 A, 241, 242.

Matthew, W. D. 1901 B, 357, 373.

1909 C, 113.

O'Harra, C. C. 1920 A, 127, 157, fig. 64.

Osborn, H. F. 1909 D, 73.

Peterson, O. A. 1906 C, 23.

1928 B, 144.

Sinclair, W. J. 1910 B, 196, fig. 1.

Thorpe, M. R. 1921 B, 406.

Weber and Abel 1928 A, 608, fig. 401.

Oligocene (Upper) or Miocene (Lower);

Nebraska, South Dakota.

### PHENACOCCELUS Peterson. Type *P. typus* Peterson.

Peterson, O. A. 1906 C, 24, 29.

Loomis, F. B. 1924 B, 12, 15.

Matthew, W. D. 1909 C, 119.

Osborn, H. F. 1909 D, 74.

1910 B, 233, 236, 550, fig. 120.

Peterson, O. A. 1923 C, 98.

1923 B, 131.

Sinclair, W. J. 1910 B, 196.

Thorpe, M. R. 1925 A, 75.

Weber and Abel 1928 A, 611.

### **Phenacocœlus munroënsis** Peterson.

Peterson, O. A. 1923 B, 161, pl. xviii, figs. 1-9.

Lower Miocene (Monroe Creek); Nebraska.

### TICHOLEPTUS Cope. Type *T. zygomatius* Cope.

Cope, E. D. 1878 H, 380.

Hay, O. P. 1902 A, 669 (Merychys, in part).

Douglass, E. 1906 A, 567.

Haug, E. 1911 A, 1705.

Loomis, F. B. 1924 B, 11, 12, 15, 35.

1925 A, 248.

1925 E, 594, figs. 7, 8.

Matthew, W. D. 1909 C, 119.

1910 H, 475.

1924 C, 72.

1924 E, 748.

Osborn, H. F. 1909 D, 23.

### **Leptauchenia densa** Loomis.

Loomis, F. B. 1925 A, 245, figs. 3, 4.

Lower Miocene (Lower Rosebud); Wyoming.

### **Leptauchenia major** Leidy.

Hay, O. P. 1902 A, 670.

Loomis, F. B. 1925 A, 246, 247.

Matthew, W. D. 1909 C, 113.

O'Harra, C. C. 1920 A, 157.

Thorpe, M. R. 1921 B, 409.

Trouessart, E. L. 1905 A, 670.

Oligocene (Upper) or Miocene (Lower); South Dakota.

### **Leptauchenia nitida** Leidy.

Hay, O. P. 1902 A, 670.

Loomis, F. B. 1925 A, 247.

Matthew, W. D. 1909 C, 113.

O'Harra, C. C. 1920 A, 157, pl. xli.

Scott, W. B. 1913 A, 377, 378, figs. 200, 201.

Thorpe, M. R. 1921 B, 410.

Oligocene (Upper) or Miocene (Lower); South Dakota.

### **Leptauchenia** sp. indet.

Cook, H. J. 1912 D, 37, 39. Oligocene (Brule); Nebraska: 40. Miocene (Monroe Creek), Nebraska?.

Matthew, W. D. 1909 C, 106, 109, 113. Oligocene (Middle and Upper); Miocene (Lower); Nebraska, South Dakota.

Wanless, H. R. 1923 A, 226, 231. Oligocene (White River); Nebraska.

### **Phenacocelus typus** Peterson.

Peterson, O. A. 1906 A, 24, 29, figs. 4-6.

Cook, H. J. 1912 D, 40.

Loomis, F. B. 1924 B, 11, fig. 6.

Matthew, W. D. 1909 C, 113.

O'Harra, C. C. 1920 A, 157.

Peterson, O. A. 1923 B, 132, pl. xvi; pl. xvii, figs. 1, 2, 4-12; pl. xviii, figs. 12, 13; pls. xix, xx.

Lower Miocene (Harrison); Nebraska.

Osborn, H. F. 1910 B, 281, 288-297, 550.

1918 A, 13, 15.

Palmer, T. S. 1904 A, 679, 912.

Peterson, O. A. 1923 B.

Schuchert, C. 1910 A, 599.

Weber and Abel 1928 A, 610.

### **Ticholeptus bannackensis** Douglass.

Douglass, E. 1907 C, 108, pl. xxx.

1907 A, 817, 822.

Matthew, W. D. 1909 C, 115.

Middle Miocene (Flint Creek); Montana.

**Ticholeptus brachymelis** Douglass.

Douglass, E. 1907 A, 809, 815, 822, figs. 6, 7.  
Matthew, W. D. 1909 C, 115.  
Middle Miocene (Flint Creek); Montana.

**Ticholeptus breviceps** Douglass.

Douglass, E. 1907 C, 107, pl. xxix.  
Abel, O. 1913 B, 741, fig. 53.  
1914 A, 168, fig. 123.  
1919 A, 807, fig. 609.  
Douglass, E. 1907 A, 816, 821.  
Matthew, W. D. 1909 C, 115.  
Osborn, H. F. 1910 B, 286, fig. 142.  
Peterson, O. A. 1928 A, 99.  
Richards and Pardee 1925 A, 15.  
Weber and Abel 1928 A, 610, fig. 404.  
Middle Miocene (Flint Creek); Montana.

**Ticholeptus hypsodus** Loomis.

Loomis, F. B. 1924 B, 35, fig. 25.  
Miocene (Snake Creek); Nebraska.

**POATREPHES** Douglass. Type *P. paludicola* Douglass.

Douglass, E. 1903 A, 176.  
Loomis, F. B. 1924 B, 15.  
Matthew, W. D. 1909 C, 119.

**Ticholeptus petersoni** Loomis.

Loomis, F. B. 1923 A, 225, figs. 2-4.  
1924 B, 11, fig. 6.  
Peterson, O. A. 1928 A, 99.  
Lower Miocene (Lower Harrison); Wyoming.

**Ticholeptus zygomaticus** Cope.

Hay, O. P. 1902 A, 669 (Merychys).  
Douglass, E. 1907 A, 816, 821.  
Dall and Harris 1892 A, 288 (Merychys).  
Matthew, W. D. 1909 C, 115.  
Middle Miocene (Deep River); Montana.

**Ticholeptus** sp. indet.

Peterson, O. A. 1928 A, 99, fig. 8. Miocene or Pliocene (Brown's Park); Colorado.

**CYCLOPIDIUS** Cope. Type *C. sinus* Cope.

Hay, O. P. 1902 A, 670.  
Beddard, F. E. 1902 A, 331.  
Kampfen, P. N. 1905 A, 591.  
Loomis, F. B. 1924 B, 14, 15 (Cyclopidius);  
14 (Chelonocephalus).  
1925 A, 241, 244, 247.  
Matthew, W. D. 1901 B, 374, 395, 445.  
1909 C, 114.  
Osborn, H. F. 1909 D, 78.  
1910 B, 293, 550.  
Palmer, T. S. 1904 A, 207, 911 (Cyclopidius);  
142, 911 (Brachymeryx).  
Peterson, O. A. 1906 C, 22.  
1928 B, pl. xviii, figs. 10, 11.  
Reynolds, S. H. 1897 A, 468.  
Schlosser, M. 1904 C, 97.  
Scott, W. B. 1913 A, 361, 376.  
Sinclair, W. J. 1910 B, 198.  
Thorpe, M. R. 1921 B, 412.  
1923 E, 241.  
1925 A, 73, 74 (Cyclopidius, Chelonocephalus).  
Trouessart, E. L. 1905 A, 670.  
Weber and Abel 1928 A, 611 (Cyclopidius, Pitheciestes).  
Winge, H. 1906 A, 133 (Cyclopidius, Pitheciestes).  
Zittel and Schlosser 1911 A, 484.  
1923 A, 573, 673.

**Cyclopidius brevifacies** (Cope).

Hay, O. P. 1902 A, 670.  
Dall and Harris 1892 A, 288 (Pitheciestes).  
Loomis, F. B. 1925 A, 241 (Pitheciestes brevifacies); 247, 248 (P. breviceps).  
Trouessart, E. L. 1905 A, 670.  
Middle Miocene (Deep River); Montana.

**Poatrephes paludicola** Douglass.

Douglass, E. 1903 A, 153, 176, 179, fig. 18.  
1907 A, 821.  
Matthew, W. D. 1909 C, 115.  
Middle Miocene (Flint Creek); Montana.

**Cyclopidius decedens** (Cope).

Hay, O. P. 1902 A, 670.  
Dall and Harris 1892 A, 288 (Pitheciestes).  
Loomis, F. B. 1925 A, 248 (Syn. of C. sinus).  
Matthew, W. D. 1909 C, 115.  
Trouessart, E. L. 1905 A, 671.  
Middle Miocene (Deep River); Montana.

**Cyclopidius emydinus** Cope.

Hay, O. P. 1902 A, 670.  
Dall and Harris 1892 A, 288.  
Douglass, E. 1907 A, 821.  
Kampfen, P. N. 1905 A, 592.  
Loomis, F. B. 1925 A, 241, 248.  
Matthew, W. D. 1909 C, 115.  
Miocene (Deep River); Montana.

**Cyclopidius heterodon** Cope.

Hay, O. P. 1902 A, 670.  
Dall and Harris 1892 A, 288.  
Loomis, F. B. 1925 A, 248 (Syn. of C. sinus).  
Trouessart, E. L. 1905 A, 671.  
Miocene (Deep River); Montana.

**Cyclopidius incisivus** Scott.

Hay, O. P. 1902 A, 671.  
Douglass, E. 1907 A, 821.  
Loomis, F. B. 1925 A, 241, 248 (Syn. of C. emydinus).  
Matthew, W. D. 1909 C, 115.  
Middle Miocene (Deep River); Montana.

**Cyclopidius lullianus** Thorpe.

Thorpe, M. R. 1921 B, 413, figs. 1, 2.  
Loomis, F. B. 1925 A, 242, figs. 1, 2.

Thorpe, M. R. 1925 A, 72, fig. 2.

Lower Miocene (Lower Rosebud); Wyoming.

### *Cyclopidius schucherti* (Thorpe).

Thorpe, M. R. 1921 B, 415, figs. 4-6 (Chelonocephalus, subgenus).

Loomis, F. B. 1925 A, 248 (Chelonocephalus?).

Thorpe, M. R. 1925 A, 73, figs. 3, 4 (Chelonocephalus).

Lower Miocene (Lower Rosebud); South Dakota.

### *Cyclopidius simus* Cope.

Hay, O. P. 1902 A, 671.

Dall and Harris 1892 A, 288 (Brachymeryx feliceps).

Douglass, E. 1907 A, 821.

Loomis, F. B. 1925 A, 241, 247.

Matthew, W. D. 1909 C, 115.

Trouessart, E. L. 1905 A, 670.

Middle Miocene (Deep River); Montana.

## HADROHYUS Leidy. Type *H. supremus* Leidy.

Hay, O. P. 1902 A, 671.

Palmer, T. S. 1904 A, 305, 931.

A genus of uncertain relationships.

### *Hadrohyus supremus* Leidy.

Hay, O. P. 1902 A, 671.

Miocene; Oregon.

## Suborder RUMINANTIA Cuvier.

Cuvier, G. 1834 A, vi.

Hay, O. P. 1902 A, 681 (Boöidea).

Beyer, H. 1903 A, 81 ("wiederkäuer").

Kowalevsky, W. 1873 A, 171 (Selenodontia).

Leche, W. 1900 A, 1033 ("wiederkäuer").

Matthew, W. D. 1923 B, 968, 981, fig. 16 ("ruminants").

Petersen, G. 1921 A, 294.

Weber, M. 1904 A, 645 (Selenodontia).

Weber and Abel 1923 A, 426, 538, 554, 565 (Selenodontia).

Weber and Burlet 1927 A, xv (Selenodontia).

Zittel, K. A. 1893 B, 324 (Selenodontia).

Zittel and Schlosser 1923 A, 569.

### Superfamily CAMELOIDÆ, new form.

Unless otherwise indicated the authors, as cited, use for this group the term Tylopoda.

Hay, O. P. 1902 A, 662 (Cameloidæ).

Andrews, C. W. 1916 A, 1.

Beddard, F. E. 1902 A, 285.

Boas, J. E. V. 1914 B, 589.

Bonaparte, C. L. 1832 A, 292.

Burmeister, H. 1879 B, 456.

Carus, V. 1875 A, 156.

Carus and Engelmann 1861 A, 1296, 1687 (Ruminantia, in part).

Clark and Sonntag 1926 A, 482.

Cope, E. D. 1891 N, 87, 89 (Cameloidæ).

Eisler, P. 1895 A, 54 ("wiederkäuer").

Frech, F. 1906 A, 486 ("tylopoden").

Giebel, C. G. 1883 A ("tylopoden").

Gray, J. E. 1821 A, 307 (Hydrophoræ).

Gregory, W. K. 1910 A, 70.

Haeckel, E. 1873 A, 554.

Hay, O. P. 1914 A, 228 (Cameloidæ).

Hoernes, R. 1886 A, 676.

Hogben, L. T. 1919 A, 75.

Illiger, C. 1811 A, 102.

Leche, W. 1887 A.

Lydekker, R. 1904 B, 25.

1913 B, 7.

1915 D, 298.

Matthew, W. D. 1901 B, 442.

Osborn, H. F. 1905 I, 101.

1910 B, 550.

Rehs, J. 1914 A, 48.

Reynolds, S. H. 1897 A, 557.

Schlosser, M. 1901 D, 462, 466 ("tylopoden").

1903 I, 96, 184, 209, 211.

1904 C, 95 ("tylopoden").

Scott, W. B. 1913 A, 202, 362, 386, 409, 410.

Stehlin, H. G. 1910 A, 1089 ("tylopoden").

Troxell, E. L. 1920 A, 392 (Tylopodidæ).

Weber, M. 1904 A, 628, 643, 655 (Tylopoda); 661 (Cameloidæ).

Weber and Abel 1923 A, 426, 538, 555.

Woodward, A. S. 1923 C, 40.

Wright, R. R. 1883 A, 279.

Zittel and Schlosser 1923 A, 573.

## CAMELIDÆ Gray.

Gray, J. E. 1821 A, 307.

Hay, O. P. 1902 A, 673 (Camelidæ); 680 (Camelinæ).

Abel, O. 1913 B, 729, 742.

1914 A, 168.

1919 A, 810.

1920 A, 436.

1921 A, 260 ("cameele").

Adams, C. C. 1905 A, 54 ("camels").

Ameghino, F. 1889 A, 1007.

1912 B, 171 ("camelidés").

Andrews, C. W. 1916 A, 1.

Arlt, T. 1907 B, 452 ("cameliden").

Arlt, T. 1907 D, 203, 256, 643 (Camelidæ).

Camelinæ, Protolabinae).

1911 A, 222 ("kamele").

1912 A, 100.

Baur, G. 1886 N, 117.

Beddard, F. E. 1902 A, 285.

Behlen, H. 1906 A, 187 ("cameliden").

1907 A, 273 ("cameliden").

Black, D. 1915 A, 353.

Black, N. 1900 A, 11 ("camels").

Boule and Thevenin 1920 A, 171.

Buwalda, J. P. 1912 C, 350 ("camels").

Case, E. C. 1899 B, 173.



- Cleland, J. 1863 B, 298 (camel, alpaca).  
 Cope, E. D. 1880 U, 152.  
     1884 G, 16 (Protolabridæ).  
 Cossmann, M. 1899 B, 83.  
 Cuvier, F. 1825 A, 227 ("chameaux").  
 Cuvier, G. 1805 A ("chameaux").  
 Depéret, C. 1907 B ("camélidés").  
 Diener, C. 1912 A, 216 ("kamelen").  
 Doran, A. H. G. 1878 A, 424.  
 Eaton, J. E. 1928 A, 133 ("camels").  
 Fairchild, H. L. 1894 A, 208 ("camels").  
 Falconer and Cautley 1836 A, 116, 120.  
 Frech, F. 1906 A, 492 ("kamele").  
     1907 A, 316 ("cameliden").  
 Gervais, P. 1859 A, 156 ("camélidés").  
 Gidley, J. W. 1912 C, 19 ("camels, llamas").  
 Giebel, C. G. 1883 A ("llamas").  
 Gilbert, J. Z. 1910 B, 37.  
 Gregory, W. K. 1920 A, 193.  
     1927 A, 601 ("camels").  
 Haworth, E. 1897 A, 280 ("llamas").  
 Hay, O. P. 1910 D, 372 ("camels").  
     1914 A, 229, 230.  
     1916 E, 54 ("camels").  
     1919 A, 311 ("camels").  
     1923 A, 481.  
     1926 E, 388 ("camels").  
     1927 E, 77 ("camels").  
 Hrdlička, A. 1903 A, 379.  
 Huxley, T. H. 1870 F, 537, 542 ("camels").  
 Kampfen, P. N. 1905 A, 594.  
 Knottnerus-Meyer, T. 1907 A, 9, 97.  
 Laloy, L. 1907 A, 536 ("camélidés").  
 Le Damany, P. 1906 B, 163 ("chameaux").  
 Lee, Stone, Gale 1915 A, 27, 34 ("camels").  
 Lesbe, F. X. 1903 A  
 Leunis and Ludwig 1883 A, 266.  
 Lobley, J. L. 1908 A, 200, 204, 213.  
 Loomis, F. B. 1925 B, 226 ("camels").  
     1925 E, 595.  
     1926 A, 153 ("camels").  
 Lull, R. S. 1904 C, 8.  
     1917 B, 624.  
 Lydekker, R. 1903 D, 124 ("camels").  
     1904 B, 25, 28.  
     1907 B, 60.  
     1913 B, 7.  
     1915 D, 299.  
 Martins, C. 1857 A, 70 ("chameaux").  
 Matthew, W. D. 1901 B, 420-439.  
     1904 B, 213.  
     1904 E, 892.  
     1908 A, 549, 561.  
     1909 C, 123.  
     1910 H, 477 ("camels").  
     1913 B, 291.  
     1914 G, 234.  
     1915 A, 187, 245, 247, 254, fig. 22.  
     1915 K, 457, fig. 17 ("camels").  
     1918 D, 144.  
     1924 C, 186.  
     1924 E, 745.  
     1928 B, 968, 980, 981, fig. 16.  
 Matthew and Cook 1909 A, 367, 395
- Meckel, J. F. 1825 A ("camels").  
 Merriam, J. C. 1910 C, 52 ("camels").  
     1915 F, 259 ("camels").  
     1919 A, 512.  
 Middleton, J. 1844 A, 286 ("camels").  
 Montgomery, T. H. 1901 A, 21734 ("camels").  
 Nehring, A. 1901 A, 264 ("cameliden").  
     1901 B, 189 ("kamele").  
 O'Harra, C. C. 1910 A, 114, 145.  
     1920 A, 132.  
 Osborn, H. F. 1905 D, 315 ("camels").  
     1905 H, 222, fig. 5.  
     1905 I, 101.  
     1906 C, 776.  
     1909 D, 123.  
     1910 B, 608.  
     1917 B, 262, 292 ("camels").  
     1926 A, 188 ("camel").  
 Owen, R. 1868 A, 868.  
 Palacký, J. 1903 B, 306 ("cameliden").  
 Palmer, T. S. 1904 A, 920 (Camelidæ, with subfamilies).  
 Pander and Alton 1823 A, 7, pl. in ("kameele").  
 Paulli, S. 1900 A, 203, pl. x; text-figs. 14-19 (Camelus, Auchenia).  
 Peterson, O. A. 1908 A, 300.  
     1911 B, 271.  
     1912 B, 166.  
 Pictet, F. J. 1853 A, 344 ("camélidés").  
 Rehs, J. 1914 A, 48.  
 Scharff, R. F. 1911 A, 86, 116, 337, 406 ("cameliden").  
 Schlosser, M. 1899 T, 453 ("cameliden").  
     1901 D, 462.  
     1911 A, 165.  
 Schmidt, O. 1886 A, 154.  
 Schuchert, C. 1915 A, 934.  
 Schuchert and Levene 1927 A, 336 ("camels").  
 Schwarz, E. 1924 A, 420.  
 Slater, P. L. 1866 A, 403.  
 Scott, W. B. 1896 D, 47, 57, 59 ("camels").  
     1913 A, 362, 386, 677.  
     1916 A, 115 ("camels").  
     1917 A, 174 ("camels").  
     1924 A, 438 ("camels").  
     1928 A, 330 ("camels").  
 Stremme, H. 1911 A, 88.  
 Stromer, E. 1912 A, 198.  
 Terra, P. 1911 A, 326.  
 Toldt, C. 1905 A, 332 ("cameliden").  
 Trouessart, E. L. 1905 A, 671.  
 Underhill, B. M. 1910 A, 81.  
 Upham, W. 1902 A, 149 ("camels").  
     1903 C, 22679 ("camels").  
 Van Bemmelen, J. F. 1918 A, 571.  
 Wallace, A. R. 1876 A, i, 112, 138; ii, 216.  
 Weber, M. 1904 A, 585.  
 Williston, S. W. 1910 G, 595 ("camels").  
 Winge, H. 1906 A, 70, 97 (Camelidæ, Camelini).  
 Woodward, A. S. 1898 D, 336 ("camels").  
     1917 D, lxxi ("camels").  
 Zittel, K. A. 1897 A, 126 ("cameliden").  
 Zittel and Schlosser 1911 A, 484.  
     1923 A, 573.

## POEBROTHERIINÆ Zittel.

- Zittel, K. A. 1893 B, 361 (Poebrotherinæ).  
 Hay, O. P. 1902 A, 675.

- Zittel and Schlosser 1911 A, 488.  
     1923 A, 575.

CAMELONODON Granger. Type *C. arapahovius* Granger.

Granger, W. 1910 A, 248.

**Camelodon arapahovius** Granger.

Granger, W. 1910 A, 248, fig. 4.

Zdansky, O. 1926 B, 8.

Upper Eocene (Uinta); Wyoming.

PROTYLOPUS Wortman. Type *P. petersoni* Wortman.

Hay, O. P. 1902 A, 675.

Abel, O. 1914 A, 169.

1919 A, 808.

Andrews, C. W. 1916 A, 2.

Beddard, F. E. 1902 A, 287.

Boas, J. E. V. 1914 B, 590.

Boule and Thevenin 1920 A, 194.

Cossmann, M. 1899 B, 83.

Granger, W. 1910 A, 249.

Gregory, W. K. 1920 A, 193.

Haug, E. 1911 A, 1528.

Kampfen, P. N. 1905 A, 596.

Lull, R. S. 1917 B, 632, 633, 634, fig. 231.

Lydekker, R. 1904 B, 26.

Matthew, W. D. 1908 A, 555.

1909 C, 103.

1910 A, 39, 42.

1915 A, 244.

1915 K, 474.

1924 E, 748.

1928 B, 980.

O'Harra, C. C. 1920 A, 137, fig. 71.

Osborn, H. F. 1905 I, 101.

1910 B, 170, 555.

Palmer, T. S. 1904 A, 587, 921.

Peterson, O. A. 1911 B, 271.

Scharff, R. F. 1911 A, 407.

Schlosser, M. 1901 D, 466.

1904 C, 95.

Scott, W. B. 1913 A, 267, 397, 398, 400, 401, figs.

213, 214.

1917 A, 115, 117.

Stehlin, H. G. 1910 A, 1083.

Terra, P. 1911 A, 327.

Troxell, E. L. 1920 A, 392.

Weber, M. 1904 A, 659, 661, 662.

Weber and Abel 1928 A, 559, 561.

Zdansky, O. 1926 B, 21, 22, 30.

Zittel and Schlosser 1911 A, 484.

1923 A, 574, 669.

**Protylopus annectens** Peterson.

Peterson, O. A. 1919 A, 91, pl. xxxvii, fig. 14;  
text-fig. 15.

Upper Eocene (Uinta); Utah.

**Protylopus petersoni** Wortman.

Hay, O. P. 1902 A, 675.

Abel, O. 1913 B, 742, fig. 60.

1914 A, 169, fig. 125.

1920 A, 437, fig. 663.

Beddard, F. E. 1902 A, 288.

Boule and Thevenin 1920 A, 194.

Matthew, W. D. 1909 C, 100.

O'Harra, C. C. 1920 A, 135.

Osborn, H. F. 1904 F, 15.

Peterson, O. A. 1919 A, 88, fig. 14.

Schlosser, M. 1901 D, 463.

Scott, W. B. 1913 A, 399, fig. 212.

Stromer, E. 1912 A, 200, fig. 184.

Trouessart, E. L. 1905 A, 671.

Weber, M. 1904 A, 659, fig. 473.

Weber and Abel 1928 A, 560, fig. 376.

Upper Eocene (Uinta); Utah.

EOTYLOPUS Matthew. Type *E. reedi* Matthew.

Matthew, W. D. 1910 A, 36, 42.

1915 K, 420.

1928 B, 980.

Osborn, H. F. 1910 B, 550.

Peterson, O. A. 1919 A, 92.

Scott, W. B. 1913 A, 257, 362.

Zittel and Schlosser 1923 A, 574.

**Eotylopus reedi** Matthew.

Matthew, W. D. 1910 A, 36, figs. 1-5.

Gregory, W. K. 1912 F, 287.

Peterson, O. A. 1912 B, 166.

Oligocene (Lower); Wyoming.

POEBROTHERIUM Leidy. Type *P. wilsoni* Leidy.

Hay, O. P. 1902 A, 675.

Abel, O. 1913 B, 742.

1914 A, 169.

1919 A, 808.

Andrews, C. W. 1916 A, 2.

Baur, G. 1886 N, 117.

Beddard, F. E. 1902 A, 288.

Boas, J. E. V. 1914 B, 591, 592, figs. 40, 41.

Boule and Thevenin 1920 A, 194.

Cope, E. D. 1880 U, 155, 156.

Depéret, C. 1907 B (Pæbrotherium).

Gaudry, A. 1891 C, 146.

Giebel, C. G. 1883 A, 135.

Gregory, W. K. 1910 A, 402.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 376.

Kampfen, P. N. 1905 A, 595.

Laloy, L. 1907 A, 586.

Leche, W. 1904 A, 220.

Lobley, J. L. 1908 A, 213.

Loomis, F. B. 1910 B, 312, 321.

1925 E, 596, figs. 9, 10.

1928 A, 137.

Lull, R. S. 1917 B, 632, 634, fig. 231.

1921 C, 393.

Lydekker, R. 1903 D, 124.

1904 B, 26, figs. 2, 3.

Matthew, W. D. 1901 B, 369, 422, 431, 441.

1903 B, 225.

1904 B, 214.

1908 A, 549, 552, 555.

1909 C, 111.

- Matthew, W. D. 1910 A, 37, 40.  
 1915 A, 244.  
 1915 K, 420, 474.  
 1924 E, 748.  
 1928 B, 980.
- O'Harra, C. C. 1920 A, 137, fig. 71.
- Osborn, H. F. 1905 H, 222 (Poebrotherium).  
 1905 I, 104, 106.  
 1909 D, 64.  
 1910 B, 220, 550.
- Palmer, T. S. 1904 A, 298, 920 (Gomphotherium); 553, 921 (Poebrotherium).
- Peterson, O. A. 1904 A, 435.  
 1911 B, 271.  
 1912 B, 166.  
 1919 A, 89.
- Pictet, F. J. 1853 A, 350.
- Schlosser, M. 1901 A, 491.  
 1901 D, 464, 466, 467.
- Schmidt, O. 1886 A, 156.
- Scott, W. B. 1913 A, 688, figs. 133, 213, 214.  
 1917 A, 115, 117.
- Sinclair, W. J. 1924 A, 129.
- Terra, P. 1911 A, 327.
- Trouessart, E. L. 1905 A, 671.
- Troxell, E. L. 1917 B, 381.  
 1920 A, 392.
- Wallace, A. R. 1876 A, I, 138; II, 217.
- Weber, M. 1904 A, 659.
- Weber and Abel 1928 A, 559, fig. 377.
- Winge, H. 1906 A, 101.
- Zdansky, O. 1926 B, 21, 22, 30.
- Zittel and Schlosser 1911 A, 485.  
 1923 A, 575, 671.
- Poebrotherium andersoni Troxell.**
- Troxell, E. L. 1917 B, 381, figs. 1-5.
- Loomis, F. B. 1928 A, 139, figs. 2, 3.
- O'Harra, C. C. 1920 A, 153.
- Sinclair, W. J. 1924 A, 102, 129, fig. 10.
- Troxell, E. L. 1920 A, 392.  
 Middle Oligocene (Brule); Nebraska.
- Poebrotherium eximium Hay.**
- Hay, O. P. 1902 A, 675.
- Abel, O. 1913 B, 742, fig. 61 (P. wilsoni).
- Beddard, F. E. 1902 A, 288, fig. 150 (P. wilsoni).
- Cook, H. J. 1912 D, 38.
- Cossmann, M. 1899 B, 83 (P. wilsoni).
- Loomis, F. B. 1928 A, 139, figs. 2, 3.
- Matthew, W. D. 1904 B, 214.  
 1909 C, 106.
- O'Harra, C. C. 1910 A, 115 (P. eximium); fig. 17 (P. wilsoni).  
 1920 A, 132, fig. 68 (P. wilsoni); 153 (P. eximium).
- Sinclair, W. J. 1924 A, 129.
- Trouessart, E. L. 1905 A, 671.
- Troxell, E. L. 1917 B, 387.  
 Middle Oligocene (Brule); South Dakota, Colorado, Nebraska.

**Poebrotherium labiatum Cope.**

- Hay, O. P. 1902 A, 675.
- Cook, H. J. 1912 D, 38.
- Cope, E. D. 1885 FF, 793, fig. 2.  
 1891 N, 62, 63, fig. e.
- Cope and Matthew 1915 A, pl. cxv; pl. cxv a, figs. 1-12.
- Loomis, F. B. 1928 A, 137, figs. 2, 3.
- Lull, R. S. 1917 B, 635, fig. 232.
- Matthew, W. D. 1901 B, 358, 422, 423.  
 1904 B, 214.  
 1909 C, 106.
- O'Harra, C. C. 1910 A, 116.  
 1920 A, 153, pl. xlv.
- Schlosser, M. 1901 D, 464.
- Scott, W. B. 1913 A, 395, fig. 211.
- Sinclair, W. J. 1924 A, 129.
- Trouessart, E. L. 1905 A, 671.
- Troxell, E. L. 1917 B, 387.
- Zdansky, O. 1926 B, 12, 19.  
 Middle Oligocene (Brule); Nebraska, Colorado.

**Poebrotherium wilsoni Leidy.**

- Hay, O. P. 1902 A, 676.
- Abel, O. 1914 A, 169, fig. 126.
- Cook, H. J. 1912 D, 38.
- Cope and Matthew 1915 A, pl. cxv a, figs. 13-21.
- Darton, N. H. 1901 A, 543.  
 1905 A, 45, 173.
- Gervais, P. 1859 A, 360 (Poebrotherium).
- Gebel, C. G. 1883 A, pl. xlv.
- Lambe, L. M. 1908 A, 10, 30, pl. viii, figs. 8, 9.
- Loomis, F. B. 1910 B, 309.  
 1924 B, 3, figs. 2, 3.  
 1928 A, 137, figs. 1-3.
- Matthew, W. D. 1901 B, 358, 422.  
 1904 B, 214.  
 1909 C, 106.
- O'Harra, C. C. 1910 A, 17, 115, fig. 3.  
 1920 A, 24, 132, 135, pl. xlv; text-figs. 2, 68.
- Osborn, H. F. 1904 F, 15.
- Schlosser, M. 1901 D, 464.
- Scott, W. B. 1913 A, 399, fig. 212.
- Sinclair, W. J. 1924 A, 129.
- Trouessart, E. L. 1905 A, 671.
- Troxell, E. L. 1917 B, 387.
- Zdansky, O. 1926 B
- Zittel and Schlosser 1911 A, 485, fig. 676.  
 1923 A, 574, fig. 717.  
 Middle Oligocene (Brule); S. Dakota, Colorado, Nebraska.

**Poebrotherium sp. indet.**

- Matthew, W. D. 1901 B, 358, 369, 422.  
 1909 C, 114. Lower Miocene (Fort Logan); Montana.
- Sinclair, W. J. 1924 A, 102. Oligocene (White River); South Dakota.

**PROTOMERYX Leidy. Type P. halli Leidy.**

- Hay, O. P. 1902 A, 676.
- Abel, O. 1913 B, 742.  
 1914 A, 170.
- Abel, O. 1919 A, 808.  
 1926 B, 359.
- Beddard, F. E. 1902 A, 289 (Gomphotherium).

- Giebel, C. G. 1883 A, 135.  
 Kampfen, P. N. 1905 A, 595 (Gomphotherium).  
 Loomis, F. B. 1911 B, 65.  
 Lull, R. S. 1917 B, 634, 636.  
 1921 C, 404 (Protomeryx, Gomphoides).  
 Lydekker, R. 1904 B, 27 (Gomphotherium).  
 Matthew, W. D. 1901 B, 370, 422 (Protomeryx, Gomphotherium).  
 1904 B, 212, 214 (Protomeryx, Gomphotherium).  
 1909 C, 120.  
 1915 A, 244.  
 Merriam and Sinclair 1903 A, 95.  
 Osborn, H. F. 1909 D, 134.  
 1910 B, 286.  
 1912 G, 247, 249.  
 Palmer, T. S. 1904 A, 583, 921.  
 Peterson, O. A. 1904 A, 472.  
 Schlosser, M. 1901 D, 464 (Gomphotherium).  
 Scott, W. B. 1913 A, 241, 251, 391.  
 Trouessart, E. L. 1905 A, 672.  
 Troxell, E. L. 1917 B, 381 (Gomphotherium).  
 Wallace, A. R. 1876 A, i, 138; ii, 217.  
 Weber, M. 1904 A, 660.  
 Weber and Abel 1928 A, 560.  
 Winge, H. 1906 A, 102 (Gomphotherium).  
 Zittel and Schlosser 1923 A, 575, 672.

### **Protomeryx campester** Matthew.

- Matthew, W. D. 1901 B, 422.  
 1901 B, 214.  
 Trouessart, E. L. 1905 A, 672.  
 Upper Oligocene; Colorado.

### **PSEUDOLABIS** Matthew. Type *P. dakotensis* Matthew.

- Matthew, W. D. 1904 B, 211, 215.  
 Haug, E. 1911 A, 1529.  
 Matthew, W. D. 1909 C, 111.  
 Osborn, H. F. 1905 I, 104.  
 1910 B, 227, 550.  
 Trouessart, E. L. 1905 A, 671.

### **Pseudolabis dakotensis** Matthew.

- Matthew, W. D. 1904 B, 211, 215.  
 Cook, H. J. 1912 D, 39 (Pseudolabis).  
 Lull, R. S. 1921 C, 393.

### **OXYDACTYLUS** Peterson. Type *O. longipes* Peterson.

- Peterson, O. A. 1904 A, 434.  
 Abel, O. 1926 B, 359.  
 Andrews, C. W. 1916 A, 2.  
 Barbour, E. H. 1906 C, 781.  
 Haug, E. 1911 A, 1705.  
 Lull, R. S. 1917 B, 634, 637, fig. 234.  
 1921 C, 404.  
 Loomis, F. B. 1909 B, 196.  
 1910 B, 312.  
 1911 B, 65.  
 1925 E, 591, figs. 5, 6, 9, 10.  
 1928 A, 139.  
 Matthew, W. D. 1904 B, 214.  
 1909 C, 120.  
 1915 A, 244.  
 1924 C, 138.  
 1924 E, 748.  
 O'Harra, C. C. 1920 A, 136.  
 Osborn, H. F. 1907 F, 872.

### **Protomeryx cedrensis** Matthew.

- Matthew, W. D. 1901 B, 358, 422, text-fig. 28.  
 Cook, H. J. 1912 D, 43 (This species?).  
 Matthew, W. D. 1909 C, 114 (This genus?).  
 Peterson, O. A. 1906 C, 24, 32.  
 Trouessart, E. L. 1905 A, 672.  
 Lower Miocene (Upper Harrison); Nebraska.

### **Protomeryx halli** Leidy.

- Hay, O. P. 1902 A, 676.  
 Matthew, W. D. 1901 B, 358.  
 1904 B, 214.  
 1909 C, 114.  
 O'Harra, C. C. 1920 A, 157.  
 Lower Miocene (Upper Rosebud); South Dakota.

### **Protomeryx leonardi** Loomis.

- Loomis, F. B. 1911 B, 68, fig. 3.  
 Cook, H. J. 1912 D, 43.  
 O'Harra, C. C. 1920 A, 157.  
 Lower Miocene (Upper Harrison); Nebraska.

### **Protomeryx** sp. indet.

- Matthew, W. D. 1909 C, 114. Miocene (Lower); South Dakota.  
 Sinclair, W. J. 1904 B, 10. Oligocene (John Day); Oregon.  
 Smith, D. T. 1904 A, 10. Tertiary (Miocene or Pliocene); Nevada.

### **Pseudolabis matthewi** Lull.

- Matthew, W. D. 1909 C, 109.  
 O'Harra, C. C. 1910 A, 116.  
 1920 A, 154.  
 Upper Oligocene (Brule); region of South Dakota, Nebraska, Wyoming.  
 Lull, R. S. 1921 C, 392, fig. 1 [Pseudolabis (Paralabis, new subg.)].  
 Upper Oligocene (Protoceras); South Dakota.

### **Oxydactylus brachyodontus** Peterson.

- Osborn, H. F. 1909 D, 72, 74, 78.  
 1910 B, 236, 286, 291, 550; fig. 144.  
 1912 G, 247, 249.  
 1918 A, 13.  
 Peterson, O. A. 1906 C, 22.  
 1908 A, 289.  
 1912 B, 167.  
 Riggs, E. S. 1909 A, 196.  
 Scott, W. B. 1913 A, 241, 391.  
 Sellards, E. H. 1916 B, 92.  
 Trouessart, E. L. 1905 A, 673.  
 Zittel and Schlosser 1923 A, 575, 672.  
 Peterson, O. A. 1904 A, 469, pls. xi-xiv.  
 Cook, H. J. 1912 D, 43.  
 Loomis, F. B. 1911 B, 66.  
 Matthew, W. D. 1904 B, 214.  
 1909 C, 114 (O. brachyiceps).

O'Harra, C. C. 1920 A, 158 (*O. brachycephalus*).  
 Trouessart, E. L. 1905 A, 673.  
 Lower Miocene (Upper Harrison); Nebraska.

***Oxydactylus campestris* Cook, H. J.**

Cook, H. J. 1909 B, 188.  
 1912 D, 41.

Loomis, F. B. 1911 B, 68.

O'Harra, C. C. 1920 A, 158.  
 Lower Miocene (Lower Harrison); Nebraska.

***Oxydactylus gibbi* Loomis.**

Loomis, F. B. 1911 B, 67, fig. 2.

Cook, H. J. 1912 D, 43.

O'Harra, C. C. 1920 A, 158.  
 Lower Miocene (Upper Harrison); Wyoming.

***Oxydactylus longipes* Peterson.**

Peterson, O. A. 1904 A, 434, pls. iv-x, xv.

Cook, H. J. 1909 B, 188.

1912 D, 43.

Davidson, P. 1923 A, 400, 407.

Loomis, F. B. 1911 B, 66.

Lull, R. S. 1921 C, 402, 403.

Matthew, W. D. 1904 B, 214.

1909 C, 114.

O'Harra, C. C. 1910 A, 115, pl. xlix.

1920 A, 133, fig. 69; 157.

Peterson, O. A. 1908 A, 288.

1911 B, 270.

Scott, W. B. 1913 A, 392, 393, figs. 209, 210.

Trouessart, E. L. 1905 A, 673.

Zdansky, O. 1926 B.

Lower Miocene (Upper Harrison); Nebraska.

***Oxydactylus longirostris* Peterson.**

Peterson, O. A. 1911 A, 260, pl. xxxvii-xl.

Cook, H. J. 1912 D, 43.

O'Harra, C. C. 1920 A, 158.

Lower Miocene (Upper Harrison); Nebraska.

***Oxydactylus lulli* Loomis.**

Loomis, F. B. 1911 B, 66, fig. 1.

Cook, H. J. 1912 D, 43.

O'Harra, C. C. 1920 A, 158.

Lower Miocene (Upper Harrison); Wyoming, Nebraska.

***Oxydactylus* sp. indet.**

Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.

Loomis, F. B. 1923 A, 222. Miocene (Lower Harrison); Nebraska.

Osborn, H. F. 1919 A, 16. Miocene (Alum Bluff); Florida.

Sellards, E. H. 1916 B, 89, pl. ii, fig. 4. Miocene (Alum Bluff); Florida.

**MIOLABINÆ Hay.**

Hay, O. P. 1902 A, 676.

Palacký, J. 1903 B, 312, 318 ("protolabinen").

Trouessart, E. L. 1905 A, 672 (*Camelopsanæ*).

Zittel and Schlosser 1911 A, 485 (*Protolabinae*).

1923 A, 570 (*Protolabinae*).

**MIOLABIS Hay. Type *Protolabis transmontanus* Cope.**

Hay, O. P. 1902 A, 676

Abel, O. 1913 B, 743 (*Protolabis*).

Lull, R. S. 1921 C, 404.

Matthew, W. D. 1901 B, 424 (*Protolabis, Miolabis*).

1904 B, 211, 214.

1907 A, 173, 176.

1909 C, 120.

1915 A, 244.

1924 C, 70.

Osborn, H. F. 1909 D, 66, 74, 78.

1910 B, 294, 550.

Palmer, T. S. 1904 A, 426, 921.

Scott, W. B. 1913 A, 391.

Trouessart, E. L. 1905 A, 672 (Subg. of *Protolabis*).

Weber, M. 1904 A, 680.

Winge, H. 1906 A, 102.

***Miolabis tenuis* Matthew.**

Matthew, W. D. 1924 C, 67, 191, fig. 56.

Middle Miocene (Sheep Creek); Nebraska.

***Miolabis transmontanus* (Cope).**

Hay, O. P. 1902 A, 676.

Cope, E. D. 1891 N, 81, fig. 59 (*Protolabis*).

Cope and Matthew 1915 A, pl. cliii, figs. 1, 2 (*Protolabis, Miolabis*).

Dall and Harris 1892 A, 282 (*Protolabis*).

Matthew, W. D. 1901 B, 423, 424, 426, 427 (*Protolabis*).

1904 B, 214.

1907 A, 176.

1909 C, 115.

1924 C, 190.

Merriam and Sinclair 1907 A, 196.

Palacký, J. 1903 B, 312 (*Protolabis*).

Schlosser, M. 1901 D, 464, 467 (*Protolabis*).

Trouessart, E. L. 1905 A, 672.

Middle Miocene (Mascall); Oregon.

**PARATYLOPUS Matthew. Type *P. primævus* Matthew.**

Matthew, W. D. 1904 B, 211 (Subgenus of *Miolabis*).

Boule and Thevenin 1920 A, 194.

Cook, H. J. 1912 D, 38.

Haug, E. 1911 A, 1528, 1705.

Lull, R. S. 1917 B, 634, 637.

Matthew, W. D. 1908 A, 552.

1909 C, 111.

Osborn, H. F. 1905 H, 222.

1905 I, 104.

1909 D, 66.

1912 G, 246.

- Thorpe, M. R. 1921 A, 222.  
 Trouessart, E. L. 1905 A, 672 (Subg. of *Protolabis*).  
 Winge, H. 1906 A, 102.  
 Zittel and Schlosser 1911 A, 485.  
 1923 A, 575, 672.

***Paratylopus cameloïdes* (Wortman).**

- Hay, O. P. 1902 A, 676 (Protomeryx).  
 Lull, R. S. 1921 C, 394, figs. 2-4 [*P. (Gomphotherium)*].  
 Matthew, W. D. 1901 B, 214 (*Miolabis*).  
 1909 C, 109.  
 Merriam, J. C. 1901 A, 297 (*Gomphotherium* This species?).  
 Merriam and Sinclair 1907 A, 187, 191, 192 [*Miolabis (Paratylopus)*].  
 Osborn, H. F. 1909 D, 68.  
 Peterson, O. A. 1904 A, 469 (Protomeryx).  
 Schlosser, M. 1901 D, 464 (*Gomphotherium*).  
 Trouessart, E. L. 1905 A, 672.  
 Upper Oligocene (John Day); Oregon.

***Paratylopus primævus* Matthew.**

- Matthew, W. D. 1904 B, 211, 214 [*Miolabis (Paratylopus)*].  
 1909 C, 106.  
 O'Harra, C. C. 1920 A, 153.

**PROCAMELUS Leidy. Type *P. occidentalis* Leidy.**

- Hay, O. P. 1902 A, 677.  
 Abel, O. 1913 B, 743.  
 1914 A, 170.  
 1919 A, 808.  
 Andrew, C. W. 1916 A, 2.  
 Baur, G. 1886 N, 117.  
 Beddard, F. E. 1902 A, 289.  
 Boas, J. E. V. 1914 B, 592, fig. 40.  
 Boule and Thevenin 1920 A, 194.  
 Cope, E. D. 1880 U, 157.  
 Davidson, P. 1923 A, 400.  
 Douglass, E. 1907 B, 98.  
 1909 A, 477.  
 Freudenberg, W. 1922 A, 10.  
 Frick, C. 1926 A, 20.  
 Giebel, C. G. 1883 A, 135.  
 Gilbert, F. 1910 B, 37.  
 Gregory, W. K. 1920 A, 187, fig. 151.  
 Haug, E. 1911 A, 1705, 1706.  
 Hay, O. P. 1917 I, 212 ("*Camelus*").  
 1918 B, 25.  
 1919 D, 373.  
 1923 A, 494.  
 1925 D, 245.  
 Hay, R. 1890 A, 16 (*Camelus*).  
 Heilprin, A. 1887 A, 376.  
 Laloy, L. 1907 A, 586.  
 Lee, Stone, Gale 1915 A, 34.  
 Lull, R. S. 1917 B, 632, 634, 636, fig. 231.  
 Lydekker, R. 1904 B, 27.  
 Matthew, W. D. 1901 B, 423, 426, 427.  
 1904 B, 215.  
 1909 C, 120.  
 1910 G, 155.  
 1915 A, 244.  
 1918 A, 216.  
 1924 E, 748.  
 Matthew and Cook 1909 A, 367, 405, 407.

- Trouessart, E. L. 1905 A, 672.  
 Middle Oligocene (Brule); South Dakota.

***Paratylopus sternbergi* (Cope).**

- Hay, O. P. 1902 A, 676 (Protomeryx).  
 Cope and Matthew 1915 A, pl. cxvi (*Poebrotherium*; *Paratylopus*).  
 Lull, R. S. 1921 C, 395.  
 Matthew, W. D. 1901 B, 423 (Protomeryx).  
 1904 B, 214 (*Miolabis*).  
 1909 C, 109.  
 Merriam and Sinclair 1907 A, 187 [*Miolabis (Paratylopus)*].  
 Osborn, H. F. 1909 D, 68.  
 Schlosser, M. 1901 D, 464, 466 (*Gomphotherium*).  
 Sternberg, C. H. 1881 A, 541 (Protomeryx).  
 1909 C, 188.  
 Trouessart, E. L. 1905 A, 672.  
 Troxell, E. L. 1917 B, 388 (*Gomphotherium*).  
 Zittel and Schlosser 1911 A, 485, fig. 677.  
 1923 A, 575, fig. 718.  
 Upper Oligocene (John Day); Oregon.

***Paratylopus wortmani* Lull.**

- Lull, R. S. 1921 C, 400, fig. 5.  
 Zdansky, O. 1926 B, 3.  
 Upper Oligocene (Upper John Day); Oregon.

- Merriam, J. C. 1907 A, 381.  
 1915 F, 257 (*Procamelas*).  
 1917 A, 443.  
 O'Harra, C. C. 1920 A, 136.  
 Osborn, H. F. 1909 D, 79, 80, 81.  
 1910 B, 628.  
 1912 G, 248.  
 1918 A, 23, 24, 26, 27, 29, 33.  
 Palmer, T. S. 1904 A, 565, 921.  
 Pavlow, M. 1904 A, 118, 127.  
 Peterson, O. A. 1904 A, 471.  
 Schlosser, M. 1901 D, 464, 466.  
 1903 I, 97.  
 Schmidt, O. 1886 A, 156.  
 Schuchert, C. 1910 A, 599.  
 Scott, W. B. 1913 A, 391, 400, 401, figs. 213, 214.  
 1917 A, 115, 117.  
 Sellards, E. H. 1914 A, 162.  
 1916 B, 94.  
 Terra, P. 1911 A, 326.  
 Trouessart, E. L. 1905 A, 673.  
 Troxell, E. L. 1917 B, 385.  
 Wallace, A. R. 1876 A, x, 130, 138; II, 217.  
 Weber, M. 1904 A, 680.  
 Weber and Abel 1928 A, 560, 561.  
 Winge, H. 1906 A, 103.  
 Woodward, A. S. 1898 D, 332.  
 Zittel and Schlosser 1911 A, 485.  
 1923 A, 575, 673, 679, 680.

***Procamelus benedentatus* Hay.**

- Hay, O. P. 1924 A, 12, pl. v.  
 Upper Miocene (Fleming); Texas.

***Procamelus castilli* "Cope."**

- Villada, M. M. 1903 A, 448 (*Auchenia*).  
 Not otherwise known to the present writer.

**Procamelus coconinensis** Hay.

Hay, O. P. 1921 A, 622, pl. cxxu, figs. 4-6; pl. cxxiii, fig. 5.

1921 B, 403 ("camel").

1922 A, 446 ("camel").

1923 A, 9.

1927 D, 129.

Pleistocene (Nebraskan?); Arizona.

**Procamelus conerptus** Hay.

Hay, O. P. 1924 A, 11, pl. iv.

Upper Miocene (Fleming); Texas.

**Procamelus edensis edensis** Frick.

Frick, C. 1921 A, 367, 371, figs. 74, 81.

Stock, C. 1925 A, 21

Phocene (Eden); California.

**Procamelus edensis raki** Frick.

Frick, C. 1921 A, 370, 386, figs. 76-79, 82.

Stock, C. 1925 A, 21

Pliocene (Eden); California.

**Procamelus elrodi** Douglass.

Douglass, E. 1909 B, 159, pls. ix-xi.

Scott, W. B. 1913 A, 232, fig. 126.

Upper Miocene; Montana.

**Procamelus gracilis** Leidy.

Hay, O. P. 1902 A, 677.

Frick, C. 1921 A, 374.

Gidley, J. W. 1903 C, 634.

Hay, O. P. 1924 A, 12.

Louderback, G. D. 1924 A, 9 (This species?).

Mansuy, — 1923 A, 102 (P. gramilis).

Matthew, W. D. 1901 B, 423, 426, 427.

1909 C, 117.

1918 A, 187 (This species?).

1924 C, 67 (This genus and species?).

Merriam, J. C. 1916 A, 189, figs. 30-34 (This species?).

1919 A, 453 (This species?).

Scott, W. B. 1913 A, 399, fig. 212.

Trouessart, E. L. 1905 A, 673.

Weber and Abel 1923 A, 560.

Upper Miocene (Arikaree); Nebraska; California, New Mexico, Texas.

**Procamelus inaequidens** Matthew.

Matthew, W. D. 1915 in Cope and Matthew 1915 A, pl. cliv, figs. 1-3 (Procamelus, Protolabis).

Upper Miocene (Republican River); Nebraska.

**Procamelus lacustris** Douglass.

Hay, O. P. 1902 A, 677.

Douglass, E. 1903 A, 154.

Matthew, W. D. 1901 B, 423.

1909 C, 117.

Trouessart, E. L. 1905 A, 673.

Miocene (Madison Valley); Montana.

**Procamelus leptognathus** Cope.

Hay, O. P. 1902 A, 678.

Dumble, E. T. 1894 A, 556.

Gidley, J. W. 1903 C, 634

Hay, O. P. 1924 A, 10, 15, pl. ii, fig. 5; pl. in, fig. 4.

Matthew, W. D. 1901 B, 423.

1909 C, 117.

Montgomery, T. H. 1904 A, 57.

Upper Miocene (Clarendon, Fleming); Texas.

**Procamelus longurio** Hay.

Hay, O. P. 1921 A, 624, pl. cxx, fig. 8; pl. cxxiii, figs. 3, 4; pl. cxxiv, fig. 4.

1921 B, 403 ("camel").

1922 A, 446 ("camel").

1923 A, 9.

1927 D, 97, 129.

Pleistocene (Nebraskan?); Arizona.

**Procamelus madisonius** Douglass.

Hay, O. P. 1902 A, 678.

Douglass, E. 1903 A, 154.

1909 B, 164, figs. 1, 2.

Matthew, W. D. 1901 B, 423.

1909 C, 117.

Trouessart, E. L. 1905 A, 673.

Miocene (Madison Valley); Montana.

**Procamelus major** (Leidy).

Hay, O. P. 1902 A, 678.

1921 A, 608, 622, 637.

1923 A, 494.

1927 D, 104, 105.

Lindgren and Drake 1904 A, 3 (P. major? This species?).

Matson and Clapp 1909 A, 136 (Auchenia); 137 (Procamelus, Pliauchenia).

Matthew, W. D. 1909 C, 117.

Merriam, J. C. 1917 A, 432 (This species?); 439.

Merrill, G. P. 1907 A, 24 (Auchenia); 55 (Procamelus).

Sellards, E. H. 1916 B, 94.

Spencer, J. W. 1895 A, 136.

Trouessart, E. L. 1905 A, 673.

Phocene or Pleistocene? (Alachua, Bone Valley); Florida. (Idaho?); Idaho.

**Procamelus minimus** (Leidy).

Hay, O. P. 1902 A, 678.

Felix and Lenk 1891 A, 126, pl. xxx, fig. 2 (Auchenia. This species?).

Freudenberg, W. 1921 A, 139 (Auchenia. This species?).

1922 A, 5 (Auchenia. This species?).

Hay, O. P. 1921 A, 637.

1923 A, 494.

Matson and Clapp 1909 A, 136 (Auchenia).

Matthew, W. D. 1909 C, 117.

Merrill, G. P. 1907 A, 24 (Auchenia); 55, 56 (Procamelus).

Spencer, J. W. 1895 A, 136.

Trouessart, E. L. 1905 A, 673.

Villada, M. M. 1903 A, 448 (Auchenia).

Pliocene? or Pleistocene? (Alachua; Florida Mexico?)

**Procamelus minor** (Leidy).

Hay, O. P. 1902 A, 678.

Allen, G. M. 1928 A, 452.

Hay, O. P. 1919 C, 106.

1921 A, 637.

- Hay, O. P. 1923 A, 494.
- Matson and Clapp 1909 A, 136 (Auchenia); 137 (Procamelus minor, P. medius; Pliauchenia minor, P. media).
- Matthew, W. D. 1909 C, 117.
- Merriam, J. C. 1917 A, 439 (P. minor, P. medius)
- Merrill, G. P. 1907 A, 24 (Auchenia); 56 (Procamelus).
- Sellards, E. H. 1916 B, 94, 100, 103 (P. minor), 94 (P. medius).
- Spencer, J. W. 1895 A, 136.
- Trouessart, E. L. 1905 A, 673.
- Pliocene? or Pleistocene? (Alachua); Florida.
- Procamelus occidentalis** Leidy.
- Hay, O. P. 1902 A, 678.
- Barbour and Cook 1917 B, 180.
- Baur, G. 1886 N, 118.
- Beddard, F. E. 1902 A, 289.
- Black, D. 1915 A, 350, fig. 14.
- Cope, E. D. 1885 FF, 798, fig. 9.
- Felix and Leuk 1891 A, 126, 137, pl. xxv, fig. 2 (Auchenia minima?).
- Gidley, J. W. 1904 A, 245.
- Matthew, W. D. 1901 B, 423, 426, 427 (Procamelus); 424 (Protolabis).
- 1909 C, 117.
- 1918 A, 187 (This species?).
- Merrill, G. P. 1907 A, 41 (Homocamelus caninus); 56 (P. occidentalis).
- O'Harra, C. C. 1920 A, 159.
- Osborn, H. F. 1904 I, 35 (Camelus).
- Schlosser, M. 1901 D, 465.
- Trouessart, E. L. 1905 A, 673.
- Zdarsky, O. 1926 B.
- Miocene (Arikaree); South Dakota, Nebraska.
- Pliocene (Snake Creek and Valentine); Nebraska.
- Procamelus robustus** Leidy.
- Hay, O. P. 1902 A, 678.
- Barbour and Cook 1917 B, 180 (This species?).
- Gidley, J. W. 1903 C, 634.
- 1904 A, 245.
- Matthew, W. D. 1901 B, 358, 423, 426 (P. robustus); 423, 424 (P. prehensilis).
- 1918 A, 187 (This species?).
- Merrill, G. P. 1907 A, 56, 57.
- O'Harra, C. C. 1920 A, 159.
- Schlosser, M. 1901 D, 464.
- Trouessart, E. L. 1905 A, 673.
- Miocene (Arikaree); South Dakota, Nebraska, Texas: Pliocene? (Snake Creek and Valentine); Nebraska.
- Procamelus** sp. indet.
- Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.
- Cook, H. J. 1912 D, 45. Pliocene (Snake Creek); Nebraska.
- Cope, E. D. 1885 M, 494. Miocene; Mexico.
- Deussen, A. 1924 A, 97 (This genus?). Miocene (Oakville), Texas.
- Douglass, E. 1903 A, 153. Miocene (Flint Creek); Montana.
- Freudenberg, W. 1921 A, 131.
- 1922 A. Pliocene; Mexico.
- Frick, C. 1921 A, 321, 322, figs. 30, 31 ("camelid," This genus?). Pliocene (San Timoteo); California: 365, 367, fig. 73; 372, fig. 86; 373, figs. 87, 88; 374, figs. 89, 90; 375, figs. 73, 93, 94; 376, pl. xlviii, fig. 3; text-figs. 92-94 (This genus?). Pliocene (Eden); California.
- Gidley, J. W. 1918 C, 180. Late Tertiary (Flaxville); Montana.
- 1922 B, 120 (This genus?). Pleistocene (San Pedro Valley); Arizona.
- Gilbert, G. K. 1875 A, 543 Pliocene?; New Mexico.
- Hay, O. P. 1923 A, 494.
- 1924 D, 169, 312. Pliocene? Montana.
- 1927 D, 311. Pleistocene; Arizona, California, Idaho, Oregon.
- Lucas, F. A. 1900, in Lindgren, W. 1900 A, 99 ("P. major"). Pleistocene? Idaho.
- 1900 H, 99. Pleistocene? Idaho.
- Lull, R. S. 1920 A, 85. Miocene or Pliocene; Nebraska.
- Matthew, W. D. 1909 C, 117.
- 1915 L, 472 (This genus?). Miocene (Fleming); Texas.
- 1923 A, 12 (This genus?). Lower Pliocene (Upper Snake Creek); Nebraska.
- Merriam, J. C. 1911 E, 168 (This genus?). Upper Miocene; California.
- 1913 E, 381, fig. 6 (This genus?). Miocene (Orndan); 227, fig. 44 (This genus?). Pleistocene (Etchehoin); California.
- 1914 C, 646. Miocene (Temblor); California.
- 1915 E, 197, 202, figs. 16-18, 31, 44 (This genus?).
- 1917 A, 425 (This genus?); 426, 428, 431, 432, 438.
- 1919 A, 525, 527. Lower Pliocene (Ricardo); Upper Miocene (Barstow); California; 450, 513, 579, figs. 90-99, 103, 105, 216-220 (This genus?).
- Sinclair, W. J. 1904 B, 10 ("camel"; this genus?). "Tertiary"; Nevada.
- 1915 A, 77 (This genus?); Nebraska.
- Stock, C. 1921 A, 290, figs. 10, 11 (Alticamelus? or Procamelus?). Pliocene? (Panaca); Nevada.
- 1924 B, 54. Upper Miocene (Mint Canyon); California: 79. Lower Pliocene (Pico); California.
- 1925 A, 18. Lower Pliocene (Rattlesnake); Oregon: 21 (Eden); California.
- Young and Cooper 1927 A, 1 (This genus?). Pliocene.

ALTICAMELUS Matthew. Type *Procamelus altus* Marsh.

- Matthew, W. D. 1901 B, 426, 429.
- Andrews, C. W. 1916 A, 2.
- Haug, E. 1911 A, 1705, 1706.
- Knipe, H. R. 1912 A, 153, fig.
- Lull, R. S. 1904 C, 9.
- Lull, R. S. 1917 B, 634, 638.
- Lydekker, R. 1904 B, 28 (Alticamelus).
- Matthew, W. D. 1904 B, 215.
- 1909 C, 120.
- 1910 G, 155.



Matthew, W. D. 1918 A, 216.

1924 C, 70, 186.

1924 E, 748.

Matthew and Cook 1909 A, 387, 402, 405.

Merriam, J. C. 1915 F, 257.

Osborn, H. F. 1905 D, 316.

1905 H, 222.

1905 I, 107.

1909 D, 78, 81.

1910 B, 805, fig. 189.

1912 G, 250.

1918 A, 29.

Palmer, T. S. 1904 A, 90, 920.

Peterson, O. A. 1904 A, 472.

1912 B, 167.

Schlosser, M. 1908 I, 96.

Schuchert and Levene 1927 A, 337, fig.

Scott, W. B. 1913 A, 234, 388, 391, 675.

Weber and Abel 1928 A, 561.

Winge, H. 1906 A, 103.

Zittel and Schlosser 1911 A, 436

1923 A, 575, 673.

### *Alticamelus alexandrae* Davidson.

Davidson, P. 1923 A, 399, figs. 1-16

Upper Miocene (Barstow); California.

### *Alticamelus altus* (Marsh).

Hay, O. P. 1902 A, 677 (Procamelus).

Matthew and Cook 1909 A, 402 (Procamelus).

Merriam, J. C. 1917 A, 428.

Merriam and Sinclair 1907 A, 196.

Osborn, H. F. 1918 A, 30.

Stock, C. 1925 A, 18.

Trouessart, E. L. 1905 A, 673 (*A. altus*, in part).

Miocene (Mascall); Pliocene (Rattlesnake); Oregon.

### *Alticamelus giraffinus* Matthew.

Matthew, W. D. in Matthew and Cook 1909 A, 402.

Davidson, P. 1923 A, 400, 401, 402, 406.

Douglass, E. 1909 B, 162 (*A. altus*).

Frick, C. 1921 A, 362.

Matthew, W. D. 1901 B, 358, 423 (Procamelus altus); 426, 430, pl. xxxix (*A. altus*).

1909 C, 115 (*A. altus*).

1924 C, 72.

Osborn, H. F. 1904 F, 5, 15 (*A. altus*).

1909 D, 81 (*A. altus*).

1910 B, 283, fig. 145 (*A. altus*).

Peterson, O. A. 1904 A, 472 (*A. altus*).

Scott, W. B. 1913 A, 236, fig. 127 (*A. altus*).

Trouessart, E. L. 1905 A, 673 (*A. altus*).

Upper or Middle Miocene (Pawnee Creek); Colorado.

The authors cited as using the name *A. altus* have doubtless had in mind the type of Matthew's *A. giraffinus*.

### *Alticamelus priscus* Matthew.

Matthew, W. D. 1924 C, 67, 187.

Middle Miocene (Sheep Creek); Nebraska.

### *Alticamelus procerus* Matthew and Cook.

Matthew and Cook 1909 A, 402, figs. 19, 20

Cook, H. J. 1912 D, 45.

Davidson, P. 1923 A, 400, 401, 402, 406.

Frick, C. 1921 A, 362.

Matthew, W. D. 1918 A, 187.

1923 A, 12 (This species?).

1924 C, 67, 186.

Merriam, J. C. 1917 A, 436

Sinclair, W. J. 1915 A, 77.

Upper Miocene (Lower Snake Creek); Nebraska.

### *Alticamelus* sp. indet.

Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.

Cook, H. J. 1922 B, 12, 29, fig. Pliocene (Snake Creek); Colorado. (This genus?).

Dumble, E. T. 1920 A, 231 (This genus?). Neocene (Fleming); Texas.

Matthew, W. D. 1915 L, 471 (This genus?). Miocene (Fleming); Texas.

1920 E, 231 (This genus?). Neocene (Fleming); Texas.

Matthew and Cook 1909 A, 405, 407. Pliocene (Snake Creek); Nebraska.

Merriam, J. C. 1917 A, 431 (This genus?). Pliocene (Ricardo); California; 437. Pliocene (Snake Creek); Nebraska.

1919 A, 450, 512, 527, 579, figs. 100, 104, 110, 216, 217, 221, 223, 228-230 (This genus?).

Miocene (Barstow) and Pliocene (Ricardo); California.

Merriam, Stock, Moody 1925 A, 59, 87, figs. 41, 42 (This genus?). Pliocene (Rattlesnake); Oregon.

Sinclair, W. J. 1915 A, 77. Pliocene (Snake Creek); Nebraska.

Stock, C. 1921 A, 290, figs. 10, 11 (*Alticamelus*? or *Procamelus*?). Pliocene? (Panaca); Nevada.

Young and Cooper 1927 A, 5, fig.

### PROTOLABIS Cope. Type *P. heterodontus* Cope.

Cope, E. D. 1876 G, 144.

Hay, O. P. 1902 A, 677 (Procamelus, in part).

Abel, O. 1914 A, 170.

1919 A, 808.

Beddard, F. E. 1902 A, 289.

Boas, J. E. V. 1914 B, 591, fig. 40.

Boule and Thevenin 1920 A, 194.

Cope, E. D. 1880 U, 157.

Dépéret, C. 1907 B.

Douglass, E. 1909 A, 477.

Haug, E. 1911 A, 1706.

Hay, O. P. 1924 A, 13.

Howes, G. B. 1902 A, 523.

Laloy, L. 1907 A, 536.

Loomis, F. B. 1928 A, 139.

Lydekker, R. 1904 B, 27.

Matthew, W. D. 1901 B, 374, 424, 426, 432.

1904 B, 214.

1909 C, 120.

1915 A, 244.

1918 A, 216.

1924 E, 748.

Osborn, H. F. 1909 D, 78.

1910 B, 299, 550.

Palmer, T. S. 1904 A, 583, 921.

Pavlov, M. 1904 A, 127.

Peterson, O. A. 1904 A, 471.  
1906 C, 22.

Schlosser, M. 1901 D, 466.  
1903 I, 96, 184.

Schmidt, O. 1886 A, 156 (Protolabos).

Scott, W. B. 1913 A, 391.

Trouessart, E. L. 1905 A, 672.

Winge, H. 1906 A, 103.

Zittel and Schlosser 1911 A, 485.  
1923 A, 575, 678.

### **Protolabis angustidens (Cope).**

Hay, O. P. 1902 A, 677 (Procamelus).

Beddard, F. E. 1902 A, 290 (Procamelus).

Cook, H. J. 1912 D, 43.

Cope and Matthew 1915 A, pl. cliv, fig. 4 (Procamelus, Protolabis).

Matthew, W. D. 1901 B, 358, 426, 427, 434.  
1909 C, 115.

1924 C, 67, 72, 187.

Trouessart, E. L. 1905 A, 672.

Zdansky, O. 1926 B, 3, 4 (Procamelus).

Upper Miocene (Pawnee Creek); Colorado:  
Upper and Middle Miocene (Snake Creek, Sheep  
Creek); Nebraska.

### **Protolabis fissidens (Cope).**

Hay, O. P. 1902 A, 677 (Procamelus).

Cook, H. J. 1912 D, 43 (Procamelus. This  
species?).

Hay, O. P. 1924 A, 13 (Procamelus).

Matthew, W. D. 1901 B, 426, 427, 428 (Procamelus).

1909 C, 115 (Procamelus).

1924 C, 67 (Miolabis); 186, 190 (Protolabis).

Trouessart, E. L. 1905 A, 673 (Procamelus).

Upper Miocene (Pawnee Creek); Colorado:  
(Lower Snake Creek); Nebraska.

### **Protolabis francisi Hay.**

Hay, O. P. 1924 A, 13, pl. iii, figs. 5-8; pl. vi.

Upper Miocene (Fleming); Texas.

### **Protolabis heterodontus (Cope).**

Hay, O. P. 1902 A, 677 (Procamelus).

Cope and Matthew 1915 A, pl. cliii, figs. 3, 4.

Matthew, W. D. 1901 B, 359, 424, 426, 427, 433.  
1909 C, 115.

Schlosser, M. 1901 D, 464.

Trouessart, E. L. 1905 A, 672.

Middle Miocene (Pawnee Creek); Colorado.

### **Protolabis longiceps Matthew.**

Matthew, W. D. 1909 C, 115.

Hay, O. P. 1924 A, 13.

Matthew, W. D. 1901 B, 358, 426 (in part), 427,  
433, 438, 439, text-figs. 31-33 (P. montanus,  
not of Douglass).

1924 C, 190, 191 (Protolabis, Miolabis).

Sinclair, W. J. 1915 A, 87.

Upper Miocene (Pawnee Creek); Colorado.

### **Protolabis montanus Douglass.**

Hay, O. P. 1902 A, 678 (Procamelus).

Douglass, E. 1903 A, 154.

Matthew, W. D. 1901 B, 423, 426 (in part).  
1909 C, 115, 117.

Osborn, H. F. 1904 F, 15.

Trouessart, E. L. 1905 A, 672.

Zdansky, O. 1926 B, 5.

Middle Miocene (Madison Valley); Montana.

### **Protolabis princetoniensis Sinclair.**

Sinclair, W. J. 1915 A, 75, 77, 87, figs. 12, 13.

Hay, O. P. 1924 A, 13.

Matthew, W. D. 1918 A, 187.

1924 C, 186 (Syn. of P. fissidens).

Merriam, J. C. 1917 A, 436.

Lower Pliocene (Snake Creek); Nebraska.

### **Protolabis pusillus Matthew.**

Matthew, W. D. 1921 C, 67 (Nom. nud.).

Middle Miocene (Sheep Creek); Nebraska.

### **Protolabis saxeus Matthew.**

Matthew, W. D. 1924 C, 67, 190.

Middle Miocene (Sheep Creek); Nebraska.

### **Protolabis serus (Douglass).**

Douglass, E. 1900 A, 12, pl. i, fig. 1 (Gomphotherium).

Hay, O. P. 1902 A, 676 (Protomeryx).

Douglass, E. 1903 A, 154 (Gomphotherium).

Matthew, W. D. 1901 B, 423 (Protomeryx).

1909 C, 117.

Trouessart, E. L. 1905 A, 672 (Protomeryx).

Middle Miocene (Madison Valley); Montana.

### **Protolabis sp. indet.**

Deussen, A. 1924 A, 97 (This genus?). Miocene  
(Oakville); Texas.

Dumble, E. T. 1920 A, 237 (May be Procamelus).  
Miocene (Fleming); Texas.

Matthew, W. D. 1915 L, 472 (This genus?).  
Miocene (Fleming); Texas.

1920 E, 237 (May be Procamelus). Miocene  
(Fleming); Texas.

### **PLIAUCHENIA Cope. Type *P. humphreysiana* Cope.**

Hay, O. P. 1902 A, 679.

Abel, O. 1913 B, 743.

1914 A, 170.

Boas, J. E. V. 1914 B, 593.

Boule and Thevenin 1920 A, 195.

Dépéret, C. 1907 B.

Haug, E. 1911 A, 1706.

Hay, O. P. 1923 A, 2, 15.

1925 D, 245.

Heilprin, A. 1887 A, 376.

Laloy, L. 1907 A, 586.

Lull, R. S. 1917 B, 634, 639.

Matthew, W. D. 1901 B, 424, 426.

1904 B, 215.

1909 C, 120.

1910 G, 155.

1915 A, 244.

1918 A, 217.

- Matthew, W. D. 1918 D, 144.  
 Matthew and Cook 1909 A, 368, 395.  
 Merriam, J. C. 1915 E, 228, fig. 45 (This genus?).  
     1915 F, 257.  
 Osborn, H. F. 1905 I, 109.  
     1909 D, 79, 80, 81, 83.  
     1910 B, 299, 300, 346, 349, 352, 356, 550.  
     1918 A, 26, 27, 29, 30.  
 Palmer, T. S. 1904 A, 551, 921.  
 Peterson, O. A. 1904 A, 471.  
 Scharff, R. F. 1911 A, 153, 407.  
 Schlosser, M. 1901 D, 465, 467.  
 Schmidt, O. 1886 A, 157.  
 Scott, W. B. 1913 A, 362.  
 Terra, P. 1911 A, 326.  
 Trouessart, E. L. 1905 A, 674.  
 Weber, M. 1904 A, 660.  
 Weber and Abel 1928 A, 560.  
 Zdansky, O. 1926 B.  
 Zittel and Schlosser 1911 A, 486.  
     1923 A, 575, 673, 679.
- Pliauchenia humphreysiana** Cope.  
 Hay, O. P. 1902 A, 680.  
 Matson and Clapp 1909 A, 137.  
 Matthew, W. D. 1901 B, 423, 424, 426, 427.  
     1909 C, 117.  
 Matthew and Cook 1909 A, 395.  
 Merrill, G. P. 1907 A, 55 (P. humphreysiana).  
 Schlosser, M. 1901 D, 465 (P. humphreysiana).  
 Trouessart, E. L. 1905 A, 674 (P. humphreysiana).  
 Zdansky, O. 1926 B, 6.  
     Miocene (Santa Fe); New Mexico.
- Pliauchenia merriami** Frick.  
 Frick, C. 1921 A, 358, pl. xlvii, figs. 1, 2, 4; pl. xlviii, fig. 11; text-figs. 66-71, 92.  
 Stock, C. 1925 A, 21.  
 Zdansky, O. 1926 B, 15, 18.  
     Lower Pliocene (Eden); California.
- Pliauchenia minima** Wortman.  
 Hay, O. P. 1902 A, 680.  
 Matthew, W. D. 1901 B, 423, 426, 427.  
     1909 C, 117.  
 Merriam, J. C. 1917 A, 438.  
 Schlosser, M. 1901 D, 465.  
     Miocene (Republican River); Kansas.
- Pliauchenia singularis** Matthew.  
 Matthew, W. D. 1918 A, 216, fig. 16.  
     Pliocene (Snake Creek); Nebraska.
- Pliauchenia spatula** Cope.  
 Hay, O. P. 1902 A, 680.  
 Dumble, E. T. 1894 A, 559.  
 Frick, C. 1921 A, 363.  
 Gidley, J. W. 1903 C, 627.  
 Matthew, W. D. 1901 B, 423, 426, 427.  
     1909 C, 120.  
 Matthew and Cook 1909 A, 396.  
 Merriam, J. C. 1917 A, 435.  
 Montgomery, T. H. 1904 A, 56.  
 Schlosser, M. 1901 D, 465.  
 Trouessart, E. L. 1905 A, 674.  
     Pliocene (Blanco); Texas: (Snake Creek?); Nebraska.

### **Pliauchenia vera** Matthew.

- Matthew, W. D. 1909 C, 117.  
     1918 A, 187 (This species?).  
 Wortman, J. L. 1898 A, 127 (P. humphreysiana, not of Cope).  
     Miocene (Republican River); Kansas.
- Pliauchenia vulcanorum** Cope.  
 Hay, O. P. 1902 A, 680.  
 Matson and Clapp 1909 A, 137.  
 Matthew, W. D. 1901 B, 423.  
 Merrill, G. P. 1907 A, 55.  
 Trouessart, E. L. 1905 A, 674.  
     Miocene; New Mexico.

### **Pliauchenia** sp. indet.

- Barbour and Cook 1917 A, 172. Pliocene (Devil's Gulch); Nebraska.  
 Freudenberg, W. 1921 A, 139. Pleistocene?; Mexico.  
 Frick, C. 1921 A, 321, fig. 30 (This genus?).  
     Pliocene (San Timoteo); California: 365, 366, pl. xlvii, figs. 3, 5. Pliocene (Eden); California.  
 Gidley, J. W. 1903 C, 627. Pliocene (Blanco); Texas.  
     1922 B (This genus?) 120. Pleistocene (San Pedro Valley); Arizona.  
 Hay, O. P. 1927 D, 311 (This genus?). Pleistocene; Arizona, California, Washington.  
 McCormack, E. C. 1920 A, 23. Pleistocene? (Ringold); Washington.  
 Matthew, W. D. 1909 C, 117, 120. Miocene (Arikaree); South Dakota: Pliocene (Blanco); Texas.  
 Merriam, J. C. 1911 B, 214 (This genus?).  
     Pliocene (Thousand Creek); Nevada.  
     1911 E, 168 (This genus?). Miocene (Upper); California.  
     1913 E, 381; fig. 7 (This genus?). Miocene? (Siestan); California.  
     1915 E, 229, fig. 44 (This genus?). Pliocene? (Etchegoin); California.  
     1917 A, 425 (This genus?); Pleistocene? (Etchegoin); California: 426 (P. sp.). Pliocene (Orindan); California: 428. Pliocene (Rattlesnake); California: 431. Pliocene (Ricardo); California: 435. Pliocene (Blanco); Texas.  
     1919 A, 450, 512, 527, 531, figs. 101, 103, 106 (This genus?). Upper Miocene (Barstow); Lower Pliocene (Ricardo); California.  
 Merriam and Buwalda 1917 A, 258 (This genus?). Pleistocene? (Ringold); Washington.  
 Merriam, Stock, Moody 1925 A, 59, 87, figs. 41, 42 (This genus?). Pliocene (Rattlesnake); Oregon.  
 Stock, C. 1921 A, 259, figs. 8, 9 (This genus?). Pliocene? (Pansac); Nevada.  
     1925 A, 18. Lower Pliocene (Rattlesnake); Oregon: 21 (This genus?); Upper Pliocene (Timoteo); California: Lower Pliocene (Eden); California.

**MEGATYLOPUS** Matthew and Cook. Type *Pliauchenia gigas* Matthew and Cook.

Matthew and Cook 1909 A, 395 (As subgenus).  
Matthew, W. D. 1924 C, 69, 70.

1924 E, 748.

Zdansky, O. 1926 B, 10, 38.

Zittel and Schlosser 1923 A, 575.

**Megatylopus gigas** Matthew and Cook.

Matthew and Cook 1909 A, 396, figs. 16-18  
[*Pliauchenia* (*Megatylopus*)].

Cook, H. J. 1912 D, 45.

1922 B, 11 [*Pliauchenia* (*Megatylopus*) This species?].

Frick, C. 1921 A, 363 (*Megatylopus*); 374  
(*Pliauchenia*).

Matthew, W. D. 1918 A, 187, 217.

1923 A, 12 (*Pliauchenia*).

1924 C, 67, 73, 186.

Merriam, J. C. 1917 A, 436 (*Pliauchenia*).

Sinclair, W. J. 1915 A, 77 (*Pliauchenia*).

Zdansky, O. 1926 B, 4, 5, 15 [*Pliauchenia* (*Megatylopus*)].

Lower Pliocene (Upper Snake Creek); Nebraska.

**CAMELINÆ** Zittel.

Zittel, K. A. 1893 B, 364.

Hay, O. P. 1902 A, 680.

Ardt, T. 1907 D, 203, 256, 643.

1912 A, 100.

Hay, O. P. 1914 A, 230.

Knottnerus-Meyer, T. 1907 A, 9, 97.

Trouessart, E. L. 1905 A, 671.

Winge, H. 1906 A, 70, 97 (*Camelini*).

Zittel and Schlosser 1911 A, 486.

1923 A, 575.

**CAMELOPS** Leidy. Type *C. kansanus* Leidy.

Hay, O. P. 1902 A, 679.

Ameghino, F. 1889 A, 980.

Boule and Thevenin 1920 A, 194.

Cook, H. J. 1927 C, 241 ("*Camelops*").

Cope, E. D. 1895 G, 599 (*Holomeniscus*).

Dall and Harris 1892 A, 284 (*Holomeniscus*).

Felix and Lenk 1891 A, 127 (*Holomeniscus*).

Giebel, C. G. 1883 A, pl. xxxi.

Haug, E. 1911 A, 1886.

Hay, O. P. 1913 D, 247.

1914 A, 230.

1919 D, 374.

1925 D, 242.

1926 E, 389.

Holmes, W. H. 1901 A, 423 ("*camel*").

Lull, R. S. 1917 B, 634, 639.

Lydekker, R. 1904 B, 27.

1914 A, 633.

Matthew, W. D. 1904 B, 215.

1915 A, 244.

1915 K, 403.

1918 D, 144.

1924 C, 186.

1924 E, 748.

Merriam, J. C. 1913 B, 306.

1915 F, 261.

Osborn, H. F. 1909 D, 86.

1910 B, 456, 460, 464, 550.

1918 A, 31.

1925 D, 532.

Palmer, T. S. 1904 A, 156, 920.

Schlosser, M. 1901 D, 465.

1903 I, 96.

Shimek, B. 1910 A, 129, 135 ("*Camelus*").

Sinclair, W. J. 1904 B, 150, fig. 2 ("*camel*").

Smith and Packard 1919 A, 102, 104 ("*camels*").

Trouessart, E. L. 1905 A, 674.

Troxell, E. L. 1915 B, 479 (*Auchenia*).

Wallace, A. R. 1876 A, 1, 138 (*Megalomeryx*).

Weber, M. 1904 A, 660.

Williston, S. W. 1902 J, 196 ("*camels*").

Wilson, T. 1901 A, 311 ("*lama*").

Wright, G. F. 1908 B, 187 ("*camel*").

1911 A, 282 ("*camel*" This genus?).

Zdansky, O. 1926 B, 39.

Zittel and Schlosser 1911 A, 486.

1923 A, 576, 680, 681 (*Camelops*, *Auchenia*).

**Camelops aransas** Hay.

Hay, O. P. 1926 C, 7, text-fig. 1.

1927 D, 286.

Pleistocene (Early); Texas.

**Camelops? arenarum** Hay.

Hay, O. P. 1927 D, 106, 266-268.

Lucas, F. A. 1900 H, 99 ("*Procamelus*, size of *P. major*").

1904 F, 3 ("*Procamelus*, size of *P. major*").

Pleistocene (Idaho); Idaho.

**Camelops californicus** (Leidy).

Hay, O. P. 1902 A, 679.

Ashley, G. H. 1895 A, 362 ("*llama*").

Cooper, J. G. 1875 A, 390 (*Palauchenia*).

Hay, O. P. 1927 D, 98 (*Auchenia*); 302, 303  
(*Camelops*); 302, 307 (*Lama*).

Kellogg, R. 1922 A, 61 (*Holomeniscus*).

Lindgren, W. 1911 A, 52 (*Auchenia*).

Merriam, J. C. 1913 B, 320.

Villada, M. M. 1903 A, 448.

Yates, L. G. 1874 B, 19 (*Lama californica*?).

Zdansky, O. 1926 B, 39.

Pleistocene; California.

**Camelops hesternus** (Leidy).

Hay, O. P. 1902 A, 679.

Abel, O. 1926 B, 238.

Cope, E. D. 1878 II, 125 (*Auchenia*).

1893 A, 84, pl. xxi, figs. 3, 4.

Felix and Lenk 1891 A, 137 (*Holomeniscus*).

Frech and Geinitz 1903 A, 35 (*Holomeniscus*).

Freudenberg, W. 1921 A, 139.

1922 A, 5.

Frick, C. 1921 A, 362.

Furlong, E. L. 1925 A, 139 (This species?).

Gilbert, G. K. 1890 A, 394 (*Auchenia*).

Gilbert, J. Z. 1910 B, 25, 37 ("*camel*").

Hay, O. P. 1913 D, 209.

- Hay, O. P. 1914 A, 231, pl. xxvii, fig. 4; pl. xxviii, figs. 4, 5; text-figs. 85-88.  
 1923 E, 395 ("camels" This species?).  
 1924 D, 374 (Camelops); 239 (Auchenia).  
 1926 C, 8.  
 1926 F, 426 ("camels").  
 1927 D, 87 (Auchenia); 100, 242 (Holomeniscus); 302, 303, pl. vi; pl. ix, fig. 9 (Camelops).  
 1928 C, 425, 426.  
 Hodge, E. T. 1925 A, x ("camel").  
 Joleaud, L. 1920 C, 92 (Auchenia).  
 Jones, J. C. 1928 A, 7 ("camel." This species?).  
 McCornack, E. C. 1920 A, 17, 23.  
 McGee, W. J. 1888 A, 27 ("camel." This species?).  
 1889 A, 303 ("camel." This species?).  
 Merriam, J. C. 1908 D, 472 ("camel").  
 1913 B, 307, figs. 1-3, 11 (C. hesternus); 309, figs. 4-9 (C. hesternus?).  
 1918 D, 517 (This species?).  
 Merriam and Stock 1925 A, 11.  
 1925 B, 39 (This species?).  
 Osborn, H. F. 1925 D, 528, 531, figs.  
 Rath, G. 1886 A, 106 (Holomeniscus).  
 Romer, A. S. 1928 B, 20.  
 Schlosser, M. 1901 D, 465 (Syn. of C. kansanus).  
 Schmidt, O. 1886 A, 157, fig. 22 (Auchenia).  
 Stock, C. 1924 A, 4.  
 1925 A, 30, 35, 118.  
 1928 C, 36.  
 Swarth, H. S. 1915 A, 23, fig. 11.  
 Trouessart, E. L. 1905 A, 674.  
 Troxell, E. L. 1915 A, 616, 622, figs. 6, 7, 9, 11 (Auchenia).  
 1917 A, 88, fig. 1 (Auchenia).  
 Villada, M. M. 1903 A, 447, pl. iv (Auchenia).  
 Whitney, J. D. 1879 B, 261 ("camel." This species?).  
 Wyman, L. E. 1922 A, 26, fig. 17 ("camel").  
 1927 A, 86 ("camel").  
 Yates, L. G. 1903 A, 113, pl. xii (Auchenia).  
 Zdansky, O. 1926 B.  
 Pleistocene (Early); Texas, Mexico, California.
- Camelops huerfanensis** Cragin. \*
- Hay, O. P. 1902 A, 679 (C. kansanus, part).  
 Baker, F. C. 1920 A, 210 (Auchenia).  
 Boule and Thevenin 1920 A, 195 (Auchenia).  
 Cahn, A. R. 1922 A, 23.  
 Hay, O. P. 1913 D, 269, pls. xxv, xxvi; text-fig. 1.  
 1914 A, 239, 243, pl. xxviii, fig. 1 (This species?); pls. xxix, xxx, fig. 1; pl. xxxi, fig. 3.  
 1917 B, 17.  
 1917 D, 47, pl. i, fig. 8; pl. ii, figs. 5, 6 (This species?).  
 1920 B, 122.  
 1921 A, 604, pl. cxiii, fig. 2.  
 1924 D, 373 (Auchenia); 374 (Camelops).  
 1927 D, 303.  
 1928 C, 425, 426.  
 Hills, R. C. 1889 A, 221 ("camel." This species?).  
 Lull, R. S. 1921 B, 170.
- Schlosser, M. 1901 D, 465 (Auchenia. Syn. of C. kansanus).  
 Trouessart, E. L. 1905 A, 674 (Syn. of C. kansanus).  
 Zdansky, O. 1926 B, 3, 6, 31.  
 Pleistocene (Early); Colorado, Kansas, Texas.
- Camelops huerfanensis dallasi** Lull.
- Lull, R. S. 1921 B, 168, figs. 4, 5.  
 Hay, O. P. 1924 D, 161, 162, 241.  
 Shuler, E. W. 1923 A, 333 ("camel").  
 Zdansky, O. 1926 B, 3.  
 Pleistocene (Early); Texas.
- Camelops kansanus** Leidy.
- Hay, O. P. 1902 A, 679.  
 Baker, F. C. 1920 A, 455.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1913 D, 267, 269.  
 1914 A, 26, 231, pl. xxvii, figs. 3, 5?; pl. xxviii, fig. 6?; pl. xxxi, fig. 4?; pl. lxxiv, fig. 7? (This species?).  
 1920 B, 121 (This species?).  
 1924 D, 374.  
 1927 D, 303.  
 1928 C, 425, 426.  
 Matthew, W. D. 1902 F, 318, 320, 321.  
 1918 A, 227.  
 Merriam, J. C. 1913 B, 317, figs. 10, 10b.  
 Merrill, G. P. 1907 A, 27.  
 Miller, L. H. 1912 A, 81.  
 Schlosser, M. 1901 D, 465.  
 Stock, C. 1925 A, 195, 199 (This species?).  
 Trouessart, E. L. 1905 A, 674, 678.  
 Zdansky, O. 1926 B, 39.  
 Pleistocene (Aftonian); Kansas, Iowa?, Colorado?, Nebraska?, Oklahoma?.
- Camelops macrocephalus** (Cope).
- Hay, O. P. 1902 A, 679.  
 Dumble, E. T. 1894 A, 564 (Holomeniscus).  
 Gidley, J. W. 1903 C, 623 (Holomeniscus).  
 Hay, O. P. 1917 B, 17.  
 1920 B, 123.  
 1924 D, 374 (Camelops); 378 (Holomeniscus).  
 1928 C, 425, 426.  
 Merriam, J. C. 1913 B, 321 (Holomeniscus).  
 Montgomery, T. H. 1904 A, 57 (Holomeniscus).  
 Osborn, H. F. 1910 B, 458 (Holomeniscus).  
 Wortman, J. L. 1898 A, 132 (Holomeniscus. Syn. of C. vitakerianus).  
 Zdansky, O. 1926 B, 39.  
 Pleistocene (Aftonian); Texas.
- Camelops minidokæ** Hay.
- Hay, O. P. 1927 D, 98, 104, 127, 264, 269, pl. vii, fig. 2; pl. viii, figs. 2, 3.  
 1913 D, 268, 271, pl. xxvi, figs. 2, 5 (C. huerfanensis).  
 1914 A, 237, 243, pl. xxx, figs. 2, 5 (C. huerfanensis?).  
 1927 D, 81 (C. huerfanensis).  
 Pleistocene (Early); Idaho.

**Camelops nevadanus** Hay.

Hay, O. P. 1927 D, 84, 303, pl. iv, figs. 3, 4; pl. v, fig. 3.

1926 G, 131 ("camel").

Pleistocene (Early); Nevada.

**Camelops niobrarensis** (Leidy).

Leidy, J. 1858 E, 24 (Megalomeryx).

Hay, O. P. 1902 A, 679 (C. kansanus, in part).

Cook, H. J. 1927 A, 117 ("camel").

Figgins, J. D. 1928 A, 82 ("camel").

Gidley, J. W. 1926 C, 484

Hay, O. P. 1913 D, 267, 276 (Megalomeryx); pl. xxvi, figs. 3, 4 (C. huerfanensis?).

1914 A, 239 (Megalomeryx); pl. xxx, figs. 3, 4 (C. huerfanensis?).

1921 A, 600-605, pl. cxvi, figs. 1-7.

1927 D, 303, pl. v, figs. 1, 2; pl. viii, fig. 4 (Camelops); 309 (Megalomeryx).

1928 C, 425, 426.

Merrill, G. P. 1907 A, 46 (Megalomeryx); 56 (Procamelus).

Spier, L. 1928 A, 161 ("camel").

Yates, L. G. 1903 A, 117 (This species?).

Zdanksy, O. 1926 B, 39.

Pleistocene (Early); Colorado.

**Camelops nitidus** Hay.

Hay, O. P. 1920 B, 122, pl. vii, figs. 3-8.

1924 D, 164, 254.

Pleistocene (Aftonian); Oklahoma.

**Camelops sulcatus** (Cope).

Cope, E. D. 1893 A, 84, pl. xxiii, fig. 4 (Holomeniscus).

Hay, O. P. 1902 A, 679 (C. kansanus, part).

Dumble, E. T. 1894 A, 564 (Holomeniscus).

Gidley, J. W. 1903 C, 623 (Holomeniscus).

Hay, O. P. 1913 D, 275 (= ? C. huerfanensis).

1914 A, 232, pl. xxviii, figs. 2, 3 (Holomeniscus, Camelops).

1917 B, 17.

1924 D, 161 (Camelops); 378 (Holomeniscus).

1926 C, 7, text-fig. 2.

1927 D, 92 (Holomeniscus); 302, 303, pl. vii, fig. 1; pl. viii, fig. 1 (Camelops).

Merriam, J. C. 1913 B, 321 (Holomeniscus).

Montgomery, T. H. 1904 A (Holomeniscus).

Osborn, H. F. 1910 B, 458 (Holomeniscus).

Schlosser, M. 1901 D, 465 (Syn. of C. kansanus).

Zdanksy, O. 1926 B, 39.

Pleistocene (Early); Texas.

**Camelops vacondæ** Hay.

Hay, O. P. 1927 D, 97, pl. vii, figs. 3, 4.

1921 A, 601-602, pl. cxvi, figs. 8, 9 (sp. indet.).

Pleistocene (Early); South Dakota.

**Camelops virginienensis** (Leidy).

Hay, O. P. 1902 A, 678 (Procamelus).

Clark and Miller 1912 A, 167, 168.

Cope, E. D. 1892, in Dall and Harris 1892 A, 130 (No name).

Leidy, J. in Dall and Harris 1892 A, 62, 130 ("Auchenia").

Geological age uncertain; Virginia.

**Camelops vitakerianus** (Cope).

Hay, O. P. 1902 A, 679.

Baker, F. C. 1920 A, 209, 213, 395.

Condon, T. 1902 A, 138, 147, pl. xxvii (Auchenia vitakeri).

1910 A, 122, pl. xxvii (Auchenia vitakeri).

Cope, E. D. 1878 II, 125 (Auchenia).

1893 A, 85 (Holomeniscus); 86 (A[uchenia]).

Gilbert, G. K. 1890 A, 294 (Auchenia).

Hay, O. P. 1914 A, 26.

1924 D, 168, 305.

1927 D, 100, 242 (Holomeniscus); 303 (Camelops).

1928 C, 425, 426.

McCornack, E. C. 1920 A, 17, 23.

Matthew, W. D. 1902 F, 318, 320, 321.

1918 A, 227 (This species?).

Merriam, J. C. 1913 B, 321.

Miller, L. H. 1912 A, 81.

Rath, G. 1886 A, 106 (Holomeniscus).

Schlosser, M. 1901 D, 465.

Stock, C. 1925 A, 195.

Zdanksy, O. 1926 B, 39.

Pleistocene (Fossil Lake); Oregon, Nebraska, Washington.

**Camelops** sp. indet.

Antevs, E. 1925 A, 75 Pleistocene (Lahontan); Nevada.

Bancroft, H. H. 1875 A, 697 ("camels"). California.

Becker, G. F. 1888 A, 221 (This genus?). Pleistocene (Cache Lake); California.

Bretz, J. H. 1928 A, 331, 340. Pleistocene; Oregon.

Calvin, S. 1910 A, xii ("camels"). Pleistocene (Aftonian); Iowa.

Cannon, G. L. 1888 B, 62 ("camel"). Pleistocene (Early); Colorado.

1896 A, in Emmons, S. F. 1896 A, 264 ("camel"). Pleistocene (Early); Colorado.

Chamberlin, R. T. 1916 A, 35 ("camel." This genus?).

Cook, H. J. 1925 A, 460. Pleistocene; Texas.

1926 D, 335 (This genus?). Pleistocene; Colorado, Texas.

Cooke, C. W. 1928 A, 421 ("camels." This genus?). Pleistocene; Florida.

Diller, J. S. 1906 A, 6, 11 ("camel." This genus?). Pleistocene (Potter Creek); California.

Freudenberg, W. 1922 A, 25 ("2 sp. cameliden"). Pleistocene; Mexico.

Frick, C. 1921 A, 295, figs. 2-4 ("camelid"? This genus?). Pleistocene (Bautista); California.

Gidley, J. W. 1918 C, 180 (This genus?). Pleistocene? (Early); Montana.

1925 A, x ("camel"). Pleistocene; Florida.

1927 E, 274. Pleistocene; Florida.

1928 B, 16 ("camel"). Pleistocene; Florida.

- Hay, O. P. 1914 A, 59, 241, pl. xxi, figs. 1, 2.  
 1921 A, 604, pl. cxxii, figs. 1-3 (*C. huerfanensis*?).  
 1922 A, 446 ("camel." This genus?). Pleistocene (Zuni); Arizona.  
 1923 A, 481.  
 1924 B, 259 ("camel"). Pleistocene; Florida.  
 1924 D, 374. Pleistocene; Colorado, Iowa, Kansas.  
 1926 D, 359. Pleistocene; Missouri, Montana, Nebraska, South Dakota, Texas.  
 1927 C, 281. Pleistocene; Florida.  
 1927 D, 101 (*Auchenia*, *Holomeniscus*); 301, 303 (*Camelops*). Pleistocene; Arizona, Colorado, California, Florida, Nevada, Oregon.  
 1928 B, 236. Pleistocene (*Anastasia*); Florida.  
 1928 C, 423.  
 Jones, J. C. 1925 A, 49. Pleistocene (Early); Nevada.  
 Knowlton, F. H. 1911 D, 63 ("camel." This genus?).  
 Lee, Stone and Gale 1915 A, 173 ("camel." This genus?). Pleistocene (Lake Lahontan); Nevada.  
 Loomis, F. B. 1924 C, 508. Pleistocene; Florida.  
 Lull, R. S. 1921 B, 174 ("camel"). Pleistocene (Early); Texas.  
 McCornack, E. C. 1914 A, 15. Pleistocene (Fossil Lake); Oregon: (*Equus* beds); Oregon, Washington.  
 MacCurdy, G. G. 1917 A, 261 ("camel").  
 Matthew and Cook 1902 F, 320, 321.  
 Merriam, J. C. 1909 A, 293. Pleistocene; California.  
 1915 C, 379, 380, fig. 3 (This genus?); Nevada.  
 1915 E, 228, figs. 42, 43. California.  
 Merriam, J. C. 1915 F, 261 ("Camelops." This genus?); ("small camel") Pleistocene (Manix) California.  
 1917 A, 425 (This genus?); Pliocene? (Etchegoin); California.  
 Merriam and Stock 1921 A, 567 ("camel"). Pleistocene (Early); California.  
 1925 A, 10, 11 ("camelid." This genus?).  
 Miller, L. H. 1912 A, 78, 81 (This genus?). Pleistocene (Early); Oregon, California.  
 1925 A, 309 ("camel"). Pleistocene (McKittrick); California.  
 Russell, I. C. 1884 A, 460 ("camel").  
 1885 A, 239 ("camel." This genus?). Pleistocene (Lake Lahontan); Nevada.  
 1902 A, 56 ("large camel," "small camel"). Pleistocene (Idaho); Idaho.  
 Sellards, E. H. 1916 C, 149, 158, pl. xxx, fig. 5 ("camel." This genus?).  
 1916 D, 617 ("camel." This genus?). Pleistocene (Early); Florida.  
 1916 E, 16 ("camel." This genus?).  
 Shufeldt, R. W. 1913 B, 154, pl. xlii, fig. 562. Pleistocene (Fossil Lake); Oregon.  
 Simpson, G. G. 1928 H, 2 (This genus?). Pleistocene (Early); Florida.  
 Sinclair, W. J. 1903 A, 711 ("Camelops sp").  
 1904 A, 18 ("camelid").  
 1904 B, 11. Pleistocene; Nevada.  
 Smith, D. T. 1904 A, 11 ("camel." This genus?). Pleistocene (Lahontan); Nevada.  
 Stock, C. 1924 A, 4 ("camel"). Pleistocene; California.  
 1925 A, 113 ("camelid." This genus?). Pleistocene (Potter Creek Cave); California.  
 Whitney, J. D. 1865 A, 251 ("camel"). Pleistocene; California.  
 Yates, L. G. 1915 A, 67 (Lama This genus?). Pleistocene (Early); California.

**ESCHATIUS Cope. Type *E. conidens* Cope.**

- Hay, O. P. 1902 A, 680.  
 Boas, J. E. V. 1914 B, 592.  
 Felix and Lenk 1891 A, 126.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1923 A, 14.  
 Lull, R. S. 1917 B, 634, 639.  
 Lydekker, R. 1904 B, 27.  
 Matthew, W. D. 1904 B, 215.  
 1915 A, 244.  
 Merriam, J. C. 1913 B, 306, 317.  
 Osborn, H. F. 1909 D, 96.  
 1910 B, 460, 550.  
 Palmer, T. S. 1904 A, 271, 920.  
 Schlosser, M. 1901 D, 467.  
 1903 I, 96.  
 Terra, P. 1911 A, 327.  
 Weber, M. 1904 A, 660.  
 Weber and Abel 1928 A, 561.  
 Zdansky, O. 1926 B, 39.  
 Zittel and Schlosser 1911 A, 486.  
 1923 A, 576, 680.

**Eschatius conidens Cope.**

- Hay, O. P. 1902 A, 680.  
 Felix and Lenk 1891 A, 137.  
 Frech and Geinitz 1903 A, 35.  
 Freudenberg, W. 1921 A, 139.  
 1922 A, 5.  
 Hay, O. P. 1927 D, 305.  
 1928 C, 425, 426.  
 Joleaud, L. 1920 C, 92 (*E. conidens*).  
 McCornack, E. C. 1920 A, 17, 23 ("Eschatius").  
 Matthew, W. D. 1902 F, 320.  
 Miller, L. H. 1912 A, 81.  
 Rath, G. 1886 A, 106 ("Eschatius").  
 Schlosser, M. 1901 D, 465.  
 Stock, C. 1925 A, 195.  
 Trouessart, E. L. 1905 A, 674.  
 Troxell, E. L. 1915 A, 616, 622, figs. 8, 10, 12, 13.  
 Villada, M. M. 1903 A, 448.  
 Pleistocene; Oregon, Mexico, Texas.

**Eschatius longirostris Cope.**

- Hay, O. P. 1902 A, 680.  
 1927 D, 100, 242.  
 Trouessart, E. L. 1905 A, 674.  
 Pleistocene; Oregon.

CAMELUS Linnæus. Type *C. dromedarius* Linnæus.

- Hay, O. P. 1902 A, 680.  
 Abel, O. 1914 A, 170.  
 Adam, W. 1830 A, 525.  
     1854 A, 237 ("camel").  
 Altmann, F. 1925 A, 108.  
 Anderson, R. J. 1908 A, 547 ("camel").  
     1914 A, 534.  
 Andrews, C. W. 1916 A, 1.  
 Arldt, T. 1907 D, 643.  
 Baker, F. C. 1920 A, 226, 243, 395.  
 Beddard, F. E. 1902 A, 285.  
 Bertelli, D. 1909 A, 166.  
 Black, D. 1915 A, 350, fig. 15.  
 Boas, J. E. V. 1884 B, 398 ("dromedär").  
     1914 B, 592.  
 Bojanus, L. H. 1824 A, 263, pl. xxi, figs. 1-8  
     (Merycotherium).  
 Boule and Thevenin 1920 A, 195.  
 Bronn, H. G. 1848 A, 207.  
     1849 A, 711.  
 Camerano, L. 1916 B, 6, pl. v, fig. 4.  
 Carus, V. 1875 A, 156.  
 Carus and Engelmann 1861 A, 1717.  
 Cuvier, G. 1805 A.  
 Doran, A. H. G. 1878 A, 424, pl. lxi.  
 Eimer, G. H. T. 1901 A, 218.  
 Falconer, H. 1868 A, i, 230.  
 Falconer and Cautley 1836 A, 116.  
 Fischer, J. B. 1829 A, 434.  
 Foote, J. S. 1916 A, 105, pl. xi ("camel").  
 Gaupp, E. 1913 A, 125.  
 Gervais, P. 1852 A, 89.  
     1853 B, 44 ("chameau").  
     1859 A, 156.  
 Giebel, C. G. 1855 A, 65, pl. xxvii.  
     1833 A, 134.  
 Gilbert, J. Z. 1910 B, 38.  
 Gregory, W. K. 1920 A, 193.  
 Hasse and Schwarck 1870 A, 137.  
 Hay, O. P. 1914 A, 240, 241.  
     1923 A, 14, 15.  
 Hoernes, R. 1886 A, 676.  
 Hrdlička, A. 1903 A, 379.  
 Jacobi, A. 1921 A, 209.  
 Kampfen, P. N. 1905 A, 594.  
 Knottnerus-Meyer, T. 1907 A, 9, fig.  
 Küstlin, O. 1844 A ("kamel").  
 Lesbre, F. X. 1903 A.  
 Leuckart, F. S. 1835 A, 172 ("dromedär").  
 Leunis and Ludwig 1833 A, 266.  
 Lubosch, W. 1907 A, 622 ("dromedär").  
 Lull, R. S. 1917 B, 627, 634, 639, fig. 229.  
 Lydekker, R. 1904 B, 27.  
     1907 B, 60.  
     1915 D, 299.  
 Matthew, W. D. 1904 B, 215.  
     1915 A, 244.  
     1918 D, 144.  
 Meckel, J. F. 1823 A, 1-20 ("kameel").  
 Merriam, J. C. 1913 B, 306, 307.  
     1917 A.  
 Nehring, A. 1901 A, 264.  
     1901 B, 188.  
 O'Harra, C. C. 1920 A, 132.  
 Osborn, H. F. 1905 I, 109.  
     1909 D, 123.  
 Osborn, H. F. 1910 B, 609.  
     1912 G, 251.  
 Owen, R. 1845 B, 530, pl. cxxxiv, figs. 8, 10  
     ("camel").  
     1858 A, 30.  
     1866 B, 470, figs. 300, 307, 318.  
     1868 A, 349.  
     1870 C, 69.  
 Palmer, T. S. 1904 A, 156, 920.  
 Pavlow, M. 1904 A, 113.  
 Pictet, F. J. 1853 A, 345.  
 Scharff, R. F. 1911 A, 153.  
 Schlosser, M. 1903 I, 97, 134, 209, 211, 219.  
 Schmidt, O. 1886 A, 157.  
 Scott, W. B. 1913 A, 387, 677.  
 Strecker, C. 1887 A, 314.  
 Taschenberg, O. 1899 A, 4491.  
 Terra, P. 1911 A, 327.  
 Tornier, G. 1888 A, 292.  
 Trouessart, E. L. 1905 A, 676.  
 Weber, M. 1904 A, 658, 661.  
 Weber and Abel 1928 A, 558.  
 Wilder, B. 1872 B, 320.  
 Winge, H. 1906 A, 102.  
 Wright, R. R. 1883 A, 230.  
 Zdansky, O. 1926 B.  
 Zittel and Schlosser 1911 A, 486.  
     1923 A, 575, 680.
- Camelus americanus Wortman.**  
 Hay, O. P. 1902 A, 680.  
 Baker, F. C. 1920 A, 209, 213, 395.  
 Boule and Thevenin 1920 A, 195.  
 Frick, C. 1921 A, 361, 363.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1914 A, 26.  
     1924 D, 168, 305.  
     1928 C, 425, 426.  
 Matthew, W. D. 1902 F, 318.  
     1918 A, 227 (Camelops).  
 Merriam, J. C. 1911 B, 211, 213, 214, fig. 50  
     (This species?).  
     1917 A, 429 (This species?).  
 Osborn, H. F. 1910 B, 456.  
 Pavlow, M. 1904 A, 127.  
 Schlosser, M. 1901 D, 465.  
 Shmeek, B. 1910 B, 316 ("Camelus?" This  
     species?).  
 Stock, C. 1928 C, 37 (To Tanupolama?).  
 Weber and Abel 1928 A, 560.  
 Zdansky, O. 1926 B, 39.  
     Pleistocene (Aftonian); Nebraska? Pliocene  
     (Thousand Creek); Nevada.
- Camelus arctoamericanus Hay.**  
 Hay, O. P. 1921 A, 607, pl. cxix, fig. 12.  
 Gidley, J. W. 1913 E, 2 ("camel").  
     Pleistocene (Early); Yukon.
- Camelus maximus Hay.**  
 Hay, O. P. 1921 A, 607, pl. cxiii, fig. 1.  
     1927 D, 303, pl. iv, fig. 5.  
 Stock, C. 1925 A, 195, 199 (Camelops? "sp.  
     max.").  
     Pleistocene (Early); Washington, Oregon,  
     Idaho?



PALAUCHENIA Owen. Type *P. magna* Owen.

- Owen, R. 1869 F, 405.  
 Cope, E. D. 1884 G, 16.  
 Felix and Lenk 1891 A, 127.  
 Lydekker, R. 1885 C, 143 (Auchenia).  
 Owen, R. 1870 C, 65.  
 Trouessart, E. L. 1898 A, 842.  
 Zittel and Schlosser 1923 A, 681.

**Palauchenia magna** Owen.

- Owen, R. 1869 F, 405.  
 Cope, E. D. 1884 G, 19.  
 Felix and Lenk 1891 A, 137.  
 Freudenberg, W. 1921 A, 139.  
 1922 A, 5.  
 Owen, R. 1870 C, 65, pls. iv-vii.  
 Villada, M. M. 1903 A, 443.  
 Pleistocene; Mexico.

## LAMA Cuvier. Type not designated.

- Cuvier, G. 1798, Tabl. Élén. Hist. Nat. Anm., 158.  
 Andrews, C. W. 1916 A, 1 (Auchenia).  
 Camerano, L. 1916 A, 3, pl. iii.  
 1916 B, 8, pls. vi, vii.  
 Cuvier, G. 1800, Leçons d'Anat. Comp., tab. i. 1805 A, tab. i.  
 Doran, A. H. G. 1878 A, 424, pl. lxi.  
 Gervais, P. 1859 A, 157 (Auchenia).  
 Gidley, J. W. 1922 B, 120.  
 Hasse and Schwarck 1870 A, 135 (Auchenia).  
 Hay, O. P. 1913 D, 276 (Auchenia).  
 1925 D, 245.  
 Knottnerus-Meyer, T. 1907 A, 9, 104.  
 Lesbre, F. X. 1903 A, 163 (Auchenia).  
 Lönnberg, E. 1913 A, 1, seq.  
 Loomis, F. B. 1925 E, 596, fig. 9, 10 (Auchenia).  
 Major, C. J. F. 1891 B, 385.  
 Matthew, W. D. 1904 B, 215 (Auchenia).  
 Merriam and Stock 1925 B, 39.  
 Miller, G. S. 1924 A, 1.  
 Owen, R. 1870 C, 66 (Auchenia).  
 Reynolds, S. H. 1897 A, 359, 423, 445, 496, fig. 103 (Auchenia).  
 Scott, W. B. 1913 A, 388.

- Stock, C. 1923 C, 32.  
 Süppel, R. 1926 A, 97.  
 Taschenberg, O. 1899 A, 4468 (Auchenia).  
 Troxell, E. L. 1915 A, 625 (Auchenia).  
 Weber, M. 1904 A, 658, 661.  
 Weber and Abel 1923 A, 556, 559, 560, figs. 373-375.  
 Weber and Burlet 1927 A, 111, fig. 83.  
 Williston, S. W. 1910 G, 595 ("llama").  
 Woodward, A. S. 1898 B, 360 (Auchenia).  
 Wright, R. R. 1883 A, 232 (Auchenia).  
 Zittel and Schlosser 1911 A, 486 (Auchenia).  
 1923 A, 576 (Auchenia).

**Lama** sp. indet.

- Freudenberg, W. 1910 A, 5. Pleistocene (Early); Mexico.  
 Gidley, J. W. 1922 B, 120. Pleistocene (San Pedro Valley); Arizona.  
 1923 B, 16 (This genus?). Pleistocene; Florida.  
 Hay, O. P. 1927 D, 302, 307. Pleistocene; Arizona, California.  
 1928 C, 425.

TANUPOLAMA Stock. Type *Lama stevensi* Merriam and Stock.

- Stock, C. 1923 C, 29.  
**Tanupolama stevensi** (Merriam and Stock).  
 Merriam and Stock 1925 B, 39, figs. 1-4 (Lama).  
 Hay, O. P. 1927 D, 198 (Lama).

- Merriam and Stock 1925 A, 11 ("camel").  
 Stock, C. 1923 C, 29, pls. i-vi.  
 Stock and Furlong 1927 A, 409 (Lama).  
 Pleistocene (McKittrick); California.

STENOMYLUS Peterson. Type *S. gracilis* Peterson.

- Peterson, O. A. 1906 C, 35, 41.  
 Andrews, C. W. 1916 A, 1.  
 Anonymous 1910 A, 197.  
 Eastman, C. R. 1912 C, 658.  
 Loomis, F. B. 1909 B, 196.  
 1910 B, 297, 318, 321.  
 1911 B, 69.  
 1923 A, 139.  
 Lull, R. S. 1917 B, 634, fig. 636.  
 1922 B, 118.  
 Matthew, W. D. 1908 A, 553, 559.  
 1909 C, 120.  
 1924 C, 165.  
 Moodie, R. L. 1923 B, 566, fig. 27, pl. lxvii.  
 O'Harra, C. C. 1920 A, 71, 136, fig. 21.  
 Osborn, H. F. 1909 D, 74.  
 1910 B, 234, 236, 550.  
 Peterson, O. A. 1911 B, 267.  
 1912 C, 366.

- Scott, W. B. 1913 A, 241, 393, 408.  
 Troxell, E. L. 1920 A, 392.  
 Zittel and Schlosser 1911 A, 485.  
 1923 A, 575, 672.

**Stenomylus crassipes** Loomis.

- Loomis, F. B. 1910 B, 303, 309, 314, 319, figs. 27-30.  
 Cook, H. J. 1912 D, 41.  
 Loomis, F. B. 1911 B, 70.  
 O'Harra, C. C. 1920 A, 157.  
 Miocene (Harrison); Nebraska.

**Stenomylus gracilis** Peterson.

- Peterson, O. A. 1906 C, 35, 41, pl. xii; text-fig. 9.  
 Cook, H. J. 1912 D, 41 (S. gracilis).  
 Loomis, F. B. 1910 B, 303, 309, 318.  
 1911 B, 70.

- Matthew, W. D. 1909 C, 114.  
 O'Harra, C. C. 1920 A, 157.  
 Peterson, O. A. 1908 A, 286, figs. 1-12.  
 1911 B, 272.  
 Zdansky, O. 1926 B, 6, 15, 30.  
 Miocene (Lower Harrison); Nebraska.

**Stenomylus hitchcocki** Loomis.

- Loomis, F. B. 1910 B, 298, 318, figs. 1-26.  
 Abel, O. 1926 B, 360, 374, 376, 459.  
 Andrews, C. W. 1916 A, 1, pl. i.  
 Cook, H. J. 1912 D, 41.  
 Gilmore, C. W. 1921 F, 66 ("Stenomylus").  
 Holland, W. J. 1909 A, 453 (S. tyleri).  
 Loomis, F. B. 1911 B, 70.  
 1923 A, 222.  
 O'Harra, C. C. 1910 A, 117.

- O'Harra, C. C. 1920 A, 157.  
 Peterson, O. A. 1911 B, 267, pl. xlv.  
 1912 C, 366, pls. xxi, xxii; text-fig. 1.  
 1923 B, 94, pl. vi.  
 Scott, W. B. 1913 A, 242, fig. 131.  
 Zdansky, O. 1926 B.  
 Miocene (Harrison); Nebraska.

**Stenomylus** sp. indet.

- Cook, H. J. 1912 D, 43. Miocene (Upper Harrison); Nebraska.  
 Peterson, O. A. 1924 B, 304, fig. 3 (This genus?).  
 Lower Miocene (Brown's Park); Colorado.  
 1928 A, 100, pl. x, figs. 3, 4; text-fig. 9  
 (This genus?). Miocene or Pliocene  
 (Brown's Park); Colorado.

**TELEOPTERNUS** Cope. Type *T. orientalis* Cope.

- Hay, O. P. 1902 A, 680.  
 Diener, C. 1912 A, 216.  
 Frech and Gemnitz 1903 A, 36.  
 Matthew, W. D., in Osborn, H. F. 1910 B, 469  
 (Related to *Ovibos*?).  
 Osborn, H. F. 1910 B, 469, 470.  
 Palmer, T. S. 1904 A, 667, 925.  
 Schlosser, M. 1902 H, 143.  
 Trouessart, E. L. 1905 A, 676.  
 The position of this genus is uncertain.

**Teleopternus orientalis** Cope.

- Hay, O. P. 1902 A, 680.  
 1923 A, 497.  
 Mercer, C. H. 1897 A, 444 ("llama").  
 Rhoads, S. N. 1903 A, 240.  
 Schlosser, M. 1902 H, 143.  
 Pleistocene (Port Kennedy); Pennsylvania.

**HYPERTRAGULIDÆ** Cope.

- Cope, E. D. 1879 B, 66.  
 Abel, O. 1913 B, 729, 743.  
 1914 A, 171, 172.  
 1919 A, 809.  
 Matthew, W. D. 1901 B, 371, 440, 441.  
 1902 E, 311.  
 1907 A, 176, 178.  
 1908 A, 555, 560, 561 (Hypertragulidæ, Hypertragulinæ, Hypisodontinæ, Leptotragulinæ).  
 1909 C, 100, 103, 104, 106, 111, 114, 120.  
 1910 A, 41 (Hypertragulidæ, Hypertragulinæ, Leptotragulinæ).  
 1926 B, 5.  
 Matthew and Granger 1925 C, 9.  
 O'Harra, C. C. 1910 A, 111, 148.  
 1920 A, 128.  
 Osborn, H. F. 1909 D, 127.  
 1910 B, 618 (Hypertragulidæ, Hypertragulinæ, Leptomerycinæ, Leptotragulinæ, Hypisodontinæ).

- Palacký, J. 1903 B, 306, 310 ("leptotragulinen").  
 Palmer, T. S. 1904 A, 747, 920.  
 Peterson, O. A. 1918 A, 153.  
 Scharff, R. F. 1911 A, 112.  
 Schlosser, M. 1903 I, 139, 211, 219 ("hypertragulinen").  
 1904 C, 70, 93.  
 Scott, W. B. 1913 A, 683.  
 Trouessart, E. L. 1905 A, 682 (Leptomerycidæ).  
 1908 A, 839 (Leptotragulinæ).  
 Troxell, E. L. 1920 A, 392.  
 Weber, M. 1904 A, 662.  
 Weber and Abel 1928 A, 426, 565, 599 (Hypertragulidæ); 602 (Leptomerycinæ); 606 (Hypisodontinæ).  
 Zittel and Schlosser 1911 A, 484 (Leptotragulinæ); 488 (Hypertragulidæ).  
 1923 A, 578 (Hypertragulidæ); 574 (Leptotragulinæ).

**LEPTOMERYX** Leidy. Type *L. evansi* Leidy.

- Hay, O. P. 1902 A, 671.  
 Abel, O. 1914 A, 172.  
 Boule and Thevenin 1920 A, 170.  
 Condon, T. 1902 A, 121.  
 Cope, E. D. 1880 U, 155, 156.  
 Dall and Harris 1892 A, 289.  
 Depéret, C. 1912 A, 708.  
 Douglass, E. 1909 C, 231.  
 Giebel, C. G. 1883 A, 137.  
 Haug, E. 1911 A, 1528, 1529.  
 Kampfen, P. N. 1905 A, 596.  
 Lambe, L. M. 1904 C, 29.  
 1905 D, 370 A.

- Loomis, F. B. 1928 A, 142.  
 Lydekker, R. 1909 C, 454.  
 Matthew, W. D. 1901 B, 369, 370, 373, 440, 441.  
 1902 E, 313, fig. 2.  
 1905 A, 24.  
 1908 A, 535, 539, 552, 554, 555, 558, 559, figs. 11-13.  
 1909 C, 111.  
 1910 A, 42.  
 1915 A, 244, 247.  
 1915 K, 420, 457.  
 1924 C, 204.  
 1924 E, 748.

- Matthew, W. D. 1926 B, 2, 5.  
 Matthew and Granger 1924 A, 4.  
     1925 E, 11.  
 Osborn, H. F. 1910 B, 215, 220, 302, 551, fig. 104.  
 Palmer, T. S. 1904 A, 372, 911.  
 Peterson, O. A. 1912 B, 166.  
     1919 A, 95.  
 Riggs, E. S. 1914 A, 145  
 Scharff, R. F. 1911 A, 110.  
 Schlosser, M. 1901 A, 490.  
     1901 G, 490.  
     1903 I, 112, 139.  
     1904 C, 76, 96, 97.  
 Scott, W. B. 1913 A, 258, 267, 407, 657.  
 Sellards, E. H. 1916 B, 89.  
 Sinclair, W. J. 1905 A, 131.  
     1924 A, 128.  
 Trouessart, E. L. 1905 A, 683.  
 Wallace, A. R. 1876 A, II, 220  
 Weber, M. 1904 A, 662, 687.  
 Weber and Abel 1928 A, 565, 604.  
 Winge, H. 1906 A, 106.  
 Zittel and Schlosser 1911 A, 489.  
     1923 A, 579.

### **Leptomeryx esulcatus Cope.**

- Hay, O. P. 1902 A, 671.  
 Granger, W. 1910 A, 240 (This species?).  
 Lambe, L. M. 1904 C, 29, 38.  
     1905 D, 367 A.  
     1908 A, 10, 30.  
 Matthew, W. D. 1902 E, 314 (Leptomeryx?).  
     1903 B, 222, fig. 15 (This species?).  
     1909 C, 104.  
 Trouessart, E. L. 1905 A, 683.  
     Lower Oligocene (White River); Canada,  
     Montana?, Wyoming.

### **Leptomeryx evansi Leidy.**

- Hay, O. P. 1902 A, 671.  
 Abel, O. 1914 A, 173, fig. 130.  
 Darton, N. H. 1905 A, 178.  
 Douglass, E. 1909 C, 288.  
 Matthew, W. D. 1901 B, 358.  
     1902 E, 313.  
     1908 A, 544, 548, figs. 8-11.  
     1909 C, 106.  
     1926 B, 4.  
 Merrill, G. P. 1907 A, 43.  
 O'Harra, C. C. 1920 A, 129, 153, fig. 65.  
 Pearson, H. S. 1923 A, 64, fig. 2.  
 Riggs, E. S. 1915 A, 381, 393, pl. lx.  
 Scott, W. B. 1913 A, 407, 563, figs. 218, 277.  
 Sinclair, W. J. 1924 A, 102.  
 Trouessart, E. L. 1905 A, 683.  
 Weber and Abel 1928 A, 605, fig. 399.  
     Middle Oligocene (Brule); South Dakota,  
     Nebraska, Colorado.

### **Leptomeryx mammifer Cope.**

- Hay, O. P. 1902 A, 671.  
 Lambe, L. M. 1904 C, 29, 38, 51.  
     1905 D, 367 A.  
     1908 A, 10, 30.  
 Matthew, W. D. 1902 E, 313.  
     1903 B, 224, figs. 16, 17.  
     1909 C, 104 (Trigenicus?).  
 Trouessart, E. L. 1905 A, 683.  
     Lower Oligocene (Swift Current Creek);  
     Canada.

### **Leptomeryx obliquidens Lull.**

- Lull, R. S. 1922 B, 115.  
 Matthew, W. D. 1926 B, 4.  
     Upper Oligocene (Upper John Day); Oregon.

### **Leptomeryx? semicinctus Cope.**

- Hay, O. P. 1902 A, 672.  
 Lambe, L. M. 1904 C, 29, 38, 51.  
     1905 D, 367 A.  
     1908 A, 10, 32.  
 Matthew, W. D. 1902 E, 314 ("Not Lepto-  
 meryx").  
 Trouessart, E. L. 1905 A, 683.  
     Oligocene (White River); Canada, South  
     Dakota.

### **Leptomeryx speciosus Lambe.**

- Lambe, L. M. 1908 A, 10, 31, pl. viii, figs. 10-15.  
     Oligocene (Cypress Hills); Saskatchewan.

### **Leptomeryx transmontanus Douglass.**

- Douglass, E. 1903 A, 151, 187, fig. 11.  
 Matthew, W. D. 1909 C, 109.  
     1926 B, 4 (L. drummondianus; *lapsus*  
     *pennae*).  
     Upper Oligocene (Drummond?); Montana.

### **Leptomeryx sp. indet.**

- Condon, T. 1902 A, 121. Oligocene; Oregon  
 (This genus?).  
     1910 A, 101. Oligocene; Oregon (This  
     genus?).  
 Cook, H. J. 1912 D, 35. Oligocene (Chadron);  
 Nebraska. 38, 39 Oligocene (Brule); Nebraska.  
 Matthew, W. D. 1901 B, 358.  
     1902 E, 314. South Dakota and Colorado.  
     1909 C, 104, 106. Oligocene (Lower, Middle,  
     Upper); Nebraska, South Dakota,  
     Wyoming.  
 Osborn, H. F. 1918 A, 16. Oligocene (Alum  
 Bluff); Florida.  
 Sellards, E. H. 1916 B, 89, pl. ii, fig. 2 (This  
 genus?). Miocene; Florida.  
 Wanless, H. R. 1923 A, 220. Oligocene (White  
 River); Nebraska.

### **TRIGENIUS Douglass. Type *T. socialis* Douglass.**

- Douglass, E. 1903 A, 162.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 111.

### **Trigenicus socialis Douglass.**

- Douglass, E. 1903 A, 149, 162, fig. 6.  
     1907 A, 822.  
 Matthew, W. D. 1909 C, 104.  
     Oligocene (Lower White River); Montana.

HYPIDODUS Cope. Type *H. ringens* Cope.

- Hay, O. P. 1902 A, 672.  
 Abel, O. 1913 B, 745.  
     1914 A, 182.  
     1919 A, 815.  
 Cope, E. D. 1880 U, 155, 156.  
 Kampfen, P. N. 1905 A, 595.  
 Loomis, F. B. 1910 B, 321.  
 Lull, R. S. 1922 B, 118.  
 Matthew, W. D. 1901 B, 369, 440, 441.  
     1902 E, 311, 316, fig. 4.  
     1905 A, 24.  
     1908 A, 539, 553, 559.  
     1909 C, 111.  
     1910 A, 42.  
     1924 E, 748.  
     1926 B, 5.  
 Osborn, H. F. 1909 D, 74.  
     1910 B, 220, 551.  
 Palmer, T. S. 1904 A, 341, 911.  
 Schlosser, M. 1903 I, 139, 188, 211.  
     1904 C, 70, 76, 96.  
 Scott, W. B. 1913 A, 258, 408.  
 Sinclair, W. J. 1905 A, 131.  
 Troxell, E. L. 1920 A, 391.  
 Wallace, A. R. 1876 A, 1, 138.  
 Weber, M. 1904 A, 662.

- Weber and Abel 1928 A, 606.  
 Winge, H. 1906 A, 107.  
 Zittel and Schlosser 1911 A, 496.  
     1923 A, 587.

**Hypisodus alacer** Troxell.

- Troxell, E. L. 1920 A, 393, 397, figs. 1-3.  
 O'Harra, C. C. 1920 A, 153.  
 Oligocene (Brule); Nebraska.

**Hypisodus minimus** Cope.

- Hay, O. P. 1902 A, 672.  
 Abel, O. 1913 B, 745, fig. 68.  
     1914 A, 182, fig. 139.  
 Cook, H. J. 1912 D, 38.  
 Matthew, W. D. 1901 B, 358, 440, text-fig. 34.  
     1902 E, 311, 316, fig. 1.  
     1909 C, 106.  
 Trouessart, E. L. 1905 A, 683.  
 Troxell, E. L. 1920 A, 391, 396, fig. 4.  
 Weber and Abel 1928 A, 607, fig. 400.  
 Zittel and Schlosser 1911 A, 497, fig. 693.  
     1923 A, 587, fig. 734.  
 Oligocene (Middle); Colorado; Nebraska, South Dakota, Wyoming.

NANOTRAGULUS Lull. Type *N. loomisi* Lull.

- Lull, R. S. 1922 B, 111, 116.  
 Zittel and Schlosser 1923 A, 579 (Nannotragulus).  
**Nanotragulus loomisi** Lull.  
 Lull, R. S. 1922 B, 111, 116, fig. 1.  
 Matthew, W. D. 1926 B, 3, 5, fig. 3.  
     Lower Miocene (Lower Harrison); Wyoming.

- Nanotragulus ordinatus** (Matthew).  
 Matthew, W. D. 1907 A, 172, 218 (Hypertragulus).  
 Lull, R. S. 1922 B, 111, 115 (Hypertragulus).  
 Matthew, W. D. 1909 C, 114 (Hypertragulus).  
     1926 B, 4 (To Nanotragulus).  
     Miocene (Lower); South Dakota.

OROMERYX Marsh. Type *O. plicatus* Marsh.

- Hay, O. P. 1902 A, 672.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 103.  
 Osborn, H. F. 1910 B, 170, 550.  
 Palmer, T. S. 1904 A, 481, 912.  
 Peterson, O. A. 1919 A, 100.  
 Stehlin, H. G. 1910 A, 1088.  
 Trouessart, E. L. 1905 A, 683.  
 Zittel and Schlosser 1923 A, 574.

**Oromeryx plicatus** Marsh.

- Hay, O. P. 1902 A, 672.  
 Matthew, W. D. 1909 C, 100.  
 Peterson, O. A. 1919 A, 98.  
     Upper Eocene (Uinta); Utah.

**Oromeryx** sp. indet.

- Peterson, O. A. 1919 A, 98. Upper Eocene (Uinta); Utah.

CAMELOMERYX Scott. Type *C. longiceps* Scott.

- Hay, O. P. 1902 A, 672.  
 Abel, O. 1913 B, 744.  
 Haug, E. 1911 A, 1528.  
 Kampfen, P. N. 1905 A, 597.  
 Matthew, W. D. 1908 A, 537, 559.  
     1909 C, 100.  
 Osborn, H. F. 1910 B, 170.  
 Palmer, T. S. 1904 A, 155, 911, 920.  
 Peterson, O. A. 1912 B, 166.  
     1919 A, 98.  
 Stehlin, H. G. 1910 A, 1088.

- Trouessart, E. L. 1905 A, 683.  
 Weber, M. 1904 A, 662.  
 Zittel and Schlosser 1911 A, 494.  
     1923 A, 584, 669.

**Camelomeryx longiceps** Scott.

- Hay, O. P. 1902 A, 672.  
 Matthew, W. D. 1909 C, 100.  
 Trouessart, E. L. 1905 A, 683.  
     Upper Eocene (Uinta); Utah.

LEPTOTRAGULUS Scott and Osborn. Type *L. proavus* Scott and Osborn.

- Hay, O. P. 1902 A, 674.  
 Granger, W. 1910 A, 249.  
 Haug, E. 1911 A, 1528.

- Matthew, W. D. 1909 C, 103, 111.  
     1910 A, 42.  
 Osborn, H. F. 1910 B, 168, 170, 550.

- Palmer, T. S. 1904 A, 373, 921.  
 Peterson, O. A. 1919 A, 95, 100.  
 Schlosser, M. 1901 D, 462.  
 Scott, W. B. 1913 A, 267, 362.  
 Stehlin, H. G. 1910 A, 1083.  
 Trouessart, E. L. 1905 A, 684.  
 Weber, M. 1904 A, 661.  
 Woodward, A. S. 1898 D, 330.  
 Zittel and Schlosser 1911 A, 484.  
 1923 A, 574, 668, 669.

**Leptotragulus medius** Peterson.

- Peterson, O. A. 1919 A, 94, pl. xxxvii, figs. 1-4.  
 Upper Eocene (Uinta); Utah.

**Leptotragulus proavus** Scott and Osborn.

- Hay, O. P. 1902 A, 674.  
 Matthew, W. D. 1909 C, 100.  
 Peterson, O. A. 1919 A, 93, pl. xxxvii, figs. 5-13.  
 Schlosser, M. 1901 D, 463 (Parameryx).  
 Trouessart, E. L. 1905 A, 684.  
 Upper Eocene (Uinta); Utah.

**Leptotragulus profectus** Matthew.

- Matthew, W. D. 1903 B, 224, figs. 18, 19.  
 1909 C, 104 (This genus?).  
 Peterson, O. A. 1919 A, 97.  
 Trouessart, E. L. 1905 A, 684.  
 Lower Oligocene (White River); Montana.

**Leptotragulus sp. indet.**

- Matthew, W. D. 1909 C, 100. Upper Eocene (Uinta); Wyoming.

**PARAMERYX** Marsh. Type *P. laevis* Marsh.

- Hay, O. P. 1902 A, 674.  
 Heilprin, A. 1887 A, 376.  
 Palmer, T. S. 1904 A, 514, 921.  
 Peterson, O. A. 1919 A, 99.  
 Schmidt, O. 1886 A, 156.  
 Trouessart, E. L. 1905 A, 684.  
 Weber, M. 1904 A, 661.  
 Zittel and Schlosser 1911 A, 484 (Syn. of *Leptotragulus*).  
 1923 A, 574 (Syn. of *Leptotragulus*).

**Parameryx laevis** Marsh.

- Hay, O. P. 1902 A, 674.  
 Matthew, W. D. 1909 C, 100 (*Leptotragulus*).  
 Peterson, O. A. 1919 A, 99.  
 Upper Eocene (Uinta); Utah.

**Parameryx sulcatus** Marsh.

- Hay, O. P. 1902 A, 674.  
 Matthew, W. D. 1909 C, 100 (*Leptotragulus*).  
 Peterson, O. A. 1919 A, 99.  
 Upper Eocene (Uinta); Utah.

**LEPTOREODON** Wortman. Type *L. marshi* Wortman.

- Hay, O. P. 1902 A, 672.  
 Cossmann, M. 1899 B, 83.  
 Kampfen, P. N. 1905 A, 592.  
 Matthew, W. D. 1909 C, 103.  
 Osborn, H. F. 1910 B, 168, 550.  
 Peterson, O. A. 1919 A, 98, 100.  
 Scott, W. B. 1913 A, 362.  
 Stehlin, H. G. 1908 A, 835.  
 1910 A, 1083.  
 Trouessart, E. L. 1905 A, 684.  
 Weber, M. 1904 A, 662.  
 Zittel and Schlosser 1911 A, 494.  
 1923 A, 584.

**Leptoreodon gracilis** Scott.

- Hay, O. P. 1902 A, 672.  
 Trouessart, E. L. 1905 A, 684.  
 Upper Eocene (Uinta); Utah.

**Leptoreodon marshi** Wortman.

- Hay, O. P. 1902 A, 672.  
 Matthew, W. D. 1909 C, 100.  
 Peterson, O. A. 1919 A, 98.  
 Schlosser, M. 1901 D, 461, 462.  
 Trouessart, E. L. 1905 A, 684.  
 Upper Eocene (Washakie); Wyoming.

**HYPERTRAGULUS** Cope. Type *H. calcaratus* Cope.

- Hay, O. P. 1902 A, 674.  
 Cope, E. D. 1880 U, 155, 156.  
 Dall and Harris 1892 A, 289.  
 Granger, W. 1910 A, 249.  
 Haug, E. 1911 A, 1528, 1705.  
 Lambe, L. M. 1905 D, 370 A.  
 Lull, R. S. 1922 B, 111.  
 Matthew, W. D. 1901 B, 369, 440, 441.  
 1902 E, 315, fig. 3.  
 1905 A, 24.  
 1907 A, 176, 218.  
 1908 A, 539, 552, 559.  
 1909 C, 111, 120.  
 1910 A, 42.  
 1915 A, 244.  
 1924 E, 748.  
 Osborn, H. F. 1909 D, 70, 75.

- Osborn, H. F. 1910 B, 215, 220, 231, 551.  
 1912 G, 246, 249.  
 Palmer, T. S. 1904 A, 340, 921.  
 Peterson, O. A. 1919 A, 97, 100.  
 Schlosser, M. 1901 A, 490.  
 1901 G, 490.  
 1903 I, 139.  
 1904 C, 97.  
 Scott, W. B. 1913 A, 683.  
 Sinclair, W. J. 1905 A, 131.  
 1924 A, 128.  
 Trouessart, E. L. 1905 A, 685.  
 Wallace, A. R. 1876 A, I, 138.  
 Weber, M. 1904 A, 661.  
 Weber and Abel 1928 A, 602.  
 Zittel and Schlosser 1911 A, 489.  
 1923 A, 579, 672.

**Hypertragulus calcaratus** Cope.

- Hay, O. P. 1902 A, 674.  
 Cook, H. J. 1912 D, 37.  
 Douglass, E. 1903 A, 151.  
 Lull, R. S. 1922 B, 112 (H. calcaratus, H. tri-costatus).  
 Matthew, W. D. 1901 B, 358.  
     1902 E, 316.  
     1909 C, 106, 114 (This species?).  
     1926 B, 3.  
 O'Harra, C. C. 1920 A, 158.  
 Trouessart, E. L. 1905 A, 685.  
     Oligocene (Middle); Colorado, South Dakota: Miocene (Lower); Montana, South Dakota?, Nebraska.

**Hypertragulus hesperius** Hay.

- Hay, O. P. 1902 A, 675.  
 Lull, R. S. 1922 B, 111, 113.  
 Matthew, W. D. 1907 A, 218.  
     1909 C, 109.  
     1926 B, 3.  
 Merriam and Sinclair 1907 A, 187 (H. calcaratus? =H. hesperius).  
 Trouessart, E. L. 1905 A, 685.  
     Upper Oligocene (John Day); Oregon.

**HETEROMERYX** Matthew.

- Matthew, W. D. 1905 A, 23, 24, fig. 6.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1908 A, 552, 559.  
     1909 C, 111.  
     1910 A, 42.  
     1915 A, 244.  
     1926 B, 5.  
 Zittel and Schlosser 1911 A, 495.  
     1923 A, 585.

**ALLOMERYX** Sinclair. Type *A. planiceps* Sinclair.

- Sinclair, W. J. 1905 A, 129.  
 Zittel and Schlosser 1911 A, 489.  
     1923 A, 579.

**Hypertragulus minutus** Lull.

- Lull, R. S. 1922 B, 111, 115.  
     Upper Oligocene (Upper John Day); Oregon.

**Hypertragulus transversus** Cope.

- Hay, O. P. 1902 A, 675.  
 Lambe, L. M. 1904 C, 29, 38, 51.  
     1905 D, 367 A.  
     1908 A, 10, 32.  
 Lull, R. S. 1922 B, 111.  
 Matthew, W. D. 1902 E, 316 (This genus?).  
     1909 C, 104 (Heteromeryx?).  
 Trouessart, E. L. 1905 A, 685.  
     Lower Oligocene (Swift Current); Canada.

**Hypertragulus** sp.? indet.

- Matthew, W. D. 1902 E, 316. Oligocene (Swift Current Creek); Colorado.  
     1909 C, 106.  
 Merriam and Sinclair 1907 A, 188, 190, 191, 192. Oligocene (John Day); Oregon.  
 Sinclair, W. J. 1905 A, 128, pl. xiv, fig. 3. Oligocene? (John Day); Oregon.  
 Stock, C. 1920 A, 269, figs. 2, 3. Oligocene (San Lorenzo); California.

Type *H. dispar* Matthew.**Heteromeryx dispar** Matthew.

- Matthew, W. D. 1905 A, 23, figs. 4, 5.  
 Cook, H. J. 1912 D, 35.  
 Matthew, W. D. 1909 C, 104.  
 O'Harra, C. C. 1920 A, 150.  
     Lower Oligocene (Chadron); Nebraska.

**Allomeryx planiceps** Sinclair.

- Sinclair, W. J. 1905 A, 129, pl. xiv, figs. 1-2.  
 Lull, R. S. 1922 B, 111, 114.  
 Matthew, W. D. 1909 C, 109 (Hypertragulus).  
 Merriam and Sinclair 1907 A, 187, 188, 190.  
     Upper Oligocene (John Day); Oregon.

**PROTOCERATIDÆ** Marsh.

- Marsh, O. C. 1891 A, 81.  
 Hay, O. P. 1902 A, 673 (Protoceratidæ).  
 Abel, O. 1913 B, 729, 744 (Protoceratidæ).  
     1914 A, 172, 174 (Protoceratidæ).  
     1919 A, 810 (Protoceratidæ).  
     1920 A, 437 (Protoceratidæ).  
 Beddard, F. E. 1902 A, 284 (Protoceratidæ).  
 Case, E. C. 1899 B, 174 (Protoceratidæ).  
 Matthew, W. D. 1908 A, 561 (Protoceratidæ).  
     1909 C, 120.  
     1915 A, 251.  
 Osborn, H. F. 1910 B, 551 (Protoceratidæ).

- Palacký, J. 1903 B, 312 ("protoceratiden").  
 Palmer, T. S. 1904 A, 766, 927.  
 Schlosser, M. 1900 D, 139.  
     1903 I, 111, 211.  
     1907 B, 435 ("protoceratiden").  
 Trouessart, E. L. 1905 A, 685.  
 Van Bemmelen, J. F. 1918 A, 572 (Protoceratidæ).  
 Weber and Abel 1928 A, 599, 600 (Protoceratidæ).  
 Winge, H. 1906 A, 70 (Protoceratini).  
 Zittel and Schlosser 1911 A, 494 (Protoceratidæ).  
     1923 A, 584 (Protoceratidæ).

**PROTOCERAS** Marsh. Type *P. celer* Marsh.

- Hay, O. P. 1902 A, 673.  
 Abel, O. 1913 B, 744.  
 Barbour, E. H. 1906 B, 623.  
 Beddard, F. E. 1902 A, 284.  
 Gaudry, A. 1896 A, 181.

- Haug, E. 1911 A, 1529.  
 Kampfen, P. N. 1905 A, 595.  
 Lee, Stone, Gale 1915 A, 34, pl. vii.  
 Loomis, F. B. 1925 E, 595, figs. 9, 10.  
     1928 B, 542.

- Lull, R. S. 1904 C, 8.  
1917 B, 296.
- Matthew, W. D. 1901 B, 370, 371, 441.  
1905 A, 24.  
1907 A, 178.  
1908 A, 552, 559.  
1909 C, 111.  
1910 A, 42.  
1915 A, 244.  
1924 E, 748.  
1926 B, 5 (Protoceras).
- O'Harra, C. C. 1910 A, 112, 146.  
1920 A, 129.
- Osborn, H. F. 1907 G, 162, fig. 135.  
1909 D, 64, 65, 74.  
1910 B, 629.  
1912 G, 243, fig. 8.
- Palmer, T. S. 1904 A, 581, 927.
- Schlosser, M. 1900 D, 139.  
1901 A, 490.  
1901 G, 489.  
1903 I, 111.
- Schuchert, C. 1910 A, 599.
- Scott, W. B. 1913 A, 252, 258, 445, fig. 133.
- Trouessart, E. L. 1905 A, 685.
- Weber, M. 1904 A, 662.
- Weber and Abel 1928 A, xxiii, 601.
- Winge, H. 1906 A, 105.
- Zittel and Schlosser 1911 A, 495.  
1923 A, 585, 669, 670.
- Protoceras celer Marsh.**
- Hay, O. P. 1902 A, 673.
- Abel, O. 1914 A, 175, fig. 132.
- Abel, O. 1919 A, 811, fig. 611.
- Cook, H. J. 1912 D, 39.
- Lee, Stone, Gale 1915 A, 40, pl. vii.
- Matthew, W. D. 1909 C, 109.
- O'Harra, C. C. 1910 A, 112, pls. xlv, xlvii.  
1920 A, 129, pls. xxiii, xliii, xlv; text-fig. 66.
- Osborn, H. F. 1904 F, 15, 31, 40.  
1910 B, 225, fig. 111.
- Schlosser, M. 1900 D, 139.
- Scott, W. B. 1913 A, 405, 406, figs. 216, 217.
- Stromer, E. 1912 A, 194, fig. 177.
- Trouessart, E. L. 1905 A, 685.
- Weber and Abel 1928 A, 601, fig. 395.
- Zittel and Schlosser 1911 A, 495, fig. 691.  
1923 A, 585, fig. 732.
- Upper Oligocene (Brule); South Dakota, Nebraska.

### Protoceras comptus Marsh.

- Hay, O. P. 1902 A, 673.
- Cook, H. J. 1912 D, 39.
- Matthew, W. D. 1909 C, 109.
- O'Harra, C. C. 1920 A, 154.
- Trouessart, E. L. 1905 A, 685.
- Upper Oligocene (Brule); Nebraska.

### Protoceras nasutus Marsh.

- Hay, O. P. 1902 A, 673.
- Cook, H. J. 1912 D, 39 (P. nastus).
- Matthew, W. D. 1909 C, 109.
- Trouessart, E. L. 1905 A, 685.
- Upper Oligocene (Brule); Nebraska.

### CALOPS Marsh. Type *C. cristatus* Marsh.

- Hay, O. P. 1902 A, 673.
- Haug, E. 1911 A, 1529.
- Matthew, W. D. 1909 C, 111.
- Palmer, T. S. 1904 A, 151, 821.
- Schlosser, M. 1900 D, 140.
- Zittel and Schlosser 1911 A, 495.
- Calops consors Marsh.**
- Hay, O. P. 1902 A, 673.
- Cook, H. J. 1912 D, 39.
- Matthew, W. D. 1909 C, 109.
- Schlosser, M. 1900 D, 140.
- Zittel and Schlosser 1911 A, 495.
- Calops cristatus Marsh.**
- Hay, O. P. 1902 A, 673.
- Cook, H. J. 1912 D, 39.
- Matthew, W. D. 1909 C, 109.
- O'Harra, C. C. 1920 A, 154.
- Upper Oligocene (Brule); region of South Dakota and adjoining parts of Nebraska and Wyoming.

### SYNDYOCERAS Barbour. Type *S. cooki* Barbour.

- Barbour, E. H. 1905 B, 797.
- Abel, O. 1913 B, 744, fig. 5.  
1914 A, 175, fig. 132.  
1920 A, 437, fig. 664.
- Barbour, E. H. 1905 A, 2 (Separate).  
1906 A, 289.  
1906 B, 623.  
1906 C, 781.
- Jaekel, O. 1911 A, 236, fig. 264.
- Lee, Stone, Gale 1915 A, 34, pl. vi.
- Matthew, W. D. 1909 C, 120.  
1910 A, 42 (This genus?).
- Osborn, H. F. 1907 F, 872.  
1909 D, 74.  
1910 B, 236, 237, 551, figs. 120, 121.
- Peterson, O. A. 1912 B, 167.
- Scott, W. B. 1913 A, 241, 258, 404, 407.
- Weber and Abel 1928 A, 600.
- Zittel and Schlosser 1911 A, 495.
- Syndyoceras cooki Barbour.**
- Barbour, E. H. 1905 B, 797, fig.  
1905 A, pl. i.  
1924 A, 13 ("Syndyceros").
- Cook, H. J. 1912 D, 41.
- Matthew, W. D. 1909 C, 114.
- O'Harra, C. C. 1920 A, 131, 158, pls. xi, xlv; text-fig. 67.
- Peterson, O. A. 1906 C, 35.
- Schlosser, M. 1907 B, 485.
- Scott, W. B. 1913 A, 403, fig. 213.
- Lower Miocene (Harrison); Nebraska.

*Superfamily TRAGULOIDÆ*, new form.

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| <p>Hay, O. P. 1902 A, 681 (Traguloidea).<br/>         Beddard, F. C. 1902 A, 281 (Tragulina).<br/>         Flower and Lydekker 1891 A, 305 (Tragulna).<br/>         Gill, T. 1872 B, 9, 73, 80 (Traguloidea).<br/>         Hogben, L. T. 1919 A, 75 (Tragulna).<br/>         Osborn, H. F. 1910 B, 550 (Tragulina).</p> | <p>Scott, W. B. 1913 A, 409 (Tragulina).<br/>         Weber, M. 1904 A, 644 (Traguloidea).<br/>         Weber and Abel 1928 A, 426, 562, 597 (Traguloidea).<br/>         Weber and Burlet 1927 A, xv (Traguloidea).<br/>         Wright, R. R. 1883 A, 287 (Tragulna).</p> |
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## TRAGULIDÆ Edwards.

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| <p>Edwards, A. M. 1864 A, 157.<br/>         Hay, O. P. 1902 A, 681.<br/>         Arldt, T. 1907 D, 686.<br/>         Beddard, F. E. 1902 A, 282.<br/>         Depéret, C. 1912 A, 708 ("tragulidés").<br/>         Doran, A. H. G. 1878 A, 423.<br/>         Kowalewsky, W. 1877 A, 145, 153 ("traguliden").<br/>         Leuthardt, F. 1891 A, 124 ("traguliden").<br/>         Matthew, W. D. 1928 B, 968, 981, fig. 16.</p> | <p>Palmer, T. S. 1904 A, 774, 930.<br/>         Schlosser, M. 1903 I, 139 ("traguliden").<br/>         Trouessart, E. L. 1905 A, 685.<br/>         Weber and Abel 1928 A, 504, 538.<br/>         Winge, H. 1906 A, 70, 104.<br/>         Zittel and Schlosser 1911 A, 486.<br/>         1923 A, 576.<br/>         No American genera are at present referred to this family.</p> |
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*Superfamily CERVOIDÆ*, new name.

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| <p>Weber and Abel 1928 A, 426, 538 (Pecora, in part).</p> | <p>Zittel and Schlosser 1911 A, 490 (Cervicornia).<br/>         1923 A, 579 (Cervicornia).</p> |
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## PALÆOMERYCIDÆ Lydekker.

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| <p>Lydekker, R. 1883 (<i>vide</i> T. S. Palmer).<br/>         Matthew, W. D. 1904 A, 102, 127 (Palæomerycinæ).<br/>         1924 C, 193.<br/>         1925 D, 33.<br/>         Osborn, H. F. 1910 B, 551.<br/>         Palmer, T. S. 1904 A, 921.<br/>         Pilgrim, G. E. 1911 A, 5, 23.</p> | <p>Schlosser, M. 1903 I, 110, 185 ("palæomeryciniden").<br/>         1904 A, 497 ("palæomeryciniden").<br/>         1906 A, 113 ("palæomeryciniden").<br/>         1924 A, 89.<br/>         Trouessart, E. L. 1905 A, 691 (Cervulinæ).<br/>         Weber, M. 1904 A, 672.<br/>         Zittel and Schlosser 1911 A, 492 (Cervulinæ).<br/>         1923 A, 581 (Cervulinæ).</p> |
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DREPANOMERYX Sinclair. Type *D. falciformis* Sinclair.

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|---|--|
| <p>Sinclair, W. J. 1915 A, 77, 78, 90.<br/>         Zittel and Schlosser 1923 A, 679.<br/> <b>Drepanomeryx falciformis</b> Sinclair.<br/>         Sinclair, W. J. 1915 A, 77, 90, figs. 14-16.<br/>         Cook, H. J. 1922 B, 13, 14, 21, 1 fig. (This genus and species?).</p> | <p>Matthew, W. D. 1918 A, 187.<br/>         1924 C, 68.<br/>         Merriam, J. C. 1917 A, 437.<br/>         Upper Miocene (Lower Snake Creek); Nebraska.</p> |
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PALÆOMERYX Meyer. Species included *P. bojani* and *P. kaupii*.

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| <p>Hay, O. P. 1902 A, 682.<br/>         Abel, O. 1909 E (248).<br/>         Bronn, H. G. 1838 A, 1186.<br/>         Cope, E. D. 1887 B, 397.<br/>         Depéret, C. 1892 A, 91.<br/>         1912 A, 709.<br/>         Douglass, E. 1909 A, 458.<br/>         Gadow, H. 1902 A, 217.<br/>         Grant, M. 1904 B, 202.<br/>         Haug, E. 1911 A, 1706.<br/>         Heilprin, A. 1887 A, 381.<br/>         Hensel, R. 1879 A, 555.<br/>         Jaeger, G. F. 1850 A, 826.<br/>         Loomis, F. B. 1925 E, 603, figs. 19, 20.<br/>         1928 B, 534.<br/>         Major, C. J. F. 1877 A, 15.<br/>         1880 A, 33.<br/>         Matsumoto, H. 1918 C, 76.<br/>         1921 A, 88.<br/>         Matthew, W. D. 1902 F, 319.<br/>         1904 A, 104, 127.<br/>         1924 C, 70, 205.</p> | <p>Matthew and Cook 1909 A, 408.<br/>         Osborn, H. F. 1905 I, 106.<br/>         1909 D, 77, 78, 80.<br/>         1910 B, 626.<br/>         Pavlow, M. 1903 B, 215.<br/>         Peterson, O. A. 1919 A, 74.<br/>         Pictet, F. J. 1853 A, 350.<br/>         Pilgrim, G. E. 1911 A, 5, 23.<br/>         Schlosser, M. 1902 J, 181.<br/>         1903 A, 292.<br/>         1903 I, 110, 113, 185.<br/>         1904 A, 497.<br/>         1916 A, 13, pls. i, ii.<br/>         1924 B, 636.<br/>         Sinclair, W. J. 1915 A, 77.<br/>         Steinmann, G. 1907 A, 497.<br/>         Trouessart, E. L. 1905 A, 692.<br/>         Van Bemmelen, J. F. 1918 A, 573.<br/>         Weber and Abel 1928 A, xix, 575, 591, 598.<br/>         Zittel and Schlosser 1911 A, 493.<br/>         1923 A, 581, 673, 674.</p> |
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**Palæomeryx americanus** Douglass.

- Hay, O. P. 1902 A, 682.  
 Douglass, E. 1903 A, 155.  
     1909 A, 458, 472, pl. lxii, figs. 1, 2; pl. lxiii,  
     fig. 2 (Dromomeryx?).  
 Lull, R. S. 1920 A (Dromomeryx); 128 (Palæo-  
 meryx).  
 Matthew, W. D. 1904 A, 104.  
     1908 A, 546.  
     1909 C, 118.  
 Trouessart, E. L. 1905 A, 692.  
     Upper Miocene (Madison Valley); Montana.

**Palæomeryx teres** (Cope).

- Cope, E. D. 1874 U, 150 (Cosoryx).  
 Hay, O. P. 1902 A, 683 (Merycodus).  
 Matthew, W. D. 1904 A, 103, 123 (Merycodus?).  
     1909 C, 118.  
     1924 C, 200 (Dicrocerus).  
 Merrill, G. P. 1907 A, 31 (Cosoryx); 33 (Dicro-  
 cerus); 53 (Palæomeryx).  
 Trouessart, E. L. 1905 A, 712 (Merycodus).  
     Lower Pliocene (Sante Fe); New Mexico.

**Palæomeryx trilateralis** (Cope).

- Hay, O. P. 1902 A, 683 (Merycodus).  
 Matthew, W. D. 1904 A, 103, 123 (Merycodus).  
     1909 C, 118.  
     1924 C, 200 (Dicrocerus. This genus?).  
 Merrill, G. P. 1907 A, 34 (Dicrocerus).  
 Trouessart, E. L. 1905 A, 712 (Merycodus).  
     Upper Miocene (Sante Fe); New Mexico.
- Palæomeryx sp. indet.**
- Barbour and Cook 1917 B, 180. Pliocene (Valen-  
 tine); Nebraska.  
 Cook, H. J. 1912 D, 43, 45. Pliocene (Sheep  
 Creek); Nebraska.  
     1922 B, 13 (This genus?). Pliocene (Snake  
 Creek); Colorado.  
 Furlong, E. L. 1927 A, 159.  
 Matthew, W. D. 1904 A, 129. Miocene; Colo-  
 rado.  
     1909 C, 115, 118. Miocene; Colorado, Ore-  
     gon: (Ankaree); South Dakota.  
 Matthew and Cook 1909 A, 408, figs. 21, 22.  
 Merriam and Sinclair 1907 A, 196. Miocene  
 (Mascall); Oregon (Genus doubtful).  
 Merrill, G. P. 1907 A, 28, 53.

**CERVIDÆ** Gray.

- Gray, J. E. 1821 A, 307.  
 Hay, O. P. 1902 A, 681.  
 Abel, O. 1912 F, 630 ("hirsch").  
     1913 B, 729, 743.  
     1914 A, 172.  
     1919 A, 810.  
     1920 A, 637 ("cerviden").  
     1921 A, 181, 252 ("hirschen").  
 Adloff, P. 1914 A, 359 ("cerviden").  
 Allen, J. A. 1905 A, 663.  
 Arldt, T. 1907 B, 452 ("cerviden").  
     1907 D, 644.  
 Atzkern, J. 1923 A, 126 ("cerviden").  
 Baird, S. F. 1876 A, cviii ("deer").  
 Baur, G. 1886 N, 117 ("cerviden").  
 Beddard, F. E. 1902 A, 291.  
 Behlen, H. 1906 A ("cerviden").  
 Black, D. 1915 A, 346.  
 Bonaparte, C. L. 1832 A, 292.  
 Botezat, E. 1903 A, 104 ("cerviden").  
     1904 A, 593 ("cerviden").  
 Boule and Thevenin 1920 A, 168 ("cervidés").  
 Brandt and Woldrich 1887 A, 12 ("cerviden").  
 Brown, A. E. 1904 B, 79.  
 Cameron, A. G. 1910 A, 51.  
     1910 B, 154, 215.  
 Carus, V. 1875 A, 153 (Cervina).  
 Case, E. C. 1899 B, 174 (Cervicornia).  
 Chandler, A. C. 1914 B, 134.  
 Chomenko, J. 1913 A, 138.  
 Cleland, J. 1863 B, 298 ("deer").  
 Cope, E. D. 1891 N, 87.  
 Cuvier, F. 1825 A, 231 ("cerfs").  
 Cuvier, G. 1805 A ("cerfs").  
     1825 A, iv, 23-106, pls. ("cerfs").  
 Dawkins, W. B. 1878 A, 402.  
     1887 A, 1, pls. i-viii.  
 Depéret, C. 1905 A, 1518 ("cervidés").  
     1907 B ("cervidés").
- Doran, A. H. G. 1878 A, 429, pl. lxi, fig. 20  
 ("deer").  
 Dürst, J. U. 1902 A, 198 ("cerfs").  
 Elliot, D. G. 1901 A, 33.  
 Flower, W. H. 1873 B, 103.  
 Freund, L. 1906 A, 114 ("cerviden").  
 Furlong, E. L. 1927 A, 152-175.  
 Gadow, H. 1902 A, 206.  
     1913 A, 132 ("deer").  
 Gervais, P. 1859 A, 141 ("cervidés").  
 Giebel, C. G. 1883 A, 27 ("hirsche").  
 Gill, T. 1877 A, 135.  
 Grant, M. 1904 B, 200, 202, 205.  
 Gray, J. E. 1821 A, 307.  
 Gregory, W. K. 1927 A, 601 ("deer").  
 Hamilton, M. of, 1910 A, 199 (Plesiometacarp-  
 alia, Telemetacarpalia).  
 Hay, O. P. 1912 D, 610.  
     1914 A, 245.  
     1923 A, 481.  
     1927 E, 76 ("deer").  
 Herman, R. 1909 A, 86 (Plesiometacarpalia,  
 Telemetacarpalia).  
 Hilzheimer, M. 1922 A, 712, 741 ("cerviden").  
 Hoernes, R. 1886 A, 677.  
 Holding, R. E. 1905 A, 1.  
 Hrdlička, A. 1903 A, 375.  
 Huxley, T. H. 1870 F, 537.  
 Ihering, H. 1909 A, 285 ("rehe").  
 Kampfen, P. N. 1905 A, 600.  
 Khomenko, J. 1913 A, 138.  
 Kingsley, J. S. 1925 A, 194, fig. 204.  
 Knottnerus-Meyer, T. 1907 A, 11, 97.  
 Korff, K. 1914 A, 693.  
 Laloy, L. 1907 A, 586 ("cervidés").  
 Lankester, E. R. 1907 A, 103.  
 Leche, W. 1887 A.  
 Le Damany, P. 1906 B, 163 ("cerfs").  
 Leunis and Ludwig 1883 A, 259 (Cervina).

- Lobley, J. L. 1908 A, 200, 204.  
 Loomis, F. B. 1925 B, 226 ("deer").  
     1925 E, 585, 591, 597, figs. 5, 11, 12 ("deer").  
     1928 B, 531, figs. 1-6.  
 Lydekker, R. 1903 B, 201.  
     1903 D, 124 ("deer").  
     1909 C, 454.  
     1913 B, 5.  
     1915 D, 1.  
 Mackenzie, W. 1911 A, 368.  
 Major, C. J. F. 1901 B, 241.  
 Matschie, P. 1899 A, 130 ("cerviden").  
 Matthew, W. D. 1904 A, 102.  
     1908 A, 535, 546, 548, 557, 561.  
     1909 C, 90, 115, 118, 120.  
     1910 G, 155.  
     1913 B, 291.  
     1915 A, 185, 245, 247, 254, fig. 23.  
     1915 K, 457, 474, fig. 17 ("deer").  
     1917 D, 208 ("deer").  
     1918 A, 221.  
     1924 C, 193, 202.  
     1924 E, 745.  
     1925 D, 34.  
     1926 B, 6.  
     1928 B, 968, 980, 981, fig. 16 ("deer").  
 Matthew and Cook 1909 A, 367, 407.  
 Matthew and Granger 1924 A, 4, 6.  
 Meckel, J. F. 1823 A, 4 ("hirsche").  
     1825 A ("hirsche").  
 Merriam, J. C. 1915 E, 229.  
 Miller, G. S. 1912 A, 962.  
     1912 B, 385.  
     1924 C, 483.  
 Murne, J. 1871 B, 440, 446.  
 Nitsche, H. 1898 A, 1, 58 ("cerviden").  
 Nopcsa, F. 1923 H, 177 ("cerviden").  
 O'Hara, C. C. 1910 A, 117, 146.  
     1920 A, 138.  
 Osborn, H. F. 1905 I, 106.  
     1909 D, 123.  
     1910 B, 609.  
 Owen, R. 1845 B, 532, 540.  
     1868 A, 871.  
 Palacký, J. 1903 B, 313 ("cerviden").  
 Pander and Alton 1823 A, 7 ("hirsche").  
 Paulli, S. 1899 A, 165 (Cervus).  
 Petersen, G. 1921 A, 294.  
 Pictet, F. J. 1853 A, 345 ("cervidés").  
 Pocock, R. I. 1910 A, 97 ("deer," Plesiometacarpalia, Telemetacarpalia).  
     1910 B, 199.  
     1912 A, 773.  
 Puccioni, N. 1908 A, 49 ("cervi").
- Reid, G. A. 1898 A, 359 ("stags").  
 Reynolds, S. H. 1897 A, 469, 507.  
 Rhumbler, L. 1913 A, 577 ("hirsche").  
     1913 B, 81 ("cerviden").  
     1914 A, 155 ("cerviden").  
 Robin and Herrmann 1882 A, 210 ("cervidés").  
 Rong, A. 1901 A, 55 ("cerviden").  
     1902 A, 538 ("cerviden").  
     1905 A, 17.  
 Rutten, L. M. R. 1909 A, 62.  
 Scharff, R. F. 1895 A, 447.  
     1907 B, 165.  
     1911 A, 109.  
 Schlosser, M. 1902 J, 240, 256 ("cerviden").  
     1903 I, 113, 185.  
     1911 A, 165 ("cerviden").  
     1924 B, 634 ("cerviden").  
 Schmidt, O. 1886 A, 158.  
 Schwarz, E. 1924 A, 420 ("deer").  
 Selater, P. L. 1886 A, 403.  
 Scott, W. B. 1913 A, 362, 411, 678 (Cervidæ;  
     411, 421 (Cervicornia).  
     1916 A, 117 ("deer").  
     1917 A, 175 ("deer").  
 Serres, M. 1860 A, 301 ("cerfs").  
 Seton, E. T. 1909 A, 37.  
 Stehlin, H. G. 1910 A, 1089 ("cerviden").  
 Steinmann, G. 1907 A, 497.  
 Taschenberg, O. 1899 A, 4522.  
 Thacker, A. G. 1914 A, 283 ("deer").  
 Thomson, A. 1902 A, 102.  
 Tims, H. W. M. 1903 A, 143.  
 Toldt, C. 1905 A, 330, figs. (Cervus).  
 Tormer, G. 1891 A, 199 ("cerviden").  
 Tornquist, A. 1897 A, 683 ("hirsche").  
 Trouessart, E. L. 1905 A, 690.  
     1906 A, 66.  
 Underhill, B. M. 1910 A, 82.  
 Van Bemmelen, J. F. 1918 A, 571.  
 Vieq-d'Azyr, F. 1792 A, cviii (Ramosi).  
 Wallace, A. R. 1876 A, I, 120, 155; II, 218.  
     1894 A, 435.  
 Weber, M. 1904 A, 643, 666.  
 Weber and Abel 1928 A, 426, 567, 574.  
 Williston, S. W. 1912 E, 261.  
 Winge, H. 1906 A, 70, 109 (Cervini).  
 Woodward, A. S. 1898 D, 335 ("deer").  
     1923 C, 41.  
 Woodward, H. 1904 B, 162.  
 Wright, R. R. 1883 A, 289.  
 Zimmer, A. 1905 A, 2 ("cerviden").  
 Zittel and Schlosser 1911 A, 490 (Cervicornia).  
     1923 A, 579 (Cervicornia).

## CERVULINÆ Selater.

- Selater, P. L. 1870, Proc. Zool. Soc. Lond., 115.  
 Zittel, K. A. 1893 B, 385.
- Zittel and Schlosser 1911 A, 492.  
     1923 A, 382.

MACHÆROMERYX Matthew. Type *M. tragulus* Matthew.

- Matthew, W. D. 1926 B, 1, 6.

**Machæromeryx** *tragulus* Matthew.

- Matthew, W. D. 1926 B, 1, figs. 1, 2.  
 Lower Miocene (Upper Harrison); Nebraska.

BLASTOMERYX Cope. Type *Merycodus gemmifer* Cope.

- Hay, O. P. 1902 A, 682.  
 Abel, O. 1913 B, 743.
- Abel, O. 1914 A, 172, fig. 129.  
     1919 A, 809.

- Boule and Thevenin 1920 A, 169, 170.  
 Brown, A. E. 1904 B, 81.  
 Cope, E. D. 1880 U, 157.  
 Depéret, C. 1912 A, 709.  
 Douglass, E. 1909 A, 457, 477.  
 Frick, C. 1926 C, 446.  
 Haug, E. 1911 A, 1705, 1706.  
 Loomis, F. B. 1925 A, 248.  
 1925 E, 597, figs. 11, 12.  
 1928 B, 535, fig. 5.  
 Lull, R. S. 1920 A, 93, 127.  
 Lydekker, R. 1909 C, 454.  
 Matsumoto, H. 1918 C, 76.  
 Matthew, W. D. 1902 F, 319.  
 1904 A, 101, 103, 123.  
 1907 A, 173, 176, 178, 219.  
 1908 A, 535, 536, 546, 549, 557, 562, figs. 12, 13.  
 1909 C, 120.  
 1915 A, 245, 247.  
 1915 K, 457.  
 1918 A, 217 (Cervavus).  
 1923 B, 109.  
 1924 C, 70, 193.  
 1924 E, 748.  
 1926 B, 1, 6.  
 Matthew and Granger 1924 A, 4, 6.  
 Merriam, J. C. 1911 B, 207, 215, 217, 221.  
 1917 A, 437.  
 1919 A, 451, 532.  
 Osborn, H. F. 1905 H, 222.  
 1905 I, 106.  
 1907 F, 872.  
 1909 D, 122.  
 1910 B, 607.  
 1912 G, 247, 249.  
 1918 A, 13.  
 Palacký, J. 1903 B, 312.  
 Palmer, T. S. 1904 A, 138, 922.  
 Peterson, O. A. 1912 B, 166.  
 Scharff, R. F. 1911 A, 110.  
 Scott, W. B. 1913 A, 224, 241, 414, 657.  
 Weber, M. 1904 A, 672, 682.  
 Weber and Abel 1928 A, 591, 603.  
 Zittel and Schlosser 1911 A, 489.  
 1923 A, 579, 672, 673 (Blastomeryx); 582, 679 (Cervavus).
- Blastomeryx advena** Matthew.  
*Matthew, W. D.* 1907 A, 173, 219.  
 Abel, O. 1914 A, 174, fig. 131.  
 1919 A, 810, fig. 610.  
 Boule and Thevenin 1920 A, 170.  
 Loomis, F. B. 1928 B, 535 (B. adventa).  
 Lull, R. S. 1920 A, 127.  
 Matthew, W. D. 1908 A, 540, 541, figs. 4, 6.  
 1909 C, 114.  
 1924 C, 67, 194, 196.  
 1926 B, 3.  
 O'Harra, C. C. 1910 A, 118, fig. 18.  
 1920 A, 139, 158, fig. 72.  
 Scott, W. B. 1913 A, 414, fig. 221.  
 Stromer, E. 1912 A, 201, fig. 186.  
 Weber and Abel 1928 A, 604, fig. 398.  
 Lower Miocene (Upper Harrison); Nebraska.

**Blastomeryx elegans** Matthew and Cook.

- Matthew and Cook* 1909 A, 410, fig. 23.  
 Cook, H. J. 1912 D, 45.  
 Matthew, W. D. 1918 A, 187, 218.  
 Merriam, J. C. 1917 A, 437.  
 Sinclair, W. J. 1915 A, 77.  
 Upper Miocene (Lower Snake Creek); Nebraska.

**Blastomeryx gemmifer** Cope.

- Hay, O. P. 1902 A, 682.  
 Abel, O. 1913 B, 743, fig. 64.  
 Boule and Thevenin 1920 A, 170.  
 Cook, H. J. 1912 D, 43 (This species?).  
 Douglass, E. 1903 A, 154.  
 Gidley, J. W. 1903 C, 634.  
 Hay, O. P. 1924 A, 17.  
 Lull, R. S. 1920 A, 127.  
 Matthew, W. D. 1901 B, 358, 442.  
 1902 F, 319.  
 1904 A, 103, 124, text-fig. 17.  
 1907 A, 219.  
 1908 A, 544, 545.  
 1909 C, 115.  
 1924 C, 72, 193.

- Merrill, G. P. 1907 A, 32 (Dicrocerus).  
 Montgomery, T. H. 1904 A, 57.  
 Palacký, J. 1903 B, 318.  
 Trouessart, E. L. 1905 A, 712.  
 Zittel and Schlosser 1911 A, 489, fig. 683.  
 1923 A, 579, fig. 724.  
 Upper Miocene (Pawnee Creek); Colorado,  
 Montana: (Lower Snake Creek); Nebraska:  
 Miocene; Texas.

**Blastomeryx marshi** Lull.

- Lull, R. S.* 1920 A, 125, fig. 25.  
 1922 A, 159, figs. 1, 2.  
 Matthew, W. D. 1924 C, 193, 194.  
 1926 B, 3 (Dyseomeryx).  
 Miocene or Early Pliocene; Nebraska.

**Blastomeryx medius** Matthew.

- Matthew, W. D.* 1924 C, 67, 194, 195, fig. 57.  
 Middle Miocene (Sheep Creek); Nebraska.

**Blastomeryx mollis** Merriam.

- Merriam, J. C.* 1911 B, 205, 206, 209, 214, 278, figs. 56, 58.  
 Miocene (Virgin Valley); Nevada.

**Blastomeryx olcottii** Matthew.

- Matthew, W. D.* 1908 A, 538, 539, 543, 544, 548, figs. 2, 3, 7, 11.  
 Boule and Thevenin 1920 A, 170.  
 Cook, H. J. 1912 D, 43.  
 Loomis, F. B. 1928 B, 535 (B. olcottii).  
 Lull, R. S. 1920 A, 127.  
 Matthew, W. D. 1926 B, 3.  
 O'Harra, C. C. 1910 A, 118.  
 1920 A, 158.  
 Lower Miocene (Upper Rosebud); South  
 Dakota: (Upper Harrison); Nebraska: Lower  
 Miocene; Wyoming.

**Blastomeryx primus** Matthew.

Matthew, W. D. 1908 A, 537, 540, 543, 544, 548, figs. 1, 5, 10, 11.

Abel, O. 1914 A, 173, fig. 130.

Boule and Thevenin 1920 A, 170.

Loomis, F. B. 1924 B, 3, figs. 2, 3.

1928 B, 535.

Lull, R. S. 1920 A, 127.

Matthew, W. D. 1926 B, 3.

O'Harra, C. C. 1910 A, 118.

1920 A, 158.

Weber and Abel 1928 A, 605, fig. 399.

Lower Miocene (Upper Rosebud); South Dakota.

**Blastomeryx riparius** Matthew.

Matthew, W. D. 1924 C, 67, 68, 197, fig. 58

(Dyseomeryx); 197 [B. Dyseomeryx].

Middle Miocene (Sheep Creek), Nebraska.

**Blastomeryx scotti** Matthew.

Matthew, W. D. 1924 C, 193, 195.

Scott, W. B., in Scott and Osborn 1890 B, 76, figs 7-9 (B. gemmifer).

Miocene (Valentine?); Nebraska.

**Blastomeryx sinclairi** (Matthew).

Matthew, W. D. 1918 A, 187, 218, fig. 17 (Cervavus).

1924 C, 68 (Dyseomeryx); 194 (Blastomeryx); 198 [B. (Dyseomeryx)].

Upper Miocene (Snake Creek); Nebraska.

**Blastomeryx vigoratus** Hay.

Hay, O. P. 1924 A, 16, pl. n, figs. 13-16 (Blastomeryx); 19 (Dromomeryx, *errore*).

Upper Miocene (Fleming); Texas.

**Blastomeryx wellsi** Matthew.

Matthew, W. D. 1904 A, 103, 125, fig. 19.

Boule and Thevenin 1920 A, 170.

Cook, H. J. 1912 D, 45 (This species?).

Gidley, J. W. 1904 A, 245.

Hay, O. P. 1924 A, 17.

Lull, R. S. 1920 A, 128.

Matthew, W. D. 1908 A, 545.

1909 C, 113.

1918 A, 187.

1924 C, 67.

Matthew and Cook 1909 A, 410, 411.

Merriam, J. C. 1917 A, 437 (This sp.?).

O'Harra, C. C. 1910 A, 118.

1920 A, 159.

Sinclair, W. J. 1915 A, 77 (This species?).

Trouessart, E. L. 1905 A, 712.

Weber and Abel 1928 A, 606.

Lower Pliocene (Upper Snake Creek); Nebraska.

**Blastomeryx** sp. indet.

Dumble, E. T. 1915 A, 471. Miocene (Fleming); Texas.

1920 A, 232. Neocene (Fleming); Texas.

Lull, R. S. 1920 A, 129 ("Blastomeryx").

Matthew, W. D. 1901 B, 353, 442.

1909 C, 114. Lower Miocene; Nebraska.

1915 L, 471. Miocene (Fleming); Texas.

1920 E, 232. Neocene (Fleming); Texas.

1923 A, 12 (Cervavus). Lower Pliocene (Upper Snake Creek); Nebraska.

1924 C, 67 (Dyseomeryx). Lower Pliocene (Upper Snake Creek); Nebraska.

Scott and Osborn 1890 B, 76, figs. 7-9.

**DROMOMERYX** Douglass. Type *Blastomeryx borealis*.

Douglass, E. 1909 A, 457, 461, 477.

Cook, H. J. 1922 B, 13.

Haug, E. 1911 A, 1705.

Loomis, F. B. 1928 B, 539.

Lull, R. S. 1920 A, 90.

Matsumoto, H. 1921 A, 88.

Matthew, W. D. 1915 A, 247, 251.

1918 A, 217.

1924 C, 193, 200.

1926 B, 6.

Merriam, J. C. 1911 B, 208, 215, 221.

1915 E, 233.

1915 F, 256.

1917 A, 437.

1919 A, 451, 452, 455, 524, 527, 532.

Osborn, H. F. 1910 B, 231, 239, 613.

1918 A, 16, 20, 24.

Peterson, O. A. 1912 B, 165.

Schuchert and Levene 1927 A, 337, fig.

Scott, W. B. 1913 A, 235, 417.

Weber and Abel 1928 A, 603, 606.

Zittel and Schlosser 1923 A, 532, 679.

**Dromomeryx angustidens** Hay.

Hay, O. P. 1924 A, 16, pl. ii, figs. 6, 7 (This genus?).

Upper Miocene (Fleming); Texas.

**Dromomeryx antilopinus** Scott.

Hay, O. P. 1902 A, 682 (Blastomeryx).

Douglass, E. 1909 A, 457 (Blastomeryx).

Lull, R. S. 1920 A, 95, 128.

Matthew, W. D. 1901 B, 442 (Blastomeryx).

1904 A, 104 (Palaeomeryx).

1908 A, 546 (Blastomeryx).

1909 C, 115 (Palaeomeryx).

Scott, W. B. 1913 A, 237, fig. 128.

Trouessart, E. L. 1905 A, 692 (Palaeomeryx).

Middle Miocene (Deep River); Montana.

**Dromomeryx borealis** (Cope).

Hay, O. P. 1902 A, 682 (Blastomeryx).

Dall and Harris 1892 A, 232, 288 (Blastomeryx).

Douglass, E. 1901 B, 237 (Palaeomeryx); 457 (Blastomeryx).

1903 A, 153, 155, 197 (Palaeomeryx).

1908 A, 258 (Palaeomeryx?).

1909 A, 457 (Blastomeryx); 477, pls. lix,

lxi; pl. lxii, figs. 3, 4; pl. lxiii, figs. 1, 3, 6; text-figs. 1-3 (Dromomeryx).

Gidley, J. W. 1908 B, 241, figs. 8, 9 (Palaeomeryx. This species?).

Hay, O. P. 1924 A, 16.

Lull, R. S. 1920 A, 96, 128.

Matthew, W. D. 1904 A, 104, 128, fig. 21 (Palaeomeryx).

- Matthew, W. D. 1908 A, 546 (Blastomeryx).  
1909 C, 115 (Palaeomeryx).  
1924 C, 72.  
Merriam, J. C. 1911 B, 205, 206, 214, 280, figs. 60, 62 (This species?).  
Merriam and Sinclair 1907 A, 179 (Blastomeryx); 196 (Palaeomeryx).  
Osborn, H. F. 1910 B, 296.  
Trouessart, E. L. 1905 A, 692 (Palaeomeryx).  
Upper Miocene (Lower Snake Creek); Nebraska: Miocene (Virgin Valley); Montana, Nevada.

#### **Dromomeryx madisonius** Douglass.

- Hay, O. P. 1902 A, 682 (Palaeomeryx).  
Douglass, E. 1909 A, 473, pl. lxii, figs. 5, 6.  
Lull, R. S. 1920 A, 104.  
Matthew, W. D. 1904 A, 104 (Palaeomeryx).  
1908 A, 546 (Palaeomeryx).  
Trouessart, E. L. 1905 A, 692 (Palaeomeryx).  
Miocene; Montana.

#### **Dromomeryx parvus** Cook.

- Cook, H. J. 1922 B, 13, 21, 1 fig.  
Pliocene (Snake Creek); Nebraska.

#### **Dromomeryx texanus** Hay.

- Hay, O. P. 1924 A, 15, pl. ii, figs. 8-12.  
Upper Miocene (Fleming); Texas.

#### **Dromomeryx whitfordi** Sinclair.

- Sinclair, W. J. 1915 A, 77, 90, figs. 17, 18.  
Cook, H. J. 1922 B, 13.  
Mansuy, — 1923 A, 102 (D. whitfordi).  
Matthew, W. D. 1918 A, 187, 217.  
1924 C, 72, 193  
Merriam, J. C. 1917 A, 437.  
Upper Miocene (Lower Snake Creek); Nebraska.

#### **Dromomeryx** sp. indet.

- Barbour and Cook 1917 B, 180. Pliocene (Valentine); Nebraska.  
Buwalda, J. P. 1916 A, 80. Miocene (Mojave Desert); California.  
Cook, H. J. 1922 B, 13, 27, 28, 4 figs. (This genus?). Pliocene (Snake Creek); Colorado.  
Dumble, E. T. 1920 A, 232 (This genus?). Neocene (Fleming); Texas.  
Matthew, W. D. 1915 L, 471, 472 (This genus?).  
Miocene (Fleming); Texas.  
1920 E, 232 (This genus?). Neocene (Fleming); Texas.  
Merriam, J. C. 1911 B, 214. Miocene (Virgin Valley); Nevada.  
1919 A, 524, figs. 136, 137 (This genus?).  
Miocene (Barstow); California.

#### CERVINÆ Baird.

- Baird, S. F. 1857 A, 630.  
Hay, O. P. 1902 A, 684.  
Abel, O. 1913 B, 744.  
1920 A, 437.  
Arlt, T. 1912 A, 746.  
Beddard, F. E. 1902 A, 293.  
Brooke, V. 1878 A, 889 (Plesiometacarpalia).  
Chomenko, J. 1913 A, 133.  
Elliot, D. G. 1901 A, 34.  
Gadow, H. 1902 A, 217.  
Hay, O. P. 1912 D, 610.  
1914 A, 245.

- Hay, O. P. 1927 E, 76 ("deer").  
Keuchenius, P. E. 1913 A, 449.  
Knottnerus-Meyer, T. 1907 A, 15, 97.  
Khomenko, J. 1913 A, 132.  
Lydekker 1915 D, 8.  
Miller, G. S. 1912 B, 385.  
Osborn, H. F. 1910 B, 552.  
Trouessart, E. L. 1905 A, 694.  
Weber, M. 1904 A, 668.  
Weber and Abel 1928 A, 569, 576.  
Zittel and Schlosser 1911 A, 493.

#### **ODOCOILEUS** Rafinesque. Type *O. speleus* Rafinesque = *Cervus virginianus*.

- Rafinesque, C. S. 1832 A, 1, 109.  
Hay, O. P. 1902 A, 684 (Dama).  
Allen, J. A. 1892 A (Cariacus).  
1902 A, 161 (Dama, Odocoileus).  
Beddard, F. E. 1902 A, 295 (Cariacus).  
Boule and Thevenin 1920 A, 169 (Cariacus).  
Brown, A. E. 1904 B, 83 (Mazama).  
Camerano, L. 1916 A, 1, pl. ii, fig. 2; pl. iii, figs. 1, 2.  
1916 B, 4, 8, pl. i, fig. 8; pl. ii, figs. 1, 8; pl. iii, figs. 1, 5, 12.  
Cameron, A. G. 1910 B, 154 ("new world deer").  
Cope, E. D. 1880 U, 158 (Cariacus).  
Elliot, D. G. 1901 A, 38.  
Fischer, J. B. 1829 A, 449 (Cervus).  
Foote, J. S. 1916 A, 103, pl. xi (Cariacus).  
Gill, T. 1877 A, 135 (Cariacus).  
Grant, M. 1904 B, 201.  
Gregory, W. K. 1912 F, 285.  
Hay, O. P. 1912 D, 610.  
1914 A, 245.  
1925 D, 245.  
Heilprin, A. 1887 A, 381 (Cariacus).

- Hermann, R. 1909 A, 86 (Cariacus).  
Holmes, F. S. 1870 A, 17 ("deer").  
Kampfen, P. N. 1905 A, 600 (Cariacus).  
Knottnerus-Meyer, T. 1907 A, 21, 110, fig.  
Leuthardt, F. 1891 A, 127 (Cariacus).  
Loomis, F. B. 1925 E, 597, figs. 13, 14.  
1928 B, 535.  
Lull, R. S. 1917 B, 301.  
Lydekker, R. 1898 D, xv.  
1907 B, 58 (Dorcylephas).  
1915 D, 153.  
Matthew, W. D. 1904 A, 116.  
1908 A, 546, 548, 549, 557, 558, 559.  
1915 A, 247.  
1915 K, 403.  
1917 D, 209.  
1918 A, 221.  
1926 B, 7.  
Merriam, C. H. 1892 A, 61 (Cariacus).  
Miller, G. S. 1902 A, 39.  
1912 B, 385.  
1924 C, 484.  
Nitsche, H. 1898 A, 23 (Cariacus).

Osborn, H. F. 1905 I, 110 (Cariacus).

1909 D, 131.

1910 B, 625.

Palacký, J. 1903 B, 317, 329 (Cariacus).

Palmer, T. S. 1904 A, 470, 924.

Pauli, S. 1900 A, 215, fig. 25 (Cervus).

Peterson, O. A. 1912 B, 166.

Pocock, R. I. 1910 A, 97 ("american deer").

1912 A, 774, figs. 110, 112.

Rogers, A. F. 1924 A, 544 ("deer").

Scharff, R. F. 1911 A, 108.

Solater, P. L. 1902 A, 290 (Cariacus).

Scott, W. B. 1913 A, 202, 208, 413, 686

Sellards, E. H. 1914 A, 162.

Seton, E. T. 1909 A, 68.

Spencer, J. W. 1898 A, 27 ("deer").

Taschenberg, O. 1899 A, 4515 (Cariacus).

Taylor, W. P. 1916 A, 471.

Thomas, O. 1902 B, 197.

Trouessart, E. L. 1905 A, 703.

Weber, M. 1904 A, 668 (Cariacus).

Weber and Abel 1928 A, 571.

Wright, R. R. 1883 A, 300 (Cariacus).

Zittel and Schlosser 1923 A, 583, 681.

#### ***Odocoileus columbianus* Richardson.**

Richardson, J. 1829, Fauna bor.-Amer. I, 257 (Cervus macrotis var. columbiana).

Elliot, D. G. 1901 A, 41.

Furlong, E. L. 1927 A, 148-175, text-figs. 1-15, 19-28.

Hay, O. P. 1927 D, 108.

Lydekker, R. 1915 D, 182.

Miller, G. S. 1912 B, 387.

1924 C, 484.

Sinclair, W. J. 1903 A, 711 (This species?).

1904 A, 17 (This species?).

Recent; from Alaska to southern California and Arizona: Pleistocene; California.

#### ***Odocoileus dolichopsis* (Cope).**

Hay, O. P. 1902 A, 684 (Dama).

1912 D, 615, pl. vi, figs. 2-2b.

1923 A, 492.

Trouessart, E. L. 1905 A, 704.

Pleistocene; Indiana.

#### ***Odocoileus ensifer* (Cope).**

Hay, O. P. 1902 A, 684 (Dama).

1927 D, 109 (Cariacus); 251 (Odocoileus).

McCormack, E. C. 1920 A, 16 ("virginia deer").

Matthew, W. D. 1902 F, 321 (Cariacus).

Stock, C. 1925 A, 199.

Pleistocene; Washington State.

#### ***Odocoileus hemionus* (Rafinesque).**

Rafinesque, C. S. 1817, Amer. Monthly Mag., I, 436 (Cervus).

Brown, B. 1908 A, 205.

Cuvier, G. 1925 A, 43, pl. v, fig. 35 (Cervus auritus).

Elliot, D. G. 1901 A, 42.

Freudenberg, W. 1921 A, 139 (Cervus).

1922 A, 5 (Cervus).

Haug, E. 1911 A, 1887.

Hay, O. P. 1914 A, 32.

1924 D, 170, 251.

Lydekker, R. 1907 B, 58 (Dorcelaphus).

Lydekker, R. 1915 D, 176.

Matschie, P. 1899 A, 130, 132 ("grossohr-hirsche").

Miller, G. S. 1924 C, 485.

Osborn, H. F. 1910 B, 488.

Peterson, O. A. 1926 A, 257.

Pocock, R. I. 1912 A, 783.

Scharff, R. F. 1911 A, 107.

Scott, W. B. 1913 A, 167, fig. 83.

Seton, E. T. 1909 A, 114, pl. vi; text-figs. 15, 16, 37-55, map 6.

Trouessart, E. L. 1905 A, 704.

Recent; western North America: Pleistocene; Pennsylvania?, Arkansas, Mexico.

#### ***Odocoileus laevicornis* (Cope).**

Hay, O. P. 1902 A, 684 (Dama).

Baker, F. C. 1920 A, 213, 208, 395.

Hay, O. P. 1923 A, 312, 316.

Peterson, O. A. 1926 A, 257.

Rhoads, S. N. 1903 A, 242.

Schlosser, M. 1899 M, 362 (Cariacus).

1902 H, 143 (Cariacus).

Pleistocene (Port Kennedy); Pennsylvania.

#### ***Odocoileus osceola* (Bangs).**

Bangs, O. 1896 B, 26 (Cariacus).

Allen, J. A. 1901 E, 451, fig. 1 (O. virginianus osceola).

Baker, F. C. 1920 A, 374.

Barbour and Allen 1922 A, 71 (O. virginianus osceola).

Elliot, D. G. 1901 A, 40 (O. americanus osceola).

Hay, O. P. 1916 C, 43, pl. viii, figs. 3-5.

1917 A, 72.

1917 E, 45, 50 (This species?).

1918 B, 4.

1923 A, 492.

Hrdlička, A. 1918 A, 26.

Miller, G. S. 1912 B, 389.

1925 C, 487.

Scott, W. B. 1913 A, 179, fig. 100 (O. virginianus osceola).

Sellards, E. H. 1916 C, 130 (O. osceola); 139, 158 (O. sp.); 149, pl. xxv, fig. 3; pl. xxvii, figs. 1, 2 ("Odocoileus").

Simpson, G. G. 1928 H, 2.

Trouessart, E. L. 1905 A, 704.

Walker, S. F. 1883 A, 423 ("deer").

Recent; Florida: Pleistocene (Early); Florida.

#### ***Odocoileus sellardsiae* Hay.**

Hay, O. P. 1917 E, 45, 50, pl. iii, fig. 4.

1918 D, 461 ("deer").

1923 A, 492.

1927 D, 273.

Loomis, F. B. 1924 C, 503, 506 (O. sellardsi).

Sellards, E. H. 1916 C, 130, 139, 158 (O. osceola, in part).

1916 F, 9 (O. sp.).

1917 D, 142 ("deer").

Pleistocene; Florida.

#### ***Odocoileus virginianus* (Zimmermann).**

Hay, O. P. 1902 A, 684 (Dama).

Agassiz, L. 1859 B, 186 ("deer").

Allen, J. A. 1905 A, 666 ("virginia deer").

- Baker, F. C. 1920 A, 465.  
 Bangs, O. 1896 B, 25 (*Cariacus americanus*).  
 Barbour and Allen 1922 A, 65.  
 Black, D. 1915 A, 348, fig. 12 (*Cervus*).  
 Bolton, H. C. 1888 A, 123 ("deer").  
 Brown, A. E. 1904 B, 83 (*Mazama*).  
 Brown, B. 1908 A, 205.  
 Calvin, J. D. 1911 A, 211 ("deer").  
 Carman, J. E. 1917 A, 409 (*This species?*).  
 Caton, J. D. 1877 A, figures.  
 Claypole, E. W. 1897 C, 53 ("deer").  
 Coleman, A. P. 1913 B, 18, 29 ("deer." *This species?*).  
 Conrad, T. A. 1835 A, 108 ("deer").  
 1838 A, x ("deer").  
 Cope, E. D. 1867 F, 138 ("deer").  
 1895 G, 596 (*Cervus*).  
 Cuvier, G. 1825 A, iv, 33, pl. v (*Cervus*).  
 Edwards, J. J. 1902 A, 248 (*Cervus*. Fossil?).  
 Elliot, D. G. 1901 A, 39, pl. xv (*O. americanus*).  
 Elrod and Benedict 1892 A, 241.  
 Fischer, J. B. 1829 A, 449 (*Cervus*).  
 Foster, J. W. 1869 A, 254 (*Cervus*).  
 Frech, F. 1907 A, 815.  
 Frech and Gemnitz 1908 A, 36 (*Cervus*).  
 Gidley, J. W. 1903 B, 474.  
 Giebel, C. G. 1883 A, 139 (*Cervus*).  
 Grant, M. 1904 B, 201.  
 Hahn, W. L. 1909 A, 457.  
 Hall, J. 1843 A, 364, 366, 367 ("deer").  
 Haug, E. 1911 A, 1886, 1887.  
 Hay, O. P. 1912 D, 611, pl. vi, fig. 1; text-fig. 44.  
 1914 A, 32, 38, 246, 251, pl. xxxi, fig. 5; text-fig. 89.  
 1917 E, 51.  
 1918 B, 18.  
 1920 B, 90, 103, 104, 124.  
 1923 A, 492.  
 1924 D, 381.  
 1927 D, 310.  
 1928 C, 428.  
 Higley, W. K. 1891 A, xiv ("deer").  
 Hildreth, S. P. 1835 A, 148 ("deer." *This species?*).  
 Hilgard, E. W. 1872 A, 14 ("deer." *This species?*).  
 Holland, W. J. 1908 A, 231 (*Cariacus*).  
 1912 B, 750 (*Cariacus*).  
 Holmes, F. S. 1859 A, 184 ("deer").  
 Holmes, W. H. 1903 A, 244 ("deer").  
 Hrdlicka, A. 1903 A, 359, 367, 376, fig. 36 ("virginia deer").  
 Ingebrigtson, O. 1924 A, 112.  
 Knottnerus-Meyer, T. 1907 A, 22.  
 Leidy, J. 1889 H, 19 (*Cervus*).  
 Leverett, F. 1889 A, 189 ("deer").  
 1897 A, 76, 77 ("deer").  
 Lull, R. S. 1920 A, 129 (*O. americana*).  
 Lydekker, R. 1907 B, 58 (*Dorcopelaphus*).  
 1915 D, 155, fig. 29.  
 Manigault, G. E. 1887 A, 130 ("deer").  
 Matschie, P. 1899 A, 130 ("virginier-hirsch").  
 Matson and Clapp 1909 A, 136 (*Cervus*).  
 Mercer, H. C. 1894 A, 98 ("deer").  
 Merriam, J. C. 1912 C, 221 (*Cervus*).  
 Miller, B. L. 1912 A, 5 (*Cariacus*).  
 Miller, G. S. 1902 A, 39 (*O. americanus*).  
 1912 B, 386 (*O. americanus*).  
 1924 C, 488.  
 Miller and Stephenson 1912 A, 50, 55 ("deer").  
 Nitsche, H. 1898 A, 21, pl. v, figs. 1-3 (*Cariacus*).  
 Osborn, H. F. 1910 B, 348, 368 ("Odocoileus");  
 438 ("white-tailed deer"); 477, 478, 488 (*O. virginianus*).  
 Owen, D. D. 1856 A, 8 ("deer").  
 Palacký, J. 1903 B, 329 (*Cariacus*).  
 Peterson, O. A. 1926 A, 257.  
 Rafinesque, C. S. 1832 A, 109 (*O. speleus*).  
 Rhoads, S. N. 1903 A, 241 (*O. americanus*).  
 Scharff, R. F. 1911 A, 396.  
 Schmidt, E. 1872 A, 251 (*Cervus*).  
 Solater, P. L. 1902 A, 290 (*Cervus*).  
 Scott, W. B. 1913 A, 166, 412, fig. 81.  
 Sellards, E. H. 1915 D, 77, 80, 81 (*O. virginianus?*).  
 Seton, E. T. 1906 E, 321-341, figs. (*O. americanus*).  
 1909 A, 68, pl. v, text-figs. 15-37, map 5.  
 Shimek, B. 1902 A, 285 (*Cervus*).  
 Smallwood, W. M. 1903 A, 26 ("virginia deer").  
 Smith, B. 1914 B, 65 (*O. americanus*).  
 Spencer, J. W. 1895 A, 137 (*Cervus*).  
 Stephenson, L. W. 1912 B, 268 ("deer").  
 Sternberg, C. S. 1903 A, 512 ("deer").  
 Taschenberg, O. 1899 A, 4515 (*Cariacus*).  
 Thomas, O. 1911 A, 585.  
 Trouessart, E. L. 1905 A, 704.  
 Volk, E. 1911 A, 83 ("deer").  
 Worthen, A. H. 1873 A, 308 ("deer").  
 1890 A, 23 ("deer").  
 Wright, R. R. 1883 A, 301 (*Cariacus*).  
 Wyman, J. 1846 B, 391 ("deer").  
 Recent; eastern North America, west to the Great Plains: Pleistocene; New York, New Jersey, Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin, Maryland, Virginia, North Carolina, South Carolina, Florida, Mississippi, Tennessee, Kentucky, Louisiana, Texas?, Oklahoma, Missouri, Kansas, Iowa.
- Odocoileus whitneyi** (Allen).  
 Hay, O. P. 1902 A, 684 (*Dama*).  
 Baker, F. C. 1920 A, 354, 359, 395.  
 Freudenberg, W. 1910 A, 23 (*O. whitneyi*).  
 Hay, O. P. 1914 A, 38, 250.  
 1923 A, 230.  
 1924 D, 172.  
 Trouessart, E. L. 1905 A, 704.  
 Pleistocene; Illinois, Iowa, Wisconsin.
- Odocoileus sp. indet.**  
 Abel, O. 1926 B, 238. Pleistocene (La Brea); California.  
 Barbour and Cook 1917 B, 180. Pliocene (Valentine); Nebraska.  
 Bryan, K. 1923 A, 31. Pleistocene; Arizona.  
 Cook, H. J. 1912 D, 45. Pleistocene (Equus beds); Nebraska.  
 1926 D, 335 (*This genus?*). Pleistocene; Colorado, Texas.  
 Cope, E. D. 1867 F, 138 ("deer"). Pleistocene; Maryland.

- Dall and Harris 1892 A, 79 ("deer").  
 Diller, J. S. 1911 A, 27. Pleistocene; California.  
 Eaton, G. F. 1923 A, 237, fig. 9. Pleistocene; Mexico.  
 Frick, C. 1921 A, 296, figs 5-12, 14 (This genus?); Pleistocene (Bautista); California: 322, figs. 33, 34 ("cervid," This genus?); Pliocene (San Timoteo); California: 378, figs. 95, 96 ("cervid," This genus?); Pliocene (Eden); California.  
 Furlong, E. L. 1904 A, 54, 55. Pleistocene; California.  
 1906 A, 243, 245. Pleistocene; California.  
 Gidley, J. W. 1913, in Matson and Sanford 1913 A, 143 (Cervus sp.).  
 1920 B, 283 ("deer"). Pleistocene (Middle); Maryland.  
 1923 B, 31. Pleistocene; Arizona.  
 1923 D, 75. Pleistocene (Gila conglomerate); Arizona.  
 1927 E, 274. Pleistocene; Florida.  
 Harkness, H. W. 1882 A, 5 ("deer"). Pleistocene; Nevada.  
 Hay, O. P. 1916 E, 53. Pleistocene; Florida.  
 1919 C, 106. Pleistocene.  
 1921 A, 610. Pleistocene; Washington.  
 1924 D, 381. Pleistocene; Iowa, Missouri, Oklahoma, Texas.  
 1926 C, 2. Pleistocene (Early); Texas.  
 1927 D, 301, 304, 310. Pleistocene; Arizona, Illinois, Michigan, California, Iowa, Nevada, Texas, Washington.  
 Holmes, F. S. 1860 A, iii, vi, vii ("deer"). Pleistocene; South Carolina.  
 Holmes, W. H. 1925 A, 257 ("deer"). Pleistocene; Florida.  
 Le Conte, J. 1882 B, 9 ("deer"). Pleistocene (Carson); Nevada.  
 Lull, R. S. 1921 B, 163. Pleistocene; Texas.  
 McCornack, E. C. 1920 A, 23. Pleistocene (caves); California.  
 Marcy, O. 1920, in Baker, F. C. 1920 A, 4 ("deer"). Pleistocene (Late Wisconsin); Illinois.  
 Merriam, J. C. 1915 E, 229, figs. 46-48 (Cervus or Odocoileus). Pleistocene? (Etchegoin); California.  
 1917 A, 425 (This genus?) Pleistocene (Etchegoin); California. 439. Pleistocene? (Alachua); Florida.  
 Merriam and Stock 1925 A, 10, 11. Pleistocene (Potter Creek); California.  
 Miller, L. H. 1912 A, 70, 73.  
 Osborn, H. F. 1925 D, 531. Pleistocene (La Brea); California.  
 Rhoads, S. N. 1903 A, 241. Pleistocene (Port Kennedy); Pennsylvania.  
 Ross, C. P. 1923 A, 75. Pleistocene (Gila conglomerate); Arizona.  
 Sellards, E. H. 1916 B, 103. Pleistocene; Florida.  
 1916 D, 616. Pleistocene; Florida.  
 1916 E, 16, 17. Pleistocene; Florida.  
 Shuler, E. W. 1923 A, 333 ("deer").  
 Stock, C. 1925 A, 30, 113, 119. Pleistocene (La Brea, Upper San Pedro, Bautista and Caves); California.  
 1927 A, 156. Pleistocene; California.  
 Tuomey, M. 1848 A, 177, 180 ("Cervus"). Pleistocene; South Carolina.  
 Whitney, J. D. 1879 A, 250 ("Cervus"). Pleistocene; California.

## BLASTOCERUS Wagner. Type not determined.

- Wagner, J. A. 1844, Suppl. Schreber's Säugethere, iv, 366-373, tabs. cccxviii, ccli.  
 Gray, J. E. 1850, Proc. Zool. Soc. Lond., 237.  
 Palmer, T. S. 1904 A, 138.  
 Zittel and Schlosser 1911 A, 494 (Blastoceras) 1923 A, 583.

## Blastocerus extraneus Simpson.

- Simpson, G. G. 1928 H, 2, 14, fig. 10. Pleistocene (Early); Florida.

RANGIFER H. Smith. Type *Cervus tarandus* Linnaeus.

- Hay, O. P. 1902 A, 686.  
 Allen, J. A. 1892 A.  
 1900 B, 1.  
 1903 A.  
 Arldt, T. 1907 D, 317-319.  
 Baker, F. C. 1920 A, 265, 283, 395.  
 Beddard, F. E. 1902 A, 298.  
 Behlen, H. 1906 A, 190 (Tarandus).  
 Boule, M. 1923 A, 500 ("reindeer").  
 Brandt and Woldrich 1887 A, 106.  
 Brown, A. E. 1904 B, 77.  
 Camerano, L. 1916 B, 1, pl. i, figs. 1-7, 10; pl. ii, figs. 1, 2.  
 Cameron, A. G. 1910 B, 154, 215.  
 Conwentz 1900 A, 432 ("rentiere").  
 Cuvier, G. 1825 A, iv, 57-64, pls. iv, v.  
 Depéret, C. 1912 A, 709 ("renne").  
 Eichwald, E. 1835 A, 692 (Cervus tarandus).  
 Elliot, D. G. 1901 A, 35.  
 Foote, J. S. 1916 A, 106, pl. xi.  
 Foster, J. W. 1873 A, 88 (Cervus).  
 Frech, F. 1906 A, 479 ("renntiere").  
 1907 A, 315 ("ren").  
 Gaudry, A. 1875 D, 1282 ("rennes").  
 Geike, J. 1914 A, 326 ("reindeer").  
 Gervais, P. 1852 A, 81 (Cervus).  
 1859 A, 144 ("tarandus").  
 Gidley, J. W. 1912 C, 20.  
 1913 D, 2.  
 Giebel, C. G. 1883 A ("renn").  
 Grant, M. 1903 A, 175.  
 1904 B, 200.  
 Hasse and Schwarck 1870 A, 132, figs. 43-45 (Cervus).  
 Hay, O. P. 1900 G, 893.  
 1910 D, 372.  
 1912 D, 630.  
 1914 A, 273.  
 1928 B, 237.  
 Heilprin, A. 1887 A, 381, 382.  
 Hollister, N. 1912 A, 3.  
 Hrdlička, A. 1903 A, 375.



- Hrdlička, A. 1920 A, 463.  
 Hue, E. 1907 A, pls. lvii, lviii, lxi, lxxviii, lxxviii, cii, cxvi, cxli, clv, clxviii, clxxxi, clxxxii.  
 Hull, E. 1914 A, 612 ("reindeer").  
 Jacobi, A. 1921 A, 209.  
 Kampfen, P. N. 1905 A, 601, fig. 73.  
 Knottnerus-Meyer, T. 1907 A, 24, 98, 111, pl. i, fig. 12.  
 LeDamany, P. 1906 B, 164 ("rennes").  
 Leunis and Ludwig 1883 A, 260.  
 Lönnberg, E. 1909 B, 1.  
 Loomis, F. B. 1925 E, 597, figs. 13, 14.  
 1928 B, 534.  
 Lull, R. S. 1904 C, 8.  
 Lydekker, R. 1903 A, 360.  
 1907 B, 51.  
 1915 D, 238.  
 Major, C. J. F. 1880 A, 22 (Tarandus).  
 Matschie, P. 1896 A, 250, 252 ("rentier").  
 1899 A, 132.  
 1901 A, 308, 315.  
 Matthew, W. D. 1908 A, 546, 549, 557.  
 1915 A, 245, 247.  
 Merriam, C. H. 1892 A, 62.  
 Miller, G. S. 1912 A, 979.  
 1912 B, 391.  
 1924 C, 491.  
 Moreau, L. J. 1900 A, 115 ("renne").  
 Nehring, A. 1880 A (Cervus).  
 Nitsche, H. 1898 A, 38.  
 Osborn, H. F. 1909 D, 86, 87.  
 1910 B, 629.  
 1912 A, 94.  
 1912 B, 261, fig. 4.  
 1912 G, 251.  
 1912 L, 187, fig. 4.  
 1916 B, 543, 544.  
 1926 C, 340.  
 Owen, R. 1866 B, 464, 468 ("reindeer").  
 1868 A, 871 (Cervus).  
 Palmer, T. S. 1904 A, 601, 925.  
 Pander and Alton 1823 A, 7, pl. iv (Cervus).  
 Pocock, R. I. 1910 A, 97 ("reindeer").  
 1910 B, 199 ("reindeer").  
 1912 A, 774.  
 Rhumbler, L. 1913 A, 584.  
 Romer, F. 1907 A, 66 ("rentier").  
 Rörig, A. 1901 A, 56.  
 Scharff, R. F. 1895 A, 454.  
 1907 A, 110, 124 ("reindeer").  
 1911 A, 3, 35, 80, 154, 155.  
 Scott, W. B. 1913 A, 208, 689.  
 1917 A, 132 ("caribou").  
 Seton, E. T. 1906 C, 426-443, figs. ("caribou").  
 1909 A, 187, pls. x-xii; text-figs. 80-92, map 8.  
 Stejneger, L. 1901 B, 112.  
 Taschenberg, O. 1899 A, 4687.  
 Toldt, C. 1905 A, 331 ("renntier").  
 Trouessart, E. L. 1905 A, 700.  
 1906 A, 66.  
 Van Bemmelen, J. F. 1918 A, 571 ("reindeer").  
 Weber, M. 1904 A, 669.  
 Williston, S. W. 1910 G, 595 ("caribou").  
 Winge, H. 1906 A, 113.  
 Wright, G. F. 1911 B, 675 ("caribou").  
 Wright, R. R. 1883 A, 305.  
 Zittel and Schlosser 1911 A, 494.  
 1923 A, 583, 681.
- Rangifer arcticus Richardson.**  
*Richardson, J.* 1829, Fauna Bor.-Amer., i, 241 (*Cervus tarandus* var. *arcticus*).  
*Allen, G. M.* 1914 A, 103, figs. 1-3 (R. a. *caboti*).  
*Bell, R.* 1898 A, 374 ("reindeer").  
*Gervais, P.* 1859 A, 365 (*Cervus tarandus*).  
*Gilmore, C. W.* 1908 A, 36 (R. arcticus?).  
*Grant, M.* 1903 A, 176, 190, figs.  
*Hay, O. P.* 1914 A, 273, text-fig. 94  
*Lönnberg, E.* 1909 B, 10.  
*Miller, G. S.* 1912 B, 391.  
 1924 C, 491.  
*Quackenbush, L. S.* 1909 A, 36, 127.  
*Richardson, J.* 1854 A, 98 ("reindeer." This species?).  
 Recent and Pleistocene; Alaska, Yukon, Mackenzie.
- Rangifer caribou (Gmelin).**  
*Gmelin, J. F.* 1788, Syst. Nat., i, 177 (Cervus).  
*Hay, O. P.* 1902 A, 686.  
*Abbott, C. C.* 1881 A, 484.  
*Allen, J. A.* 1900 B, 9.  
*Baker, E. C.* 1920 A, 470.  
*Brown, A. E.* 1904 B, 86.  
*Caton, J. D.* 1877 A, figs.  
*Coleman, A. P.* 1899 A, 195 ("caribou").  
 1901 A, 298 ("caribou").  
 1904 A, 353, 366 ("caribou").  
 1913 B, 18 ("caribou." This species?).  
*Cuvier, G.* 1825 A, iv, 63, pl. iv ("caribou").  
*Dall, W. H.* 1896 A, 854.  
*Dall and Harris* 1892 A, 264.  
*Dawson, J. W.* 1894 D, 4.  
*Dietrich, W. O.* 1910 A, 335.  
*Elliot, D. G.* 1901 A, 35, pl. xiii.  
*Frech and Gemitz* 1903 A, 36 (R. caribou).  
*Goddard, P. E.* 1927 A, 68 ("caribou").  
*Grant, M.* 1903 A, 176, 190, figs.  
*Hartnagel and Bishop* 1921 A, 90 (R. arcticus. This species?).  
*Haug, E.* 1911 A, 1873.  
*Hay, O. P.* 1912 D, 630.  
 1923 A, 494.  
 1927 D, 282.  
*Hull, E.* 1908 A, 154 ("woodland caribou").  
*Hussakof, L.* 1916 B, 689 (This species?).  
*Lambe, L. M.* 1912 B, 349.  
*Lewis, H. C.* 1881 A, 544 ("reindeer").  
 1883 B, 366, 374 ("reindeer").  
*Lobley, J. L.* 1908 A, 195.  
*Lönnberg, E.* 1909 B, 10 ("barren ground caribou").  
*Loomis and Young* 1912 A, 25.  
*Lydekker, R.* 1915 D, 246, fig. 42 (R. tarandus caribou).  
*Mercer, H. C.* 1894 A, 98.  
 1894 C ("reindeer").  
*Miller, G. S.* 1912 B, 392.  
 1924 C, 491.  
*Mitchell, S. L.* 1826 A, 26 ("reindeer").  
*Norton, A. H.* 1924 A, 132 ("caribou")

- Obalski, T. 1904 A, 216 ("renne").  
 Osborn, H. F. 1910 B, 440, 489.  
 Perkins, G. H. 1910 B, 7.  
 Putnam, F. W. 1884 B, 372 ("antler").  
 Rhoads, S. N. 1903 A, 241.  
 Scharff, A. F. 1911 A, 3, 4.  
 Scott, W. B. 1913 A, 157, 208, 412, fig. 57.  
 Shaler, N. S. 1877 A, 197 ("caribou").  
 Trouessart, E. L. 1905 A, 701.  
 Wilson, T. 1901 A, 333 (*Cervus tarandus*. This species?).  
 Woodworth, J. B. 1905 A, 187 ("reindeer").  
 Wright, G. F. 1911 A, 282 ("caribou").  
 1911 C, 42 ("caribou").  
 Recent; Eastern Canada: Pleistocene; Connecticut, Vermont, New York, New Jersey, Pennsylvania, Ontario, Kentucky.

### *Rangifer grœnlandicus* Gmelin.

- Gmelin, J. F. 1788, Syst. Nat., 1, 177.  
 Allen, J. A. 1900 B, 9, figs. 1, 10, 13, 14.  
 Fielden, H. W. 1877 A, 488 (*Cervus tarandus*).  
 Fielden and Derance 1878 A, 566 (*Cervus tarandus*).  
 Grant, M. 1903 A, 176, 185, figs.  
 Hay, O. P. 1909 G, 893 (*R. tarandus*. This species?).  
 1912 D, 631, text-fig. 48.  
 1923 A, 246 (*R. grœnlandicus*, *R. tarandus*).  
 Lambe, L. M. 1912 B, 349 (This species?).  
 Lydekker, R. 1915 D, 256 (*R. tarandus grœnlandicus*).  
 Muller, G. S. 1924 C, 492.  
 Rhoads, S. N. 1903 A, 241.  
 Trouessart, E. L. 1905 A, 701.  
 Recent; Greenland: Pleistocene; Grinnell Land or northern Greenland.

### CERVALCES Scott. Type *Cervus americanus* Harlan = *Cervalces scotti* Lydekker.

- Hay, O. P. 1902 A, 685.  
 Baker, F. C. 1920 A, 195, 333.  
 Brown, A. E. 1904 B, 88.  
 Calvin, S. 1909 A, 137.  
 Dietrich, W. D. 1910 A, 326 (*Alces latifrons*).  
 Frech and Geinitz 1903 A, 36.  
 Gidley, J. W. 1913 D, 2 ("cervalces").  
 Grant, M. 1904 A, 387.  
 Hay, O. P. 1912 D, 623.  
 1914 A, 261.  
 1918 B, 10.  
 1919 A, 311.  
 1919 B, 379.  
 1923 A, 481.  
 Heilprin, A. 1887 A, 382.  
 Holland, W. J. 1912 B, 750.  
 Matthew, W. D. 1915 K, 410.  
 Osborn, H. F. 1910 B, 449, 471, 492, 493, 553.  
 Palmer, T. S. 1904 A, 172, 922.  
 Reichenau, W. 1900 A, 56 (*Alces latifrons*).  
 Scharff, R. F. 1911 A, 32.  
 Scott, W. B. 1913 A, 208, 413.  
 Stremme, H. 1911 A, 89.

### *Rangifer muscatinensis* Leidy.

- Leidy, J. 1879 A, 32.  
 Hay, O. P. 1902 A, 686 (*R. caribou*, part).  
 Baker, F. C. 1920 A, 470.  
 Calvin, S. 1897 A, 19 ("reindeer").  
 Hay, O. P. 1914 A, 34, 278, pl. xxxii, figs. 4, 5; pl. xxxiii, figs. 1-4.  
 1918 B, 20.  
 1920 B, 113 (This species?).  
 1923 A, 247, 339.  
 1923 C, 429.  
 Keyes, C. R. 1889 A, 121 (*Cervus*).  
 Leighton, M. M. 1921 A, 513 (This species?).  
 Leverett, F. 1899 A, 166 ("deer").  
 McGee, W. J. 1887 A, 218 (*R. caribou*, *Cervus muscatinensis*).  
 1891 A, 471 (*R. caribou*, *Cervus muscatinensis*).  
 Tilton, J. L. 1915 A, 236.  
 dden, J. A. 1899 A, 360 ("caribou").  
 1901 B, 110 ("deer").  
 Winchell, N. H. 1907 A, 151 ("reindeer").  
 Witter, F. M. 1880 A, 16 (*R. caribou*).  
 1890 A, 45\* (*R. caribou*).  
 1892 A, 67 ("reindeer").  
 1892 B, 276 ("reindeer").  
 Pleistocene; Iowa, Illinois?

### *Rangifer* sp. indet.

- Ferguson, H. G. 1917 A, 182. Pleistocene; Nevada (This genus?).  
 Gidley, J. W. 1917 C, 182. Pleistocene; Nevada (This genus?).  
 1924 A, 69 (This genus?). Pleistocene (early); Nevada.  
 Hay, O. P. 1927 D, 311 (This genus?). Pleistocene; Nevada, Utah.  
 King, C. 1878 A, 494 ("reindeer"). Pleistocene (Lake Bonneville); Utah.  
 Koch, A. 1840 A, 3 ("antediluvian reindeer" This genus?). Pleistocene; Missouri.  
 Tilton, J. L. 1910 A, 950. Pleistocene; Iowa.

- Trouessart, E. L. 1905 A, 700.  
 Zittel and Schlosser 1923 A, 593, 680, 681.

### *Cervalces borealis* Bensley.

- Bensley, B. A. 1913 A, 1, fig.  
 Baker, F. C. 1920 A, 456.  
 Coleman, A. P. 1913 A, 72.  
 1913 B, 29.  
 1914 A, 448 ("Cervalces").  
 Hartnagel and Bishop 1921 A, 68.  
 Hay, O. P. 1914 A, 263, 269.  
 1923 A, 226.  
 Pleistocene (Middle); Toronto, Ontario.

### *Cervalces roosevelti* Hay.

- Hay, O. P. 1913 A, 5, text-fig. 1.  
 Baker, F. C. 1920 A, 259, 283, 395.  
 Bensley, B. A. 1913 A, 1.  
 Calvin, S. 1909 A, 137 (*Cervalces*? This species?).  
 1909 B, 350, pl. xxii, fig. 3 (*C. scotti*. This species?).  
 Hay, O. P. 1914 A, 34, 267, pl. xxxii, figs. 1, 2.

- Hay, O. P. 1920 B, 111, 124, pl. vi, figs. 1, 2, 5-8 (This species?).  
 1923 A, 338, 339.  
 1928 C, 429.  
 Leighton, M. M. 1921 A, 513.  
 Shmuck, B. 1909 A, 405 ("Cervalces." This species?).  
 1910 A, 138 ("Cervalces." This species?).  
 1911 A, 316 ("Cervalces." This species?).  
 Pleistocene; Iowa, Illinois?

### **Cervalces scotti** Lydekker.

- Lydekker, R. 1898 A, 60, fig. 14 (Alces).  
 Hay, O. P. 1902 A, 685 (C. americanus).  
 Abel, O. 1914 A, 177 (C. americanus).  
 Baker, F. C. 1920 A, 456.  
 Bensley, B. A. 1913 A, 2.  
 Cameron, A. G. 1910 B, 215 (Cervalces).  
 Cooper, Smith and Dekay 1831 A, 371 ("Cervus").  
 Foster, J. W. 1873 A, 88 (Cervus americanus).  
 Godman, J. D. 1880 A, II, 265 ("Wistar's fossil elk").  
 Haug, E. 1911 A, 1887 (C. americanus).  
 Hay, O. P. 1910 D, 371 (C. americanus).  
 1912 B, 13.  
 1912 D, 623, pl. vii; text-fig. 46.  
 1914 A, 231, text-figs. 91, 92.  
 1923 A, 431.

- Lucas, F. A. 1902 B, 247 ("Cervalces").  
 Osborn, H. F. 1904 F, 20, 46, fig. 6 (C. americanus).  
 1910 B, 449, 492, 493, fig. 217 ("Cervalces").  
 1920 A, 244, fig. ("Cervalces").  
 Palacký, J. 1903 B, 326 (C. americanus).  
 Peterson, O. A. 1917 A, 473, fig. 6 ("Cervalces?").  
 1926 A, 257 (C. americanus).  
 Rhoads, S. N. 1903 A, 240.  
 Rörig, A. 1901 A, 66 (C. americanus).  
 Schuchert, C. 1915 A, 958.  
 Schuchert and Levene 1927 A, 339 ("stag-moose").  
 Scott, W. B. 1913 A, 195 (fig. 113); 208, 209 (fig. 117).  
 Trouessart, E. L. 1905 A, 700 (C. americanus).  
 Veatch, A. C. 1906 A, 51 ("large elk." This species?).  
 Williston, S. W. 1897 I, 303, pl. xlvii (C. americanus. This species?).  
 Pleistocene (Late); Kentucky, New Jersey.

### **Cervalces** sp. indet.

- Hay, O. P. 1923 A, 431. Pleistocene; Illinois, Pennsylvania.  
 1924 D, 262. Pleistocene; Missouri, Virginia.

### ALCES Gray. Type *Cervus alces* Linnæus.

- Gray, J. E. 1821 A, 307.  
 Hay, O. P. 1902 A, 685.  
 Abel, O. 1910 B (186), ("elch").  
 1912 F, 238, fig. 169 (Alces).  
 Aichel, O. 1917 A, 106, figs. 5, 6 (Cervus).  
 Allen, J. A. 1892 A.  
 1902 A, 159 (Paralces).  
 1903 A (Paralces).  
 Beddard, F. E. 1902 A, 297.  
 Behlen, H. 1906 A, 190.  
 Beyer, H. 1908 A, 81 ("elch").  
 Boas, J. E. V. 1884 B, 395.  
 Bojanus, L. H. 1824 A, 272, pl. xxii, figs. 47-49.  
 Botzard, E. 1904 A, 594 (Cervus).  
 Brauer, A. 1914 A, 282.  
 Brown, A. E. 1904 B, 87.  
 Cameron, A. G. 1910 B, 154, 215.  
 Caton, J. D. 1877 A.  
 Dawkins, W. B. 1887 A, 1, pl. i.  
 Diener, C. 1912 A, 218.  
 Dietrich, W. O. 1910 A, 318 (Alce).  
 Elliot, D. G. 1901 A, 37.  
 Elwes, H. J. 1903 A, 133, figs. 18-26.  
 Fischer, J. B. 1829 A, 441 (Cervus).  
 Foote, J. S. 1916 A, 105, pl. xi.  
 Frech, F. 1906 A, 484.  
 Geikie, J. 1914 A, 321 ("elk").  
 Gervais, P. 1852 A, 80 (Cervus).  
 1859 A, 143 (Alce).  
 Gidley, J. W. 1912 C, 19.  
 1913 D, 2 ("moose").  
 Grant, M. 1904 B, 200.  
 Hay, O. P. 1912 D, 627.  
 1914 A, 269.  
 1915 A, 245, 247.  
 1918 B, 10.

- Heilprin, A. 1887 A, 381.  
 Hrdlička, A. 1920 A, 463.  
 Hue, E. 1907 A, pls. lvi, lxii, lxxxvii, cii, cxvi, cxxix, cxl, cliii, clxvii, clxxx.  
 Ingebrigtsen, O. 1924 A, 96.  
 Jacobi, A. 1921 A, 209, 213 (Alce).  
 Knottnerus-Meyer, T. 1907 A, 23, 98, 111, fig. (Alce).  
 Le Damany, P. 1906 B, 163 ("elan").  
 Leunis and Ludwig 1883 A, 259.  
 Leuthardt, F. 1891 A, 126 (Cervus).  
 Lönnberg, E. 1903 A, 352.  
 Loomis, F. B. 1905 B, 842 ("moose").  
 1925 E, 597, 599, figs. 13, 14.  
 1928 B, 534, fig. 4.  
 Lydekker, R. 1907 B, 51.  
 1910 E, 352 ("elk").  
 1915 D, 228, fig. 35.  
 Major, C. J. F. 1880 A, 22.  
 Matschie, P. 1899 A, 132.  
 1901 A, 315.  
 Matthew, W. D. 1908 A, 546, 549, 557.  
 Merriam, C. H. 1892 A, 62 (Alce).  
 Miller, G. S. 1912 A, 976.  
 1912 B, 391.  
 1924 C, 490.  
 Moreau, L. J. 1900 A, 115 ("elan").  
 Nehring, A. 1880 A (Cervus).  
 Newton, E. T. 1891 A, 33.  
 Nitsche, H. 1898 A, 89.  
 Osborn, H. F. 1905 I, 110.  
 1909 D, 86, 87, 89.  
 1910 B, 438, 440, 449, 466, 605.  
 1912 A, 94.  
 1912 G, 251.  
 1916 B, 535.

- Osborn, H. F. 1926 C, 340.  
 Owen, R. 1845 B, 533, pl. cxxxiv, fig. 6.  
 1868 A, 759.  
 Palacký, J. 1903 B, 327, 328.  
 Pavlow, M. 1906 B, 7.  
 Pocock, R. I. 1910 A, 97 ("elk").  
 1910 B, 199 ("moose").  
 1912 A, 774 (Alce).  
 Pusch, G. G. 1840 A, 69, 78 (Cervus, Alces).  
 Reichenau, W. 1900 A, 56 (A. latifrons = Cervalces?).  
 Rönig, A. 1901 A, 56.  
 Rosenberg, A. 1873 A, 123 ("elen")  
 Scharff, R. F. 1911 A, 32, 80.  
 Scott, W. B. 1913 A, 208, 675 (Alce).  
 1917 A, 132 ("moose").  
 Seton, E. T. 1909 A, 144.  
 Taschenberg, O. 1899 A, 4459.  
 Thomas, O. 1902 B, 197.  
 Trouessart, E. L. 1905 A, 700 (Alce).  
 Upham, W. 1902 A, 149 ("moose").  
 1903 C, 22679 ("moose").  
 Wallace, A. R. 1876 A, II, 219.  
 Weber, M. 1904 A, 669.  
 Weber and Abel 1928 A, 570, 577.  
 Winge, H. 1906 A, 112.  
 Wright, R. R. 1883 A, 296.  
 Wüst, E. 1901 A, 304 [Cervus (Alces)].  
 Zittel and Schlosser 1911 A, 494.  
 1923 A, 583.

Many, perhaps most, writers have used *Alces* as a masculine noun.

### *Alces americana* (Clinton).

- Clinton, DeWitt 1822 (*Cervus americanus*). (See Miller, G. S. 1924 C, 490.)  
 Hay, O. P. 1902 A, 685.  
 Baker, F. C. 1920 A, 453.  
 Brandt and Woldrich 1887 A, 106 (*Cervus alces*).  
 Caton, J. D. 1877 A, fig.  
 Cuvier, G. 1825 A, iv, 64, pl. vi (*Cervus alces*).  
 Dall, W. H. 1896 A, 854.  
 Dall and Harris 1892 A, 264.  
 Dawson, J. W. 1894 D, 4.  
 Elliot, D. G. 1901 A, 33, pl. xiv.  
 Fischer, J. B. 1829 A, 441 (*Cervus alces*).  
 Foote, J. S. 1921 A, 10, pl. iii, fig. 22.  
 Frech and Gemitz 1902 A, 36.  
 Gaudry, A. 1903 A, 553 ("elans").  
 Goddard, P. E. 1927 A, 68 ("moose").  
 Grant, M. 1902 A, 225, 14 figs.  
 1904 A, 374, figs. ("moose").  
 1904 B, 200.  
 Hartnagel and Bishop 1921 A, 91.  
 Haug, E. 1911 A, 1873.  
 Hay, O. P. 1912 D, 628, fig. 47.  
 1914 A, 259, 270, fig. 93.  
 1920 B, 125, pl. vi, figs. 3-4.  
 1923 A, 479.  
 1927 D, 125, 282.  
 Hrdlička, A. 1903 A, 375.  
 Leidy, J. 1889 H, 19 (Alce).  
 Lohley, J. L. 1908 A, 195 (A. machlis).  
 Lydekker, R. 1915 D, 234, fig. 36 (A. alces americanus).

- Matschie, P. 1896 A, 252 ("elch").  
 Merriam, C. H. 1884 A, 40 (Alce).  
 Miller, G. S. 1912 B, 391.  
 1924 C, 490.  
 Obalski, T. 1904 A, 216 ("elan").  
 Osborn, H. F. 1910 B, 478, 490 (This species?).  
 Rhoads, S. N. 1903 A, 240.  
 Scharff, R. F. 1911 A, 32, 56, fig. 3.  
 Scott, W. B. 1913 A, 151, 158, 202, figs. 65, 202, 208, 412 (Alce).  
 Seton, E. T. 1906 B, 157-178, figs. ("moose").  
 1909 A, 144, pls. vii-ix; text-figs. 56-79, map 7.  
 Trouessart, E. L. 1905 A, 700 (Alce).  
 Wright, G. F. 1905 A, 18 ("moose").  
 1911 A, 282 ("moose").  
 1911 B, 675 ("moose").  
 1911 C, 42 ("moose").  
 Recent; Nova Scotia to Montana and northward: Pleistocene; Pennsylvania, Ohio, Illinois, Kentucky, Minnesota, Oklahoma.

### *Alces brevitrabalis* Cope.

- Hay, O. P. 1902 A, 685.  
 1914 A, 273.  
 1927 D, 251.  
 McCormack, E. C. 1920 A, 15, 16, 23 (A. sp. a).  
 Matthew, W. D. 1902 F, 321.  
 Stock, C. 1925 A, 199.  
 Pleistocene (Early); Washington State.

### *Alces runnymedensis* Hay.

- Hay, O. P. 1923 A, 363, 364.  
 1916 A, 387 ("moose").  
 1927 C, 282 ("moose").  
 1919 D, 364 ("moose").  
 Pleistocene (Early); South Carolina.

### *Alces semipalmata* Cope.

- Hay, O. P. 1902 A, 685.  
 1914 A, 273.  
 1927 D, 251.  
 McCormack, E. C. 1920 A, 15, 16, 23 (A. sp. b).  
 Matthew, W. D. 1902 F, 321.  
 Stock, C. 1925 A, 199.  
 Pleistocene (Early); Washington.

### *Alces shimeki* Hay.

- Hay, O. P. 1914 A, 26, 272, pl. xxxi, fig. 8; pl. xxxii, fig. 8.  
 Baker, F. C. 1920 A, 226, 243, 395 (A. shimekii).  
 Hay, O. P. 1923 C, 425.  
 Pleistocene (Aftonian); Iowa.

### *Alces* sp. indet.

- Bretz, J. H. 1913 A, 181 ("elk"). Pleistocene (Admiralty sediments); Washington.  
 Gilmore, C. W. 1908 A, 36 (Alce). Pleistocene; Alaska.  
 Hay, O. P. 1927 D, 109, 252, 259. Pleistocene; Washington.  
 Quackenbush, L. S. 1909 A, 127 (Alce). Pleistocene; Alaska.

CERVUS Linnæus. Type *C. elaphus* Linnæus.

- Hay, O. P. 1902 A, 684.  
 Abel, O. 1909 E (248).  
     1912 F, 239, 630, 664.  
     1913 B, 744 ("edelhirsch").  
 Alezais, — 1902 A, 586.  
 Allen, J. A. 1892 A.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1885 A, 203.  
     1889 A, 1008.  
     1904 A, 215.  
 Anderson, R. J. 1902 A, 1118.  
     1905 A, 332.  
 Antonius, H. O. 1920 A, 37 ("hirsche").  
 Beddard, F. E. 1902 A, 293.  
 Bertelli, D. 1909 A, 166.  
 Beyer, H. 1908 A, 81, 97 ("hirsch").  
 Boas, J. E. V. 1884 B, 395.  
     1917 A, 9, pl. ii, fig. 1.  
 Bonsdorff, E. J. 1871 A, 318.  
 Botezat, E. 1903 A, 105.  
     1904 A, 594.  
 Bronn, H. G. 1848 A, 277.  
     1849 A, 709, 733, seq.  
 Brown, A. E. 1904 B, 79.  
 Brown, B. 1926 A, 1, figs. 1-5.  
 Camerano, L. 1916 A, 3, pl. ii, fig. 1; pl. ii, fig. 10.  
     1916 B, 5, pl. vii.  
 Cameron, A. G. 1910 A, 51.  
     1910 B, 154, 215.  
 Carus, V. 1875 A, 154.  
 Carus and Engelmann 1861 A, 1720.  
 Cooke, C. W. 1926 A, 445 ("elk," "reindeer").  
 Dana, J. D. 1863 C, 336 ("stag").  
 Dawkins, W. B. 1873 A, 403.  
     1887 A, 11.  
 De Stefani, C. 1921 A, 256.  
 Dietrich, K. 1841 A, 87.  
 Dietrich, W. O. 1910 A, 318.  
 Döderlein, L. 1902 A, 420.  
 Doran, A. H. G. 1878 A, 429, pl. lxi.  
 Eichwald, E. 1835 A, 689.  
 Elmer, G. H. T. 1901 A, 218.  
 Elliot, D. G. 1901 A, 34.  
 Fischer, J. B. 1829 A, 440.  
 Frey, H. 1911 A, 418.  
 Geukie, J. 1914 A, 326 ("red-deer").  
 Geinitz, E. 1903 A.  
     1904 A.  
 Geoffroy St Hilaire, E. F. 1824 F, 82.  
     1832 A, 355 ("cerf").  
 Gervais, P. 1859 A, 145.  
 Gidley, J. W. 1912 C, 19.  
 Giebel, C. G. 1855 A, 66.  
 Gill, T. 1877 A, 136.  
 Grant, M. 1904 B, 201.  
 Haller, G. 1922 A.  
 Hasse and Schwarck 1870 A, 134.  
 Hay, O. P. 1909 A, 892.  
     1912 D, 616.  
     1914 A, 252.  
     1923 A, 481.  
 Hamilton, Marquis of, 1910 A, 199 ("red deer").  
 Heilprin, A. 1887 A, 380, 381.  
 Hensel, R. 1879 A, 555.  
 Hermann, R. 1907 B, 284, fig. 1.  
 Hilzheimer, M. 1922 A, 712, 749.  
 Hoernes, R. 1912 A, 663.  
 Holding, R. E. 1905 A, 1.  
 Hrdlička, A. 1903 A, 377.  
 Hue, E. 1907 A, pls. lx, lxi, lxxviii, lxxxvii, cii, cxvi, cxxx, cxl, cliii, clxvii, clxxxiii.  
 Huxley, T. H. 1856 A, 46 ("deer").  
     1870 F, 542.  
 Kampfen, P. N. 1905 A, 600.  
 Khomenko, J. 1913 A, 139.  
 Knottnerus-Meyer, T. 1907 A, 25, 93, 112, fig.  
 Köstlin, O. 1844 A.  
 Korff, K. 1914 A, 691-732, pls. xxiii, xxiv; text-figs. 1-11.  
 Leunis and Ludwig 1833 A, 262.  
 Leuthardt, F. 1891 A, 127.  
 Leydig, F. 1859 A, 705 ("hirsch").  
 Lofer, E. G. 1914 A, 438.  
 Loomis, F. B. 1905 B, 842 ("elk").  
     1925 E, 591, 597, figs. 5, 11, 12.  
 Lubosch, W. 1914 A, 425.  
 Lydekker, R. 1902 A, 375.  
     1907 B, 52.  
     1910 E, 352 ("red deer").  
     1915 D, 46.  
 Major, C. J. F. 1901 B, 241.  
 Matschie, P. 1899 A, 130, 132 ("edelhirsch").  
     1907 B, 221.  
 Matsumoto, H. 1926 C, 23.  
 Matthew, W. D. 1908 A, 549, 557, 558, 559.  
     1910 G, 155.  
     1915 A, 247.  
     1915 K, 403.  
 Merriam, C. H. 1892 A, 62.  
 Merriam, J. C. 1915 E, 193, 194, 299.  
     1917 A.  
 Meckel, J. F. 1825 A.  
 Miller, G. S. 1912 A, 962.  
     1912 B, 385.  
     1924 C, 483.  
 Nehring, A. 1880 A.  
 Newton, E. T. 1882 A, 52.  
     1891 A, 25.  
 Nitsche, H. 1898 A, 1-80, pls. i-iii; pl. v, figs. 5, 6; pl. x.  
 Nopcsa, F. 1923 H, 170 ("hirsche").  
 Osborn, H. F. 1909 D, 86, 87, 89.  
     1910 A, 214.  
     1910 B, 609.  
     1912 G, 251.  
     1916 B, 537.  
     1926 C, 340.  
 Owen, R. 1845 B, 533, pl. cxxxiv.  
     1868 A, 628.  
 Palacký, J. 1903 B, 318.  
 Palmer, T. S. 1904 A, 174, 922.  
 Pander and Alton 1823 A, 7, pl. v.  
 Pavlow, M. 1906 B, 20.  
 Perna, G. 1906 A, 131.  
 Petronievics, B. 1921 A, 108.  
 Pocock, R. I. 1910 A, 97.  
     1912 A, 778, fig. 110.  
 Rhumbler, L. 1913 A, 578.  
     1914 A, 154 ("hirsch").  
 Rörig, A. 1901 A, 56.  
     1902 A, 541.

- Scharff, R. F. 1895 A, 447.  
1911 A, 68.
- Schlosser, M. 1903 I, 113, 121, 186, 209.  
1904 C, 96.  
1924 B, 636.
- Schmidt, O. 1886 A, 162, fig. 24 ("red deer").
- Scott, W. B. 1913 A, 208, 678.
- Seeley, H. G. 1872 A, 277 ("deer").
- Serres, M. 1852 A, 121 ("cerf").
- Seton, E. T. 1909 A, 37.
- Stejneger, L. 1907 A, 462.
- Strasser, H. 1885 A, 204.
- Stromer, E. 1906 A, 217.
- Taschenberg, O. 1899 A, 4526.
- Tornier, G. 1903 A, 453, figs. 1-11.
- Trouessart, E. L. 1905 A, 694.  
1906 A, 66.
- Virchow, H. 1909 A, 419, figs. 1, 2.
- Wallace, A. R. 1876 A, I, 492.
- Weber, M. 1904 A, 670, 672.
- Weber and Abel 1928 A, 573, 577.
- Weber and Burlet 1927 A, 251, fig. 190.
- Wherry, G. 1902 A, 973 ("stag").
- Winge, H. 1906 A, 112.
- Wright, R. R. 1883 A, 291.
- Wüst, E. 1901 A, 304, 310 (Elaphus).
- Zietzschmann, O. 1917 A, 442.
- Zimmer, A. 1905 A, 2 ("hirsche").
- Zittel and Schlosser 1911 A, 494.  
1923 A, 583, 680.
- Cervus canadensis** Erxleben.
- Hay, O. P. 1902 A, 685.
- Anderson, R. J. 1902 A, 1119, fig. 2.
- Antonius, H. O. 1920 A, 40 ("wapiti").
- Baker, F. C. 1920 A, 456.
- Bell, R. 1898 A, 377.
- Blatchley, W. S. 1898 A, 90 ("elk").
- Botezat, E. 1903 A, 106 ("wapiti").
- Brandt and Woldrich 1887 A, 104 (C. elaphus).
- Brown, A. E. 1904 B, 80.
- Brown, B. 1908 A, 204.
- Caton, J. D. 1877 A, figures.
- Clark, J. M. 1888 A, 389 ("elk"?).  
1904 A, 931 ("elk").
- Coleman, A. P. 1904 A, 351 ("wapiti").  
1917 A, 359 ("wapiti").
- Cuvier, G. 1825 A, iv, 26, pl. xii.
- Dawson, J. W. 1863 F, 914.
- Dietrich, W. O. 1910 A, 334.
- Edwards, J. J. 1902 A, 248 (Cariacus americanus, This species?).
- Elliot, D. G. 1901 A, 84, pl. xii.
- Elrod and Benedict 1892 A, 240 ("elk").
- Fischer, J. B. 1829 A, 442.
- Gaudry, A. 1875 A, 1282.  
1903 A, 553 ("cerfs").
- Gidley, J. W. 1911 A, 436 ("Cervus?").
- Hahn, W. L. 1909 A, 454.
- Harlan, R. in Conrad, T. A. 1838 A, xi ("elk").  
1842 B, 143 ("elk").
- Hartnagel and Bishop 1921 A, 88.
- Haug, E. 1911 A, 1836, 1887.
- Hay, O. P. 1912 D, 616, text-fig. 45.  
1914 A, 32, 38, 252, pl. xxxi, figs. 6, 7;  
text-fig. 90.  
1918 C, 346.
- Hay, O. P. 1920 B, 92, 103, 116, 124, pl. iii, fig. 16.  
1923 A, 481.  
1927 D, 303.
- Henning, C. L. 1912 A, 602.
- Hermann, R. 1909 A, 86.
- Hitchcock, E. 1885 A, 450 ("elk").
- Holding, R. E. 1905 A, 1, fig. B ("wapiti").
- Holmes, F. S. 1859 A, 184 ("elk").  
1860 A, vi, vii ("elk").
- Holmes, W. H. 1903 A, 244 ("elk").
- Hussey, J. 1878 A, 476 ("elk." This species?).
- Lambe, L. M. 1904 C, 31, 39, 51.  
1912 A, 14.
- Lindgren and Drake 1904 A, 3 (This species?).
- Lydekker, R. 1910 B, 988, fig. 143.  
1915 D, 129, fig. 24.
- M'Caslin, D. S. 1883 A, 169 ("elk." This species?).
- Matschie, P. 1896 A, 252 ("rothirsch").  
1907 B, 221.
- Matsumoto, H. 1926 D, 36.
- Matthew, W. D. 1915 A, 245.
- Mercer, H. C. 1894 A, 98 ("elk").
- Merriam, C. H. 1884 A, 143 ("elk").
- Miller, B. L. 1912 A, 5.
- Miller, G. S. 1912 B, 385.  
1924 C, 463.
- Miller and Stephenson 1912 A, 50, 55 ("elk").
- Newberry, J. S. 1870 D, 28 ("elk." This species?).
- Nitsche, H. 1898 A, 40, pls. vi, vii.
- Obalski, T. 1904 A, 216 ("cerf à grands bois").
- Osborn, H. F. 1909 D, 90.  
1910 B, 440, 450, 478, 488, 489.
- Pavlov, M. 1906 A, 200.
- Peabody, C. 1913 A, 4 ("elk").
- Phinney, A. J. 1883 A, 181 ("elk").
- Pocock, R. I. 1912 A, 774, fig. 108.
- Putnam, F. W. 1900 B, 275 ("elk." This species?).  
1911 A, vi ("elk").
- Quackenbush, L. C. 1909 A, 127 ("Cervus").
- Rhoads, S. N. 1903 A, 241.
- Rhumblar, L. 1913 B, 90.
- Römg, A. 1901 A, 56.
- Savage, J. 1878 A, 10 ("elk").
- Scharff, R. F. 1895 A, 443.  
1911 A, 56, 67, 80.
- Schmidt, E. 1872 A, 251.
- Schmidt, O. 1886 A, 163.
- Scott, W. B. 1913 A, 151, 155 (fig. 63), 202, 208, 412.
- Seton, E. T. 1906 A, 15-33, figs.  
1909 A, 37, pls. i-iv; text-figs. 2-14, map 4.
- Shaler, N. S. 1877 A, 197 ("elk").
- Spencer, J. W. 1883 A, 308.
- Stephenson, L. W. 1912 B, 268 ("elk").
- Trouessart, E. L. 1905 A, 698.
- Volk, E. 1911 A, 111, 123-127, pls. xciii-xcv:  
text-fig. 24 (This species?).  
1912 A, 185 ("elk." This species?).
- Weber and Abel 1928 A, 568, 580, fig. 338.
- Worthen, A. H. 1873 A, 308 ("elk").  
1890 A, 23 ("elk").
- Wright, R. R. 1883 A, 292, fig. 145.
- Wyman, J. 1846 B, 391 (Elephas can.).

Zdansky, O. 1925 A, 80, pl. xv, figs. 1-5; pl. xvi, fig. 103 (C. c. fossilis).

1927 A, 16, text-fig. 6 (C. c. mongolæ).

1928 A, 106, pls. xii, xiii (C. c. mongoliæ).

Recent; Minnesota west to Vancouver Island, south to New Mexico: Pleistocene; Ontario, Vermont, New York, Pennsylvania, Michigan, Indiana, Illinois, Wisconsin, Maryland, North Carolina, South Carolina, Georgia?, Tennessee, Kentucky, Arkansas, Missouri, Kansas, Iowa, California?, Washington.

### **Cervus fortis** Cope.

Hay, O. P. 1902 A, 685.

Gilbert, G. K. 1890 A, 394.

Hay, O. P. 1927 D, 111.

Palacký, J. 1903 B, 318.

Pleistocene ("Loup Fork"); Oregon.

### **Cervus lucasi** Hay.

Hay, O. P. 1927 D, 303, pl. ix, figs. 7, 8.

Lucas, F. A. 1900 H, 99 ("Cervus, possibly new").

1904 F, 3 ("Cervus, possibly new").

Merriam, J. C. 1917 A, 432 (Sp. indet.)

Pleistocene? (Idaho); Idaho.

### **Cervus** sp. indet.

Cook, H. J. 1912 D, 45. Pliocene (Snake Creek); Nebraska.

Cope, E. D. 1883 L, 166 ("Cervus." This genus?). Pleistocene (Idaho); Idaho.

Gidley, J. W. 1915 D, 20 ("Cervus." This genus?). Florida.

1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1923 A, 481 Pleistocene; Idaho, Georgia, Tennessee.

1924 D, 375. Pleistocene; Arkansas, Iowa, Kansas, Missouri, Oklahoma.

1927 C, 282 ("reindeer"). Pleistocene; Florida.

1927 D, 302, 303. Pleistocene; California, Florida, Idaho; 274 (Taurotragus?). Pleistocene; Florida.

Merriam, J. C. 1915 E, 228, figs. 46-48 ("Cervus or Odocolleus"). Pliocene? (Etchegom); California.

1916 E, 172. Pleistocene? (Etchegom); California.

1917 A, 425 (This genus?); Pliocene (Etchegom); California.

Shimek, B. 1910 B, 316 ("Cervus") Pleistocene (Aftonian); Iowa.

Sinclair, W. J. 1915 A, 77. Pliocene (Snake Creek); Nebraska.

### SANGAMONA Hay. Type *S. fugitiva* Hay.

Hay, O. P. 1920 B, 91.

Zittel and Schlosser 1923 A, 583 (Sangonoma).

### **Sangamona fugitiva** Hay.

Hay, O. P. 1920 B, 91, 102, 111, pl. iii, figs. 14, 15, pl. v, figs. 5, 6.

1928 C, 429.

Leighton, M. M. 1921 A, 513.

Pleistocene (Middle); Tennessee, Maryland, Illinois.

### **Sangamona?** sp. indet.

Hay, O. P. 1921 A, 603, 610 (This genus?). Pleistocene; Oregon, Washington.

1927 D, 109, 259 (This genus?). Pleistocene; Oregon, Washington.

### MERYCODONTIDÆ Matthew.

Matthew, W. D. 1904 A, 102, 103.

Arlt, T. 1912 A, 746 (Merycodontinæ).

Grant, M. 1904 B, 202 ("merycodonts").

Hilzheimer, M. 1922 A, 745.

Matthew, W. D. 1907 A, 176.

1909 C, 114, 115, 118, 120 (Merycodontinæ).

Osborn, H. F. 1905 H, 222.

Osborn, H. F. 1905 I, 106.

1909 D, 129.

1910 B, 289, 295, 356, 454, 553.

Peterson, O. A. 1912 B, 164.

Scharf, R. F. 1911 A, 112 (Merycodontinæ).

Scott, W. B. 1913 A, 362, 414.

Trouessart, E. L. 1905 A, 667 (Agriocheridæ).

### MERYCOCUS Leidy. Type *M. necatus* Leidy.

Hay, O. P. 1902 A, 683.

Baird, S. F. 1876 A, 336 (Dicroceras).

Boas, J. E. V. 1914 B, 594.

Brown, A. E. 1904 B, 81 (Cosoryx).

Chandler, A. C. 1914 A, 155.

Cope, E. D. 1874 U, 148 (Cosoryx).

1880 U, 157 (Cosoryx).

Dall and Harris 1892 A, 316 (Cosoryx).

Depéret, C. 1912 A, 709.

Douglass, E. 1909 A, 477.

Frick, C. 1926 A, 20.

Furlong, E. L. 1927 A, 145-175.

Giebel, C. G. 1883 A, 135.

Haug, E. 1911 A, 1706.

Hay, O. P. 1925 D, 245.

Hilzheimer, M. 1922 A, 745.

Loomis, F. B. 1925 E, 593, 597, figs. 6, 11, 12. 1923 B, 535, fig. 6.

Lydekker, R. 1914 B, 229.

Matthew, W. D. 1902 F, 318.

1904 A, 101, 103, 105, 111, 123.

1908 A, 542.

1909 C, 120.

1915 A, 250.

1915 K, 458, fig. 32.

1918 A, 219.

1924 C, 70, 193, 200.

1924 E, 748.

1926 B, 6.

Matthew and Cook 1909 A, 411.

1909 B, 197.

Merriam, J. C. 1911 B, 207, 208, 215, 217, 221.

- Merriam, J. C. 1915 F, 256.  
1917 A.  
1919 A, 451, 452, 517, 528, 537.  
Merriam and Pack 1913 A, 128.  
Merriam, Stock, Moody 1925 A, 59.  
Osborn, H. F. 1905 I, 106.  
1909 D, 79 (Cosoryx).  
1910 B, 623.  
1918 A, 16, 24, 33 (Merycodus); 27 (Cosoryx).  
Palmer, T. S. 1904 A, 201, 922 (Cosoryx), 411, 924 (Merycodus).  
Peterson, O. A. 1912 B, 165.  
Scharff, R. F. 1911 A, 112.  
Schlosser, M. 1924 B, 639.  
Scott, W. B. 1913 A, 224, 414  
Taylor, W. P. 1911 A, 191.  
Trouessart, E. L. 1905 A, 712.  
Troxell, E. L. 1916 A, 347.  
Wallace, A. R. 1876 A, i, 138; ii, 220.  
Weber, M. 1904 A, 672 (Cosoryx).  
Zittel and Schlosser 1911 A, 496.  
1923 A, 587, 673, 679.
- Merycodus agilis (Douglass).**  
Hay, O. P. 1902 A, 683.  
Douglass, E. 1903 A, 155.  
Matthew, W. D. 1904 A, 123.  
1909 C, 118.  
Trouessart, E. L. 1905 A, 712 (Syn.? of *M. furcatus*).  
Middle Miocene (Madison Valley); Montana.
- Merycodus altidens Matthew.**  
Matthew, W. D. 1924 C, 68, 200, fig. 60 (This genus?).  
Parks, W. A. 1925 C, 432, 434.  
Lower Pliocene (Upper Snake Creek); Nebraska.
- Merycodus coronatus Merriam, J. C.**  
Merriam, J. C. 1913 C, 336, figs. 1-3.  
Abel, O. 1914 A, 182, fig. 140.  
Merriam, J. C. 1919 A, 450, 517, 521, 527, fig. 135a.  
Upper Miocene (Barstow); California.
- Merycodus furcatus (Leidy).**  
Hay, O. P. 1902 A, 683.  
Baird, S. F. 1876 A, 336 (Antelope).  
Cope, E. D. 1874 U, 148 (Cosoryx).  
1885 FF, 793, fig. 4 (Cosoryx).  
Furlong, E. L. 1927 A, 146-176, pls. xxiv, xxvi; text-figs. 1-16, 20-28.  
Louderback, G. D. 1924 A, 9.  
Matthew, W. D. 1904 A, 103, 110, 122, figs. 5, 6.  
1909 C, 118  
1924 C, 200.  
Merriam, J. C. 1911 B, 205, 206, 214, 284, fig. 66 (This species?).  
1916 A, 194, figs. 43-45.  
1919 A, 453, 454.  
Merrill, G. P. 1907 A, 31 (Cosoryx); 32 (Dicrocerus).  
Osborn, H. F. 1918 A, 17, 27.  
Parks, W. A. 1925 C, 432.  
Scott, W. B. 1913 A, 415.
- Trouessart, E. L. 1905 A, 712.  
Lower Pliocene (Valentine); Nebraska: (Santa Fe); New Mexico: (Virgin Valley); Nevada. (Cedar Mountain); California.
- Merycodus grandis Hay.**  
Hay, O. P. 1924 A, 17, pl. iii, figs. 9-11.  
Upper Miocene (Fleming); Texas.
- Merycodus necatus Leidy.**  
Hay, O. P. 1902 A, 683.  
Abel, O. 1914 A, 182, fig. 140.  
Baird, S. F. 1876 A, 336 (Cervus warreni).  
Barbour, E. H. 1914 B, 189.  
1914 C, 222.  
Barbour and Cook 1917 A, 172.  
1917 B, 180.  
Cook, H. J. 1912 D, 45 (This species?).  
Dall and Harris 1892 A, 292 (Merycadus).  
Douglass, E. 1903 A, 155, 197, fig. 36 (This species?).  
Furlong, E. L. 1927 A, 146-176, pls. xxiv-xxvii; text-figs.  
Gidley, J. W. 1904 A, 245.  
Hay, O. P. 1927 D, 136 (This species?).  
Louderback, G. D. 1924 A, 9 (This species?).  
Matthew, W. D. 1904 A, 103, 121.  
1909 C, 118.  
1913 A, 187, 219, fig. 18.  
1924 C, 68, 70, 72, 200, 204.  
Merriam, J. C. 1911 E, 168, pl. xxix, figs. 6-8.  
1913 C, 338, fig. 4.  
1915 E, 233.  
1916 A, 197, fig. 42 (This species?).  
1916 C, 127, figs. 16-21 (This species?).  
1917 A, 426, 431, 437 (This species?).  
1919 A, 450, 453, 517, 525, 527, figs. 113-117, 126-134, 234-252 (This species?).  
Merrill, G. P. 1907 A, 28 (Cervus warreni); 33 (Dicrocerus); 48 (Merycodus).  
Osborn, H. F. 1918 A, 23.  
Parks, W. A. 1925 C, 432.  
Sinclair, W. J. 1915 A, 77 (This species?).  
Trouessart, E. L. 1905 A, 712.  
Miocene (Bijou Hills); South Dakota: (Sheep Creek, Snake Creek, Valentine and Devil's Gulch); Nebraska: (Chanac); California.
- Merycodus necatus sabluonis Matthew and Cook.**  
Matthew and Cook 1909 A, 411, fig. 24.  
Barbour, E. H. 1915 A, 92.  
Matthew, W. D. 1924 C, 200.  
Merriam, J. C. 1917 A, 426, 431, 437.  
Troxell, E. L. 1916 A, 347.  
Upper Miocene (Lower Snake Creek); Nebraska.
- Merycodus nevadensis Merriam.**  
Merriam, J. C. 1911 B, 205, 209, 214, figs. 64, 65.  
Miocene (Virgin Valley); Nevada.
- Merycodus osborni Matthew.**  
Matthew, W. D. 1904 A, 103, 107, pl. iii; text-figs. 1-4, 7-16; frontispiece.  
1909 C, 115.  
1924 C, 72, 200.



- Matthew and Cook 1909 A, 412.  
 Merriam, J. C. 1919 A, 519.  
 Osborn, H. F. 1904 F, 36.  
     1905 I, pl. vi.  
     1910 B, 294, fig. 146.  
 Parks, W. A. 1925 C, 432.  
 Scott, W. B. 1913 A, 415, fig. 222.  
 Trouessart, E. L. 1905 A, 712.  
 Zittel and Schlosser 1911 A, 497, fig. 694.  
     1923 A, 587, fig. 735.  
     Upper Miocene (Pawnee Creek); Colorado,  
     South Dakota.

### ***Merycodus ramosus* (Cope).**

- Cope, E. D. 1874 U, 148 (Cosoryx).  
 Hay, O. P. 1902 A, 683.  
 Matthew, W. D. 1904 A, 103, 122 (This  
 species?).  
     1909 C, 118.  
     1924 C, 200.  
 Merrill, G. P. 1907 A, 31 (Cosoryx)  
 Parks, W. A. 1925 C, 432 (M. ramulosus).  
 Trouessart, E. L. 1905 A, 712.  
     Lower Pliocene (Santa Fé); New Mexico.

### ***Merycodus tehuanus* (Cope).**

- Hay, O. P. 1902 A, 683.  
 Matthew, W. D. 1909 C, 118 (This genus?).  
     1924 C, 200 (Dicrocerus).  
 Merrill, G. P. 1907 A, 33 (Dicrocerus).  
     Lower Pliocene (Santa Fé); New Mexico.

### ***Merycodus warreni* (Leidy).**

- Leidy, J. 1858 E, 23 (Cervus).  
 Hay, O. P. 1902 A, 683 (M. necatus in part).  
 Leidy, J. 1869 A, 172, 379, pl. xxvii, fig. 12  
 (Cervus).  
 Matthew, W. D. 1924 C, 200.  
 Parks, W. A. 1925 C, 432.  
     Lower Pliocene (Valentine); Nebraska.

### **CAPROMERYX Matthew.**

- Matthew, W. D. 1902 F, 318.  
 Chandler, A. C. 1916 A, 111.  
 Diener, C. 1912 A, 216.  
 Furlong, E. L. 1927 A, 155, 167.  
 Gidley, J. W. 1913 D, 3.  
 Hay, O. P. 1925 D, 245.  
 Loomis, F. B. 1928 B, 542.  
 Matthew, W. D. 1904 A, 104, 126.  
     1918 A, 219.  
     1924 C, 204.  
     1926 B, 6.  
 Merriam, J. C. 1915 G, 100 ("deer-antelope").  
 Osborn, H. F. 1909 D, 86, 87.  
     1910 B, 454, 456, 553.  
     1925 D, 532.  
 Palmer, T. S. 1904 A, 159, 922.  
 Scharff, R. F. 1911 A, 113.  
 Scott, W. B. 1913 A, 417.  
 Stremme, H. 1911 A, 88.  
 Taylor, W. P. 1911 A, 191, 196.  
 Trouessart, E. L. 1905 A, 712.  
 Weber, M. 1904 A, 682.  
 Weber and Abel 1928 A, 591.  
 Zittel and Schlosser 1911 A, 496.  
     1923 A, 587, 680.

### ***Merycodus* sp. indet.**

- Buwalda, J. P. 1916 A, 80. (Mojave Desert);  
 California.  
     1924 A, 572. Middle Neocene (Payette);  
     Idaho.  
 Cook, H. J. 1922 B, 12 (This genus?). Pliocene  
 (Snake Creek); Colorado.  
 Douglass, E. 1907 A, 809 (Cosoryx). Miocene;  
 Montana.  
 Frick, C. 1921 A, 382, fig. 102 (Merycodus?  
 Ilngoceros? Antilocapra?). Pliocene (Eden);  
 California.  
     1926 A, 106. Miocene (Pawnee Creek);  
     Colorado.  
 Furlong, E. L. 1927 A, pls xxv, xxvi, xxviii.  
     Miocene (Barstow); California.  
 Gidley, J. W. 1913 C, 180. Late Tertiary (Flax-  
 ville); Montana.  
     1922 B, 120, 121. Pleistocene (San Pedro  
     Valley); Arizona.  
     1926 A, 83. Upper Pliocene or Lower Pleis-  
     tocene.  
 Hay, O. P. 1924 D, 169 Pliocene?; Montana.  
 Matthew, W. D. 1923 A, 12 (This genus?).  
     Lower Pliocene (Upper Snake Creek); Ne-  
     braska.  
 Matthew and Cook 1909 A, 412, fig. 25.  
 Merriam, J. C. 1914 A, 280, fig. 3 (This genus?).  
     1915 B, 287, figs. 4, 5. Miocene?; Cali-  
     fornia.  
     1917 A, 437, 438. Miocene (Snake Creek  
     and Republican River); Nebraska.  
     1919 A, 518, figs. 118-125. Miocene (Bar-  
     stow); California.  
 Merriam and Pack 1913 A, 128. Miocene; Cali-  
 fornia.  
 Sinclair, W. J. 1915 A, 77. Pliocene (Snake  
 Creek); Nebraska.  
 Stock, C. 1925 A, 21 (This genus?). Lower  
 Pliocene (Eden); California.

### **Type *C. furcifer* Matthew.**

### ***Capromeryx furcifer*.**

- Matthew, W. D. 1902 F, 318.  
 Baker, F. C. 1920 A, 209, 213, 395.  
 Freudenberg, W. 1910 A, 28.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1914 A, 26.  
     1928 C, 423, 425.  
 Matthew, W. D. 1904 A, 104, 127, fig. 20.  
     1918 A, 227.  
 Osborn, H. F. 1910 B, 456.  
 Parks, W. A. 1925 C, 432.  
 Trouessart, E. L. 1905 A, 712.  
     Pleistocene (Sheridan); Nebraska.

### ***Capromeryx mexicana* Furlong.**

- Furlong, E. L. 1925 A, 145, figs. 7-10.  
     1927 A, 149-175; text-figs. 1-17, 20-28.  
     Pleistocene; Mexico.

### ***Capromeryx minor* Taylor.**

- Taylor, W. P. 1911 A, 192, figs. 1-6 (This  
 genus?).  
 Chandler, A. C. 1914 A, 155.  
     1916 A, 111, figs. 1-4.

- Freudenberg, W. 1922 A, 5.  
 Furlong, E. L. 1925 A, 150, fig. 11.  
 1927 A, 159.  
 Hay, O. P. 1927 D, 303.  
 Merriam, J. C. 1908 D, 473 ("deer-like animal").  
 1918 D, 519 ("Capromeryx").  
 Merriam and Stock 1925 A, 11.  
 Miller, L. H. 1912 A, 78.  
 Osborn, H. F. 1925 D, 531.  
 Parks, W. A. 1925 C, 432, 434.  
 Stock, C. 1925 A, 30, 118.

- Wyman, L. E. 1922 A, 29, fig. 20.  
 Pleistocene (La Brea); California, Mexico.

### Capromeryx sp. indet.

- Freudenberg, W. 1921 A, 139. Pleistocene; Mexico.  
 1922 A, 5. Pleistocene; Mexico.  
 Hay, O. P. 1927 D, 162. Pleistocene (Bautista); California.  
 Stock, C. 1925 A, 119. Pleistocene (Bautista); California.

### Superfamily BOVOIDÆ, new form.

Unless otherwise indicated the authors, as cited, use for this superfamily the name Pecora.

- Hay, O. P. 1902 A, 681 (Booidea).  
 Abel, O. 1913 B, 729, 745 (Cavicornia).  
 1914 A, 184 (Boödontia).  
 Ameghino, F. 1889 A, 1024 (Ruminantia).  
 Beddard, F. E. 1902 A, 290.  
 Beyer, H. 1908 A, 81 ("wiederkäuer").  
 Black, N. 1900 A, 11.  
 Boas, J. E. V. 1914 B, 589.  
 Bonaparte, C. L. 1833 A, 1043 ("ruminants").  
 Burmeister, H. 1879 B, 454 (Ruminantia).  
 Carus, V. 1875 A, 148 (Cavicornia).  
 Carus and Engelmann 1861 A, 1296, 1687 (Ruminantia, in part).  
 Clark and Sonntag 1926 A, 482.  
 Cope, E. D. 1891 N, 87 (Boöidea).  
 Cuvier, G. 1805 A ("ruminans").  
 1825 A, iv, 1-228, pls. i-xiii ("ruminans").  
 Dana, J. D. 1863 C, 336 ("ruminants").  
 Dietrich, K. 1841 A, 86 ("wiederkäuer").  
 Duméril, A. M. C. 1806 A, 24 (Ruminantia).  
 Eisler, P. 1895 A, 54 ("wiederkäuer").  
 Ellenberger and Baum 1903 A ("wiederkäuer").  
 Ganzer, H. 1908 A, 159 ("wiederkäuer").  
 Gaupp, E. 1905 D, 1039 (Ruminantia).  
 Gervais, P. 1853 B, 30 ("ruminants").  
 Giebel, C. G. 1883 A, 25 ("wiederkäuer").  
 Gill, T. 1872 B, 8, 24 (Boöidea).  
 Gray, J. E. 1821 A, 307 (Ruminantia).  
 Gregory, W. K. 1910 A, 23, 24, 30, 33 (Pecora); 18, 466 (Ruminantia).  
 Hasse and Schwarck 1870 A, 130 (Ruminantia).  
 Hay, O. P. 1912 D, 609 (Boöidea).  
 1914 A, 244 (Boöidea).  
 Hoernes, R. 1886 A, 679 (Cavicornia).  
 Hogben, L. T. 1919 A, 75.  
 Huene, F. 1912 F, 522 ("wiederkäuer").  
 Humphrey, G. M. 1876 A, 664 ("ruminants").  
 Ihde, — 1912 A, 265 ("ruminanten").  
 Jaeger, G. F. 1842 A, 438 ("wiederkäuer").  
 Jaekel, O. 1911 A, 234 (Ruminantia).  
 Klotnerus-Meyer, T. 1907 A, 9, 97, 104 (Ruminantia).  
 Köstlin, O. 1844 A ("wiederkäuer").  
 Kowalewsky, W. 1877 A, 148 ("wiederkäuer").  
 Kukenenthal, W. 1913 A, 633 (Ruminantia, in part).  
 Laloy, L. 1907 A, 586 ("ruminants").  
 Ledouble, A. F. 1906 A, 550, 589 ("ruminants").  
 Leunis and Ludwig 1883 A, 242 (Cavicornia).  
 Linnaeus, C. 1758 A, 65.  
 Lull, R. S. 1904 C, 2.  
 Lydekker, R. 1907 B, 13.  
 1913 B, 4, 8.  
 Magitot, E. 1875 A, 80 ("ruminants").  
 Martins, C. 1857 A, 69 ("ruminants").  
 Matthew, W. D. 1904 A, 102 (Booidea).  
 1907 A, 178.  
 1915 A, 242 ("ruminants").  
 Matthew and Granger 1925 C, 10.  
 Meckel, J. F. 1823 A, 1 ("wiederkäuer").  
 1825 A ("wiederkäuer").  
 Nat. Sci. 1898 A, 371 ("ruminants").  
 Oken, L. 1823 A, 341 ("rinder").  
 Osborn, H. F. 1909 D, 76.  
 1910 B, 551.  
 1912 B, 255 ("cattle").  
 Pander and Alton 1823 A, 1, 6 ("wiederkäuer").  
 Petersen, G. 1921 A, 295 (Cavicornia).  
 Reichert, K. B. 1849 A, 474 ("wiederkäuer").  
 Reid, G. A. 1898 A, 359 ("horned ruminants").  
 Retterer, E. 1884 A, 490 ("ruminants").  
 Retzius, A. 1849 A, 664 (Ruminantia).  
 Reynolds, S. H. 1897 A, 553 (Ruminantia, Pecora).  
 Rhumbler, L. 1914 A, 154 ("cavicornier").  
 Robin and Herrmann 1882 A, 205 ("ruminants").  
 Rutland, J. 1901 A, 21033 ("ruminants").  
 Schlosser, M. 1899 T, 451 ("rinder").  
 Schmidt, O. 1886 A, 173 (Cavicornia).  
 Scott, W. B. 1896 D, 57.  
 1913 A, 409, 421.  
 Serres, M. 1852 A, 145 ("ruminants").  
 1852 B, 197 ("ruminants").  
 Stehlin, H. G. 1910 A, 1143 (Ruminantia).  
 Terra, P. 1911 A, 327.  
 Vivq-d'Azyr, F. 1792 A, cviii (Ruminantes).  
 Wagner, R. 1843 A ("ruminanten").  
 Wallisch, W. 1906 A, 307 ("wiederkäuer").  
 Weber, M. 1904 A, 628, 643, 655 (Ruminantia); 645 (Selenodontia).  
 Weber and Abel 1928 A, 565 (Pecora).  
 Weber and Burret 1927 A, xv (Pecora).  
 Winge, H. 1906 A, 70 (Bovidae).  
 Wright, R. R. 1883 A, 276, 289 (Ruminantia, Pecora).  
 Zimmerman, A. 1912 A, 650 ("wiederkäuer").

## GIRAFFIDÆ Gray.

- Gray, J. E. 1821 A, 307.  
 Abel, O. 1914 A, 121, 180, 181.  
     1919 A, 813.  
 Black, D. 1915 A, 329.  
 Bohlin, B. 1927 A, 1-178.  
 Cope, E. D. 1887 B, 379.  
 Falconer, H. 1868 A, 197.  
 Flower and Lydekker 1891 A, 330.  
 Gill, T. 1872 B, 76.  
 Knottnerus-Meyer, T. 1907 A, 35.  
 Lydekker, R. 1882 B, 99 (Camelopardalidæ).  
     1885 C, 58.  
     1914 B.  
 Major, C. J. F. 1891 A, 315.  
     1901 B, 242.

- Matthew, W. D. 1925 D, 35, 40.  
     1928 B, 968, 981, fig. 16.  
 Owen, R. 1845 B, 529 ("giraffe").  
 Palmer, T. S. 1904 A, 925.  
 Pilgrim, G. E. 1911 A, 1, 23.  
 Reynolds, S. H. 1897 A, 469.  
 Schlosser, M. 1903 I, 97 (Camelopardalidæ).  
 Schwarz, E. 1924 A, 421 ("giraffes").  
 Weber, M. 1904 A, 682.  
 Weber and Abel 1928 A, 426, 538, 595.  
 Woodward, A. S. 1898 B, 368.  
 Zittel, K. A. 1893 B, 407 (Giraffinæ).  
 Zittel and Schlosser 1911 A, 495.  
     1923 A, 585 (Giraffinæ).

GIRAFFA Brisson. Type *G. giraffa* Brisson (= *Cervus camelopardalis* Linnæus).

- Brisson, M. J. 1762, Regn. animale, etc., 2d ed., 12, 37-38.  
 Abel, O. 1914 A, 181 (Camelopardalis).  
 Altmann, F. 1925 A, 109 (Camelopardalis).  
 Atzkern, J. 1923 A, 126 ("giraffe").  
 Black, D. 1915 A, 329, figs. 1-3.  
 Bohlin, B. 1927 A, 130, pls. xi, xii.  
 Bonsdorff, E. J. 1871 A, 318 (Camelopardalis).  
 Carus and Engelmann 1861 A, 1717 (Camelopardalis).  
 Doran, A. H. G. 1878 A, 429, pl. lxi.  
 Falconer, H. 1845 A, 362, pl. xiv (Camelopardalis).  
     1868 A, 197, 398, 543, pl. xvi (Camelopardalis).  
 Flower and Lydekker 1891 A, 331, fig. 136.  
 Gaudry, A. 1867 A, 245, pl. xi (Camelopardalis).  
 Knottnerus-Meyer, T. 1907 A, 35.  
 Loomis, F. B. 1925 B, 598, figs. 13, 14.  
     1928 B, 537, figs. 7, 8 (Camelopardalis, Giraffa).  
 Lydekker, R. 1882 B, 100, 102, pl. xvi (Camelopardalis).  
     1885 C, 71.  
 Major, C. J. F. 1891 A, 316.  
     1901 B, 242.  
 Matsumoto, H. 1926 C, 17.  
 Matthew, W. D. 1925 D, 37, 39, fig. 20.

- Meckel, J. F. 1823 A, 12 ("giraffen").  
 Nopcsa, F. 1926 A, 645 ("giraffine").  
 Osborn, H. F. 1925 F, 961 ("giraffe").  
 Owen, R. 1842 G, 217, pls. xl-xliv ("giraffe").  
     1866 B, 463, 475, figs. 310, 325, 326 (Camelopardalis).  
 Palmer, T. S. 1904 A, 295, 926.  
 Pilgrim, G. E. 1911 A, 6.  
 Reynolds, S. H. 1897 A, 359, 445, 501, 507 ("giraffe").  
 Schlosser, M. 1903 I, 97 (Camelopardalis).  
 Taschenberg, O. 1899 A, 4583.  
 Trouessart, E. L. 1898 A, 962.  
 Weber, M. 1904 A, 22, 683, fig. 19.  
 Weber and Abel 1928 A, 596, 597, fig. 390.  
 Werthofer, A. 1888 A, 281, pl. xvi (Camelopardalis).  
 Winton, W. E. de 1897 A, 273-283, figs. 1-4.  
 Woodward, A. S. 1898 B, 369.  
 Wright, R. R. 1883 A, 312 (Camelopardalis).  
 Zittel, K. A. 1893 B, 408 (Camelopardalis).  
 Zittel and Schlosser 1911 A, 496 (Camelopardalis).  
     1923 A, 585, 676, 677 (Camelopardalis).

## Giraffa nebrascensis Matthew.

- Matthew, W. D. 1925 D, 35, figs. 14, 15.  
 Pleistocene (Loess); Nebraska.

## ANTILOCAPRIDÆ Gray.

- Gray, J. E. 1866 C, 326.  
 Hay, O. P. 1902 A, 686.  
 Abel, O. 1913 B, 729, 745.  
     1914 A, 121, 181 (Antilocaprinæ).  
     1919 A, 815.  
 Arldt, T. 1907 D, 247, 321.  
     1912 A, 700, 746.  
 Beddard, F. E. 1902 A, 306.  
 Caton, J. D. 1877 A (Antilocaprinæ).  
 Chandler, A. C. 1914 B, 134 (Antilocaprinæ).  
 Elliot, D. G. 1901 A, 43.  
 Furlong, E. L. 1927 A, 148-176.  
 Gill, T. 1885 B, 18.  
 Grant, M. 1904 B, 203.  
 Hay, O. P. 1914 A, 283 (Antilocaprinæ).  
 Knottnerus-Meyer, T. 1907 A, 115 (Antilocaprinæ).

- Lydekker, R. 1907 B, 46.  
     1913 B, 5.  
     1914 B, 229.  
 Lyon, M. W. 1908 A, 398 (Antilocaprinæ).  
     1908 B, 693 (Antilocaprinæ).  
 Matthew, W. D. 1901 B, 442.  
     1908 A, 561.  
     1909 C, 114, 115, 118, 120.  
     1915 K, 457 ("antilocaprids").  
     1918 A, 22.  
     1924 C, 198, 202.  
     1926 B, 6, 7.  
 Matthew and Cook 1909 A, 367 (Antilocaprinæ).  
 Miller, G. S. 1912 B, 393.  
 Nitsche, H. 1898 A, 81.  
 Osborn, H. F. 1905 I, 107.

- Osborn, H. F. 1909 D, 77, 86.  
1910 B, 357, 553.  
Palacký, J. 1903 B, 313 ("antilocapriden").  
Scharff, R. F. 1911 A, 113.  
Schwarz, E. 1924 A, 420 ("prongbucks").  
Slater, P. L. 1866 A, 403.  
Scott, W. B. 1913 A, 362, 416.  
Seton, E. T. 1909 A, 210.  
Skinner, M. P. 1922 A, 82.

- Trouessart, E. L. 1905 A, 711 (Antilocapridæ);  
712 (Antilocaprinæ).  
Wallace, A. R. 1876 A, II, 223 (Antilocaprinæ).  
1894 A, 435.  
Weber, M. 1904 A, 681.  
Weber and Abel 1928 A, 590 (Antilocaprinæ).  
Zittel and Schlosser 1911 A, 496.  
1923 A, 586, 602.

# ANTILOCAPRA Ord. Type *A. americana* Ord.

- Ord, G. 1818, Jour. Physique, LXXXVII, 149.  
Hay, O. P. 1902 A, 686.  
Allen, J. A. 1892 A.  
Arlt, T. 1907 D, 256.  
Beddard, F. E. 1902 A, 307.  
Boas, J. E. V. 1914 B, 594.  
1917 A, 3, pl. 1, figs. 5-7; pl. ii; text-  
figs. 1-4.  
Carus, V. 1875 A, 153.  
Caton, J. D. 1877 A, figures.  
Chandler, A. C. 1916 A, 112.  
Doran, A. H. G. 1878 A, 424, pl. lxi.  
Douglas, E. 1909 A, 470, 475.  
Elliot, D. G. 1901 A, 43.  
Fryxell, F. M. 1926 A, 333.  
Gadow, H. 1902 A, 207, 213.  
Gidley, J. W. 1912 C, 19.  
Grant, M. 1904 B, 202, 203, 205.  
Gray, J. E. 1866 C, 323.  
Gregory, W. K. 1912 F, 238.  
Haug, E. 1911 A, 1836.  
Hay, O. P. 1914 A, 284.  
1923 A, 337.  
1925 D, 245.  
Hilzheimer, M. 1922 A, 745.  
Howes, G. B. 1902 A, 523.  
Hrdlička, A. 1903 A, 377.  
1920 A, 464.  
Kampfen, P. N. 1905 A, 605.  
Knotnerus-Meyer, T. 1907 A, 115, pl. iii, fig. 18.  
Leunis and Ludwig 1883 A, 253.  
Loomis, F. B. 1925 E, 600, figs. 15, 16.  
1928 B, 542.  
Lull, R. S. 1904 C, 8.  
1920 A, 88.  
1921 B, 165.  
Lydekker, R. 1914 B, 230.  
Lyon, M. W. 1908 B, 693.  
Matthew, W. D. 1902 F, 318.  
1904 A, 105, 116, 119.  
1915 A, 250.  
1915 K, 403.  
1918 A, 221.  
1924 C, 200, 206.  
1924 E, 748.  
1926 B, 6.  
Merriam, C. H. 1892 A, 61.  
Merriam, J. C. 1911 B, 283.  
Miller, G. S. 1912 B, 393.  
1924 C, 493.  
Murie, J. 1871 B, 440.  
Nitsche, H. 1898 A, 71, 80.  
Osborn, H. F. 1905 I, 110.  
1909 D, 85-87.  
1910 B, 454, 456, 460, 553.  
Palmer, T. S. 1904 A, 109, 914.

- Parks, W. A. 1925 C, 432.  
Reynolds, S. H. 1897 A, 417.  
Schlosser, M. 1903 I, 169, 173.  
1904 C, 98.  
1906 A, 169, 173.  
Schmidt, O. 1886 A, 161.  
Slater, P. L. 1866 A, 403.  
1875 A, 219.  
Scott, W. B. 1913 A, 225, 675.  
Seton, E. T. 1909 A, 209.  
Skinner, M. P. 1922 A, 82.  
Taschenberg, O. 1899 A, 4463.  
Trouessart, E. L. 1905 A, 713.  
Weber, M. 1904 A, 21, 681, fig. 18.  
Weber and Abel 1928 A, 591.  
Wherry, G. 1902 A, 973.  
Winge, H. 1906 A, 118 (Dicranoceros).  
Wright, R. R. 1883 A, 333.  
Zittel and Schlosser 1911 A, 496.  
1923 A, 587, 680-682.

# Antilocapra americana Ord.

- Ord, G. 1815, Guthnes' Geog., 2d Amer. ed.,  
II, 292 (Antelope).  
Hay, O. P. 1902 A, 686.  
Baker, F. C. 1920 A, 454.  
Beddard, F. E. 1902 A, 306.  
Brown, A. E. 1904 B, 70 ("prong-horn").  
Buwalda, J. P. 1914 A, 451 ("antelope"; This  
species?).  
Chandler, A. C. 1914 A, 155 ("Antilocapra").  
Doran, A. H. G. 1878 A, 424, pl. lxi.  
Elliot, D. G. 1901 A, 43, pl. xvi.  
Forbes, W. A. 1880 A, 127, figs. 1-3.  
Frech, F. 1907 A, 315.  
Furlong, E. L. 1927 A, 148-175, text-figs. 1-15,  
18, 20-28.  
Gervais, P. 1859 A, 365.  
1875 A, 49, pl. D.  
Gibbs, M. 1898 A, 198.  
Giebel, C. G. 1878 D, 856 (A. americana, A.  
furcifer).  
Gray, J. E. 1866 C, 323.  
Hay, O. P. 1914 A, 26, 38, 284, pl. xxxiii, figs.  
5, 6; pl. xxxiv, fig. 3.  
1921 A, 626.  
1923 A, 9, 343.  
1927 B, 61.  
1927 D, 301 (Antilocapra).  
1928 C, 425 (This species?).  
Lobley, J. L. 1908 A, 195.  
Lull, R. S. 1920 A, 89, figs. 5, 9-25.  
Lydekker, R. 1907 B, 46, fig. 33.  
1914 B, 230, fig. 37.  
Lyon, M. W. 1908 A, 393, 397.  
Matschie, P. 1896 A, 252 ("gabelgemse").

- Matthew, W. D. 1902 E, 318 (*A. americana?*); 320 ("Antilocapra").  
 1904 A, 104.  
 1918 A, 227.
- Merriam, J. C. 1911 B, fig. 77.  
 1914 B, 201 ("antelope").  
 1918 D, 520 ("Antilocapra").
- Merriam and Stock 1925 A, 11 (This species?).
- Miller, G. S. 1912 B, 393.  
 1924 C, 493.
- Murie, J. 1870 A, 334, figs. 1-9.
- Nitsche, H. 1898 A, 71, pl. xi, figs. 8-11.
- Osborn, H. F. 1910 B, 438, 454.
- Owen, R. 1866 B, 473.  
 1868 A, 625
- Palacký, J. 1903 B, 330.
- Savage, J. 1878 A, 10 ("antelope").
- Scharff, R. F. 1911 A, 112.
- Schlosser, M. 1903 I, 169, fig. 32.
- Sciater, P. L. 1886 A, 401.
- Scott, W. B. 1913 A, 162, 202, 416, 417, fig. 74.
- Seton, E. T. 1906 D, 33-49, figs  
 1909 A, 209, pls. xiv-xxi; text-figs. 93-99;  
 map 9.
- Skinner, M. P. 1922 A, 82, pls. vi-ix.
- Taylor, W. P. 1911 A, 191.
- Wright, R. R. 1883 A, 333, fig. 160.
- Wyman, L. E. 1922 A, 29.
- Recent; Mexico to California and British  
 America Pleistocene; Illinois, Oregon, Cali-  
 fornia, Nebraska?
- Antilocapra sp. indet.**  
 Freudenberg, W. 1921 A, 139 (*A. sp. nov.*).  
 Pleistocene; Mexico.  
 1922 A, 5, 28. Pleistocene; Mexico.
- Frick, C. 1921 A, 300, figs. 13, 17, 18 (This  
 genus?). Pleistocene (Bautista); California;  
 379, figs 97-101 (This genus?): Pliocene  
 (Eden); California.
- Hay, O. P. 1927 D, 301 (Antilocapra); 162  
 (Antilocapra? or Neotragus?). Pleistocene;  
 California, Oregon.
- McCornack, E. C. 1920 A, 17, 23 ("antelope").  
 Pleistocene (Fossil Lake); Oregon.
- Merriam and Stock 1921 A, 567 (This genus?).  
 Pleistocene (Early); California.  
 1925 A, 11 (This genus?). Pleistocene  
 (McKittrick); California.
- Miller, L. H. 1912 A, 81 Pleistocene (Fossil  
 Lake), Oregon.
- Osborn, H. F. 1925 D, 541 ("Antilocapra").  
 Pleistocene (La Brea); California.
- Parks, W. A. 1924 A, 38 (This genus?). Pleis-  
 tocene (Late); Saskatchewan  
 1925 A, 226 ("antilocaprid"). Post-glacial;  
 Saskatchewan.
- Stock, C. 1925 A, 21 (This genus?). Lower  
 Pliocene (Eden): Pleistocene (Bautista); Cali-  
 fornia: (Christmas Lake); Oregon.

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#### ALETOMERYX Lull. Type *A. gracilis* Lull.

- Lull, R. S. 1920 A, 85.
- Looms, F. B. 1928 B, 539.
- Matthew, W. D. 1924 C, 193.  
 1926 B, 3, 6.
- Weber and Abel 1928 A, 603, 606.
- Aletomeryx gracilis** Lull.  
 Lull, R. S. 1920 A, 85, pl. 1; text-figs. 1, 2,  
 4-25.  
 Matthew, W. D. 1924 C, 193.  
 O'Harra, C. C. 1920 A, 159.  
 Upper Miocene or Lower Pliocene; Ne-  
 braska.

#### TETRAMERYX Lull. Type *T. shuleri* Lull.

- Lull, R. S. 1921 B, 163.
- Matthew, W. D. 1926 B, 6.
- Tetrameryx shuleri** Lull.  
 Lull, R. S. 1921 B, 163, figs. 2, 3.  
 Furlong, E. L. 1927 A, 149, 157 (*T. shuleri*).  
 Hay, O. P. 1924 D, 384.  
 Shuler, E. W. 1923 A, 333 ("four-horned ante-  
 lope").  
 Pleistocene (Early); Texas.

#### NEOMERYX Parks. Type *N. finni* Parks.

- Parks, W. A. 1925 C, 432.
- Neomeryx finni** Parks.  
 Parks, W. A. 1925 C, 432, pl. x.  
 Hay, O. P. 1927 D, 234.  
 Late Pleistocene or early Recent; Saskat-  
 chewan.

#### BOVIDÆ Gray.

- Gray, J. E. 1821 A, 308.
- Hay, O. P. 1902 A, 686.
- Abel, O. 1909 D, (222) ("boviden").  
 1913 B, 729, 746 (Bovodontia).  
 1921 A, ("rinder").
- Ahrens, H. 1912 B, 49 ("rind").
- Anderson, R. J. 1902 C, 735 ("oxen").  
 1912 D, 253.
- Ardt, T. 1907 D, 202, 255 (Cavicornia); 641  
 (Bovidae).
- Atzkern, J. 1923 A, 125 ("cavicornier").
- Baird, S. F. 1876 A, ccviii ("oxen").

- Baum, H. 1920 A, 19, figs. 1, 2, 6, 9 ("rind").  
 Baur, G. 1886 N, 118 ("pecoriden").  
 Beddard, F. E. 1902 A, 307.  
 Behlen, H. 1906 A, 187 (Cavicornia); 191 ("boviden").  
 Bertelli, D. 1909 A, 166, fig. 17 (Bos).  
 Black, D. 1915 A, 348.  
 Blanford, W. T. 1901 A, 298.  
 Boas, J. E. V. 1890 B, 530, 2 figs. ("rind").  
 1917 A, 3.  
 Bonaparte, C. L. 1832 A, 291 (Cavicornia).  
 Boule, M. 1923 A, 45, 54 ("ox").  
 Broom, R. 1926 A, 260, fig. 3 (Bos).  
 Carnot, A. 1892 A, 1190 ("boeuf").  
 Carus, V. 1875 A, 149 (Bovina).  
 Carus and Engelmann 1861 A, 1715.  
 Case, E. C. 1839 B, 175 (Cavicornia).  
 Chandler, A. C. 1914 B, 134.  
 Chomenko, J. 1913 A, 141 (Cavicornia).  
 Cope, E. D. 1891 N, 87.  
 Cuvier, F. 1825 A, 231 ("boeufs").  
 Doran, A. H. G. 1878 A, 425.  
 Duerst, J. U. 1902 A, 197 ("cavicornes"); 202 ("bovidés").  
 1902 B, 1 (Cavicornia).  
 1903 A, 360 (Cavicornia).  
 1903 B, 342 ("cavicornes").  
 Eichwald, E. 1835 A, 686 ("boves").  
 Eimer, G. H. J. 1901 A, 131 (Cavicornia).  
 Elliot, D. G. 1901 A, 44.  
 Engelmann, O. 1910 A, 486 ("rind").  
 Flower, W. H. 1892 A, 43.  
 Frassetto, F. 1903 A, 184, 340.  
 Friepie, A. 1886 A, 72, pls. i-iii; text-figs. 1-8 ("rind").  
 Gadow, H. 1902 A, 206.  
 1913 A, 132 ("cattle").  
 Gervais, P. 1852 A, 69 (Bos).  
 1859 A, 130 ("bovidés").  
 Giebel, C. G. 1883 A ("boviden").  
 Goodman, N. 1868 A, 109 ("cow").  
 Goodsir, J. 1868 A, 53 ("ruminants").  
 Grant, M. 1904 B, 196, 205.  
 Gray, J. E. 1825 B, 342.  
 Gregory, W. K. 1910 A, 70, 345 (Cavicornia).  
 1920 A, 193 (Pecora).  
 Haeckel, E. 1873 A, 554 (Cavicornia).  
 Haller, G. 1922 A (Capra, Bos).  
 Hasse, G. 1911 B, 311 ("bovidés").  
 Hasse and Schwarcz 1870 A, 130 (Bos).  
 Hay, O. P. 1912 D, 632.  
 1914 A, 282.  
 Hoernes, R. 1886 A, 679 (Cavicornia).  
 Huxley, T. H. 1855 B, 130 ("calf").  
 1856 A, 46 ("oxen").  
 1870 F, 537.  
 Jackson, J. W. 1915 A, 293.  
 Kampfen, P. N. 1905 A, 604.  
 Knottnerus-Meyer, T. 1907 A, 85, 101.  
 1910 A, 589.  
 1911 A, 14 ("rinder").  
 Kowalewsky, W. 1877 A, 148 (Bovina).  
 Kowarsik, R. 1911 A, 107.  
 Krukenberg, A. 1849 A, 413 ("ochsen").  
 La Baume, W. 1909 A.  
 Laloy, L. 1907 A, 586 ("cavicornes").  
 Lankester, E. R. 1907 A, 108.  
 Lankester, E. R. 1908 A, 324 ("bovines").  
 Leche, W. 1887 A (Cavicornia).  
 Ledouble, A. F. 1906 A, 548 ("bovidés").  
 Leunis and Ludwig 1883 A, 244 (Bovina).  
 Lobley, J. L. 1908 A, 195, 200, 213.  
 Loomis, F. B. 1925 E, 535 ("bovids").  
 Lull, R. S. 1904 C, 8.  
 Lydekker, R. 1907 B, 13.  
 1910 C, 12.  
 1913 B, 4, 9.  
 Lyon, M. W. 1908 A, 397.  
 Mackenzie, W. 1911 A, 363.  
 Major, C. J. F. 1880 A, 23 ("boviden").  
 Marchlewski, T. 1926 A, 95 ("cattle").  
 Matthew, W. D. 1904 A, 102.  
 1908 A, 559, 561.  
 1915 A, 187, 248, 254, figs. 24, 27.  
 1915 K, 457, fig. 17 ("cattle").  
 1918 A, 221.  
 1925 D, 34, 35.  
 Meckel, J. F. 1825 A ("ochsen").  
 Miller, G. S. 1912 A, 986.  
 1912 B, 394.  
 1924 C, 494.  
 Murne, J. 1871 B, 440, 446.  
 Nitsche, H. 1898 A, 68, 80 ("boviden").  
 Nopcsa, F. 1923 H, 177 ("cavicornier").  
 1926 A, 644 (Cavicornia).  
 Osborn, H. F. 1909 D, 122.  
 1912 L, 179, fig. 2 ("cattle").  
 Owen, R. 1845 B, 538.  
 1848 B, pl. u, fig. 18.  
 1868 A, 867.  
 Palacký, J. 1903 B, 313 ("boviden").  
 Pander and Alton 1823 A, 7 ("ochsen").  
 Paulli, S. 1899 A, 161, fig. 7 ("kalb").  
 1900 A, 227, pls. xiii, xiv; text-figs. 33-40 (Bos).  
 Pavlow, M. 1906 B, 52.  
 Perna, G. 1906 A, 131, pl. vi, fig. 20 (Bos).  
 Petersen, G. 1921 A, 291 ("rind").  
 Pfeiffer, H. 1854 A, 9 ("wiederkäuer").  
 Pilgrim, G. E. 1913 A, 302.  
 Popowa, N. 1913 A, 279 ("rind").  
 Pouchet and Chabry 1884 A, 160 ("veau")  
 Puccioni, N. 1908 A, 49.  
 Rehs, J. 1914 A, 49.  
 Reid, G. A. 1898 A, 359.  
 Retterer and Lelièvre 1912 A, 371 ("boeufs").  
 Retzius, A. 1837 A, 488, pl. xxi, fig. 6 ("ochsen").  
 Reynolds, S. H. 1897 A, 468, 507, 523.  
 Rhumbler, L. 1914 A, 154 ("rinder").  
 Robin and Herrmann 1832 A, 251 ("boeufs").  
 Rutland, J. 1901 A, 21033 ("hollow-horned Herbivora").  
 Rutten, L. M. R. 1909 A, 72.  
 Schlosser, M. 1899 T, 454 ("boviden").  
 1903 I, 187, 212 ("Cavicornia").  
 1904 C, 93, 98 (Bovidae); 95 ("cavicornier").  
 Schwarz, E. 1924 A, 421 ("cattle").  
 Slater, P. L. 1866 A, 403.  
 Scott, W. B. 1913 A, 362, 418 (Bovidae); 416, 678 (Cavicornia).  
 Serres, M. 1860 A, 301 ("boeufs").  
 Seton, E. T. 1909 A, 247.  
 Sisson, S. 1910 A, 112, figs. 88-104 ("ox").

- Steinmann, G. 1907 A, 498.  
 Stromer, E. 1912 A, 202 (Cavicornia).  
 Taschenberg, O. 1899 A, 4465 (Antilopidæ);  
 4476 (Bovidæ).  
 Terra, P. 1911 A, 327.  
 Tims, H. W. M. 1903 A, 143.  
 Tornier, G. 1888 A, 292 ("boiden").  
 1908 A, 195 ("wiederkäuer").  
 Tournoux, F. and J. P. 1912 A, 66, figs. 1-3  
 ("veau").  
 Van Bemmelen, J. F. 571 ("cattle").  
 Wallace, A. R. 1894 A, 436.  
 1876 A, II, 221.  
 Weber, M. 1904 A, 409, 421, 643, 672.
- Weber and Abel 1928 A, 426, 538, 581.  
 Wherry, G. 1902 A, 973.  
 Wilhelm, J. 1924 A, 1, figs. 1-7 ("rind").  
 Wilkie, H. C. 1926 A, 819.  
 Williston, S. W. 1910 G, 595.  
 Windle, B. C. A. 1905 A, 1055 ("wiederkäuer").  
 Winge, H. 1906 A, 70, 108, 126 (Bovini).  
 Wright, R. R. 1883 A, 313.  
 Woodward, A. S. 1923 C, 47.  
 Zaaier, T. 1894 A, 339.  
 Zondek, M. 1895 A, 502 ("kuh").  
 Zittel and Schlosser 1911 A, 497 (Cavicornia).  
 1923 A, 559, 602 (Cavicornia).

## ANTILOPINÆ Baird.

- Hay, O. P. 1902 A, 687.  
 Abel, O. 1913 B, 729, 745 (Ægodontia).  
 1921 A, 181, 252 ("antilopen").  
 Arldt, T. 1907 D, 638.  
 1912 A, 746 (Ilmgoceratinae).  
 Bonaparte, C. L. 1832 A, 291 (Antilopina).  
 Carus, V. 1875 A, 151 (Antilopina).  
 Depéret, C. 1912 A, 709 ("antilopidés").  
 Dürst, J. U. 1902 B, 33 (Antilopina).  
 Frech, F. 1906 A, 497 ("antilopen").  
 Giebel, C. G. 1883 A ("antilopen").  
 Gill, T. 1872 B, 9, 77.  
 Hoernes, R. 1886 A, 679.  
 Hrdlička, A. 1903 A, 377 (Antilopidæ).  
 Kowalewsky, W. 1877 A, 148 (Antilopina).  
 Laloy, L. 1907 A, 586 ("antilopes").  
 Leunis and Ludwig 1883 A, 252 (Antilopina).  
 Loomis, F. B. 1925 E, 593, 600 ("antelopes").  
 Lydekker, R. 1907 E, 673 ("antelopes").  
 1914 B, 21.  
 Matthew, W. D. 1915 A, 187, 248, 254, fig. 24.  
 1915 K, 457, fig. 17 ("antelopes").
- Meckel, J. F. 1825 A ("antilopen").  
 Merriam, J. C. 1910 C, 50 ("antelopes").  
 Osborn, H. F. 1917 B, 225, 266, 292 ("antelopes").  
 Owen, R. 1845 B, 528 (Antilopidæ).  
 1868 A, 861 (Antilopidæ).  
 Pander and Alton 1823 A, 9 ("antilopen").  
 Pictet, F. J. 1833 A, 359 ("antilopidés").  
 Rhumbler, L. 1914 A, 154 ("antilopen").  
 Roger, O. 1896 A, 239.  
 Schlosser, M. 1903 I, 126, 161 (Antilopidæ).  
 1904 C, 88, 98, 111.  
 1906 A, 127, 161, 170 ("antelopes").  
 Scott, W. B. 1913 A, 416 (Antilopidæ).  
 Van Bemmelen, J. F. 1918 A, 571 ("antelopes").  
 Vioq-d'Azyr, F. 1792 A, cix (Curvicornes).  
 Weber, M. 1904 A, 676.  
 Weber and Abel 1928 A, 585.  
 Wherry, G. 1901 A, 252, 348 ("antelopes").  
 1902 A, 973 ("antelopes").  
 Woodward, H. 1904 B, 162 (Antilopidæ).  
 Zaaier, T. 1894 A, 339 (Antilopidæ).

NEOTRAGOCERUS Matthew and Cook. Type *N. improvisus* Matthew and Cook.

- Matthew and Cook 1909 A, 413.  
 Abel, O. 1914 A, 184.  
 Arldt, T. 1911 A, 214.  
 Joleaud, L. 1919 A, 712.  
 1919 C, 311.  
 Matthew, W. D. 1924 C, 70 (Neotragoceras);  
 206 (Neotragocerus).  
 Merriam, J. C. 1919 A, 532.  
 Osborn, H. F. 1910 B, 337, 353, 354, 355, 553.  
 1912 G, 250.  
 1918 A, 33.  
 Peterson, O. A. 1912 B, 167.  
 Scott, W. B. 1913 A, 362.  
 Taylor, W. P. 1911 A, 196.  
 Zittel and Schlosser 1911 A, 503.  
 1923 A, 593.
- Matthew and Cook 1909 A, 413, figs. 26, 27?  
 Cook, H. J. 1912 D, 45 (Neotragocerus).  
 1922 B, 15 (Neotragoceras).  
 Gidley, J. W. 1913 D, 3.  
 Matthew, W. D. 1918 A, 187, 222.  
 1923 A, 12.  
 1924 C, 68.  
 Merriam, J. C. 1917 A, 437.  
 1918 A, 526.  
 Scharff, R. F. 1911 A, 407 ("antelope").  
 Sinclair, W. J. 1915 A, 77, 94.  
 Taylor, W. P. 1911 A, 192.  
 Lower Pliocene (Lower Snake Creek); Nebraska.
- Neotragocerus lindgreni** Merriam.  
 Merriam, J. C. 1918 A, 526, fig. 2.  
 Hay, O. P. 1927 D, 267, 268.  
 Merriam, J. C. 1917 A, 432, 433 ("Tragocerus?").  
 Pleistocene (Idaho); Idaho.

TAUROTARAGUS Wagner. Type *Antilope oreas* Pallas = *A. oryx* Pallas.

- Wagner, J. A. 1855, suppl. Schreber's Säugethiere, v, 438.  
 Beppard, F. E. 1902 A, 316.  
 Camerano, L. 1915 B, 6, pl. iii, figs. 1-4.
- Carruccio, A. 1913 A, 77.  
 Flower and Lydekker 1891 A, 343 (Oreas).  
 Foote, J. S. 1916 A, 107.  
 Gidley, J. W. 1913 D, 2.

Joleaud, L. 1919 A, 711, fig. 9 (Oreas).

Knottnerus-Meyer, T. 1907 A, 138.

Leche, W. 1921 A, 68 (Oreas).

Lydekker, R. 1907 B, 34.

1914 A, 631.

1914 B, 207.

Osborn, H. F. 1910 B, 328, 432, 554 (Oreas).

Palmer, T. S. 1904 A, 665, 920.

Schlosser, M. 1903 I, 150, 152, 168, fig. 28.

1904 C, 80, 91.

Sclater and Thomas 1900, Book of Antilopes, iv, 198.

Scott, W. B. 1913 A, 202.

1916 A, 118 ("eland").

Trouessart, E. L. 1905 A, 733.

Weber and Abel 1928 A, 586, 587.

Winge, H. 1906 A, 119 (Oreas).

### **Taurotragus americanus** Gidley.

Gidley, J. W. 1913 D, 1, pl. i, fig. 2.

1913 B, 96.

1913 G, 50 ("eland").

1914 B, 18 ("eland").

1920 B, 283 ("antelope").

Hay, O. P. 1918 D, 461 ("eland").

1920 B, 113, pl. v, figs. 7-11.

1923 A, 497.

1924 D, 263, 264.

1928 C, 429.

Leighton, M. M. 1921 A, 513.

Lydekker, R. 1914 A, 631.

1914 B, 208.

Matchie, P. 1913 A, 258.

Matthew, W. D. 1925 D, 34 ("eland").

Pleistocene (Middle); Maryland; Illinois, Missouri.

### ILINGOCEROS Merriam, J. C. Type *I. alexandræ* Merriam.

Merriam, J. C. 1909 B, 319.

Chandler, A. C. 1916 A, 119.

Cook, H. J. 1922 B, 15.

Furlong, E. L. 1927 A, 174.

Haug, E. 1911 A, 1705 (Ilingoceros).

Hay, O. P. 1923 A, 15.

Joleaud, L. 1919 A, 711, fig. 9.

Lydekker, R. 1910 F, 660.

1914 B, 229.

Matthew, W. D. 1918 A, 219.

1926 B, 6.

Merriam, J. C. 1915 E, 233.

1917 A.

1919 A, 452.

Merriam and Stock 1928 A, 21.

Merriam, Stock, Moody 1925 A, 59.

Osborn, H. F. 1910 B, 338, 357, 554.

1912 G, 250.

1918 A, 24, 30, 33.

Peterson, O. A. 1912 B, 167.

Scott, W. B. 1913 A, 362.

Taylor, W. P. 1911 A, 196.

Zittel and Schlosser 1911 A, 504 (Ilingoceros).

1923 A, 595, 680 (Ilingoceros).

### **Ilingoceros alexandræ** Merriam.

Merriam, J. C. 1909 B, 320, figs. 1-6.

Gidley, J. W. 1913 D, 3.

Merriam, J. C. 1911 B, 211, 213, 214, 299, figs. 73, 79.

1917 A, 429.

Parks, W. A. 1925 C, 432 (Ilingoceros).

Pliocene (Thousand Creek); Nevada.

### **Ilingoceros schizoceros** Merriam.

Merriam, J. C. 1911 B, 211, 213, 214, 292; figs. 73-76.

1917 A, 429.

Pliocene (Thousand Creek); Nevada.

### **Ilingoceros** sp. indet.

Merriam, J. C. 1911 B, 301, fig. 80 (Form B?); Pliocene (Thousand Creek); Nevada.

1917 A, 428 (This genus?).

Merriam, Stock, Moody 1925 A, 59 (This genus or Sphenophalos). Pliocene (Rattlesnake); Oregon.

Stock, C. 1925 A, 21 (This genus?). Lower Pliocene (Rattlesnake); Oregon; (Eden); California.

### TRAGOCERUS Gaudry. Type *T. amalthæus* Gaudry.

Gaudry, A. 1861 C, C. R. Acad. Sci. Paris, LXX, 297-298.

Flower and Lydekker 1891 A, 349 (Tragoceros).

Gaudry, A. 1896 A, 185, fig. 181.

Hay, O. P. 1923 A, 8.

Matthew and Cook 1909 B, 197.

Merriam, J. C. 1917 A, 487.

Palmer, T. S. 1904 A, 684, 920.

### **Tragoceros?** sp. indet.

Merriam, J. C. 1911 B, 303 (Tragoceros? or Ilingoceros). Pliocene (Thousand Creek beds); Nevada.

### SPHENOPHALOS Merriam. Type *S. nevadanus* Merriam.

Merriam, J. C. 1909 B, 325.

Cook, H. J. 1922 B, 15.

Furlong, E. L. 1927 A, 174.

Haug, E. 1911 A, 1705.

Lydekker, R. 1910 F, 660.

1914 B, 229.

Matthew, W. D. 1918 A, 219.

Matthew, W. D. 1926 B, 6.

Merriam, J. C. 1911 B, 221, 291, 298.

1919 A.

Merriam, Stock, Moody 1916 A, 89.

1925 A, 59.

Osborn, H. F. 1910 B, 338, 357, 554.

1912 G, 250.



Osborn, H. F. 1918 A, 24, 33.

Peterson, O. A. 1912 B, 167.

Taylor, W. P. 1911 A, 196.

**Sphenophalos nevadanus** Merriam.

Merriam, J. C. 1909 B, 325, fig. 7.

Cook, H. J. 1922 B, 13.

Gidley, J. W. 1913 D, 3.

Merriam, J. C. 1911 B, 211, 213, 214, 285, figs 67, 70, 72.

1917 A, 428, 429.

Merriam and Stock 1928 A, 20, text-figs. 13, 14.

Parks, W. A. 1925 C, 432.

Stock, C. 1925 A, 18 (This species?).

Phocene (Thousand Creek); Nevada: (Rattlesnake); Oregon.

**Sphenophalos** sp. indet.

Merriam, J. C. 1911 B, figs. 68, 69, 71 (Sphenophalos, *Ilngoceros*).

1917 A, 425 (This genus?). Orinda; California.

Merriam, Stock, Moody 1925 A, 59, 90, figs. 44, 45 (May be *Ilngoceros*). Pliocene (Rattlesnake); Oregon. #

Stock, C. 1925 A, 20 (This genus?). Lower Phocene (Pinole-Orinda-Siesta); California.

CRANIOCERAS Matthew. Type *C. unicornis* Matthew.

Matthew, W. D. 1918 A, 223.

Cook, H. J. 1922 B, 15.

Matthew, W. D. 1924 C, 70, 206.

**Cranioceras unicornis** Matthew.

Matthew, W. D. 1918 A, 187, 223, figs. 19, 20.

1924 C, 68.

Upper Miocene (Lower Snake Creek); Nebraska

RUPICAPRINÆ.

Arlt, T. 1912 A, 744 (*Nemorhædus*).

Flower and Lydekker 1891 A, 349 ("rupicaprine section").

Knottnerus-Meyer, T. 1907 A, 48, 99, 123 (*Nemorhædus*).

Lydekker, R. 1913 B, 178.

Osborn, H. F. 1910 B, 554.

Schlosser, M. 1903 I.

Trouessart, E. L. 1905 A, 734.

Weber and Abel 1928 A, 587.

Zittel and Schlosser 1911 A, 500.

1923 A, 590.

**NEMORHEDUS** H. Smith. Species *Antilope sumatrensis* Shaw and *A. goral* Hardwicke.

Hay, O. P. 1902 A, 687 (*Nemorhædus*).

Beddard, F. E. 1902 A, 308, 326 (*Nemorhædus*).

Brown, A. E. 1904 B, 75 (*Nemorhædus*).

Camerano, L. 1916 B, 10, pl. vii, fig. 7 (*Nemorhædus*).

Grant, M. 1904 B, 198 (*Nemorhædus*).

Kampfen, P. N. 1905 A, 605 (*Nemorhædus*).

Knottnerus-Meyer, T. 1907 A, 48, 99, 124, pl. iv, fig. 29 (*Nemorhædus*).

Leunis and Ludwig 1883 A, 254 (*Nemorhædus*).

Lucas, F. A. 1901 A, 307 (*Nemorhædus*).

Lydekker, R. 1907 B, 29 (*Nemorhædus*).

1909 A, 940 (*Nemorhædus*).

1913 B, 202 (*Nemorhædus*).

Palmer, T. S. 1904 A, 446, 918.

Poock, R. L. 1908 A, 183.

Poock, R. L. 1908 B, 173.

Scharff, R. F. 1911 A, 83, 106 (*Nemorhædus*).

Schlosser, M. 1903 I, 169, fig. 31 (*Nemorhædus*).

1904 C, 98 (*Nemorhædus*).

Trouessart, E. L. 1905 A, 734 (*Nemorhædus*).

Weber, M. 1904 A, 675 (*Nemorhædus*).

Weber and Abel 1928 A, 587 (*Nemorhædus*).

Winge, H. 1906 A, 123 (*Nemorhædus*).

Zittel and Schlosser 1911 A, 500 (*Nemorhædus*).

1923 A, 591 (*Nemorhædus*)

**Nemorhedus palmeri** Cragin.

Hay, O. P. 1902 A, 687 (*Nemorhædus*).

Cragin, F. W. 1900 B, 219.

Hay, O. P. 1924 D, 144, 273, 275.

Pleistocene; Colorado.

**OREAMNOS** Rafinesque. Type *Mazama dorsata* Rafinesque.

Rafinesque, C. S. 1817, Amer. Monthly Mag., II, 44.

Adams, C. C. 1905 A, 60.

Allen, J. A. 1892 A (*Mazama*).

Arlt, T. 1907 D, 202 (*Haploceros*).

Diener, C. 1912 A, 218.

Elliot, D. G. 1901 A, 44 (*Oreamnus*).

Frech, F. 1906 A, 484.

Furlong, E. L. 1905 A, 186 (*Aploceros*).

Gidley, J. W. 1912 C, 20.

Grant, M. 1904 B, 198.

1905 A, 233, 236, figs.

Heilprin, A. 1837 A, 377 (*Aploceros*).

Knottnerus-Meyer, T. 1907 A, 76, 140, pl. v, fig. 35 (*Oreamnus*).

Leunis and Ludwig 1883 A, 254 (*Haploceros*).

Loomis, F. B. 1925 E, 591, 592, 593, 600, figs.

4, 6, 15, 16 (*Oreamnus*).

Lydekker, R. 1913 B, 217.

Merriam, C. H. 1892 A, 61 (*Mazama*).

Miller, G. S. 1912 B, 397.

1924 C, 498.

Osborn, H. F. 1905 I, 110.

1909 D, 87, 89 (*Haploceros*).

1910 B, 635.

Palmer, T. S. 1904 A, 478, 918.

Scharff, R. F. 1911 A, 106.

Sinclair, W. J. 1905 B, 150 (*Aploceros*).

Sinclair and Furlong 1904 A, 416 (*Haploceros*).

Stock and Furlong 1927 A, 423.

Trouessart, E. L. 1905 A, 735.  
 Weber and Abel 1928 A, 587.  
 Wright, R. R. 1883 A, 343 (Haplocerus).  
 Zittel and Schlosser 1911 A, 501 (Haploceros).  
 1923 A, 591.

**Oreamnos americanus** (Blainville).

Blainville, H. M. D. 1816, Bull. Soc. Philomath.  
 Paris, 80 (Rupicapra).  
 Baird, S. F. 1857 A, 671 (Aplocerus montanus).  
 Brown, A. E. 1904 B, 75 (O. montanus).  
 Diller, J. S. 1906 A, 11 (Haplocerus).  
 Elliot, D. G. 1901 A, 44, pls. xvii-xx (O. montanus).  
 Goddard, P. E. 1927 A, 68 ("mountain goat").  
 Giant, M. 1904 B, 198 (O. montanus).  
 Haug, E. 1911 A, 1873, 1887 (Ovis montanus).  
 Hay, O. P. 1927 D, 215.  
 Lobley, J. L. 1908 A, 195 (Haploceros montanus).  
 Lydekker, R. 1898 D, 4 ("rocky-mountain goat").  
 1907 B, 31 (O. montanus).  
 1913 B, 218 (O. americanus).  
 Merriam and Stock 1925 A, 10.  
 Miller, G. S. 1912 B, 398 (O. montanus).  
 1924 C, 498 (O. americanus).  
 Miller, L. H. 1912 A, 70 (Haplocerus montanus).  
 Ord, G. 1815, Guthrie's Geog., 2d Amer. ed.,  
 292, 309-310 (Ovis montanus).  
 Osborn, H. F. 1906 F, 217, figs. (O. montanus).  
 1910 B, 476, 483, 490 (O. montanus).  
 Palacký, J. 1903 B, 331 (Haplocerus montanus).

Baird, S. F. 1857 A, 664.  
 Hay, O. P. 1902 A, 687 (Caprinæ).  
 Abel, O. 1913 B, 741 (Ovicaprinæ).  
 Arldt, T. 1907 D, 670 (Ovidæ).  
 Blanford, W. T. 1901 A, 298 ("sheep," "goats").  
 Carus, J. V. 1875 A, 150 (Ovina).  
 Disselhorst, R. 1906 A, 324 ("ziege").  
 Duerst, J. U. 1902 B, 36 (Ovina); 38 (Caprina).  
 1903 B, 342 ("ovidæ").  
 Engelmann, O. 1910 A, 486 ("schaf").  
 Frassetto, F. 1903 A, 340 (Caprinæ).  
 Gervais, P. 1852 A, 73 (Capra).  
 Gray, J. E. 1821 A, 307 (Capridæ).  
 Hay, O. P. 1914 A, 287 (Caprinæ).  
 Hoernes, R. 1886 A, 680 (Ovinæ).  
 Kampfen, P. N. 1905 A, 606 (Caprovinæ).  
 Knottners-Meyer, T. 1907 A, 77 (Capridæ);  
 79, 100 (Caprinæ).  
 Kowalewsky, W. 1877 A, 148 (Ovina).

Scharff, R. F. 1911 A, 105 (O. montanus).  
 Scott, W. B. 1913 A, 202 (O. montanus).  
 Sinclair, W. J. 1904 A, 18 (Haplocerus montanus).

1905 B, 152, pl. xx, figs. 3, 4 (Aplocerus montanus).

Stock, C. 1925 A, 113 (O. americanus).

Trouessart, E. L. 1905 A, 735 (O. montanus).

Wright, R. R. 1883 A, 343 (Haplocerus montanus).

Recent; British Columbia, Washington, Oregon, Montana: Pleistocene (Potter Creek Cave); California.

**Oreamnos** sp. indet.

Furlong, E. L. 1904 A, 54 (Haplocerus). Pleistocene (Samwel Cave); California.

1906 A, 243 (Haplocerus). Pleistocene (Samwel Cave); California.

Hay, O. P. 1927 D, 214, 251. Pleistocene; California, Washington.

McConnell, R. G. 1905 A, 29. Pleistocene; Klondike, Canada.

McCormack, E. C. 1920 A, 16 (Ovis montana).

Matthew, W. D. 1902 F, 321 (Oreamnos). Pleistocene; Washington.

Miller, L. H. 1912 A, 73 (Haplocerus). Pleistocene (Samwel Cave); California.

Obalski, T. 1904 A, 216 ("mouton").

Osborn, H. F. 1910 B, 438, 439, 455, 466, 478.

Quackenbush, L. S. 1909 A, 126. Pleistocene; Klondike, Yukon.

Stock, C. 1925 A, 113. Pleistocene (cave); California: (Delight); Washington.

**OVINÆ Baird.**

Loomis, F. B. 1925 E, 591, 592, 593, 600, figs. 5, 6, 16 ("goats," "sheep").  
 Lydekker, R. 1910 C, 12 (Caprinæ).  
 1913 B, 72 (Caprinæ).  
 Matthew, W. D. 1915 A, 248, fig. 24 (Ovinæ).  
 1923 B, 968, 981, fig. 16 ("sheep").  
 Osborn, H. F. 1909 D, 86, 89 (Ovinæ).  
 1910 B, 554 (Caprinæ).  
 Owen, R. 1845 B, 528 (Ovidæ).  
 Roger, O. 1896 A, 243.  
 Schlosser, M. 1903 I, 160 (Ovidæ).  
 1904 C, 90 (Ovinæ).  
 Shitkow and Sabanjew 1909 A, 457 ("schafe").  
 Terra, P. 1911 A, 329.  
 Trouessart, E. L. 1905 A, 736 (Caprinæ).  
 Wallace, A. R. 1876 A, 11, 224 (Caprinæ).  
 Weber and Abel 1928 A, 583, 588 (Caprinæ).  
 Wherry, G. 1901 A, 252, 348 ("sheep," "goat").  
 1902 A, 973 (Caprinæ).  
 Zittel and Schlosser 1911 A, 500 (Ovicaprinæ).  
 1923 A, 591 (Ovicaprinæ).

**Ovis** Linnæus. Type *O. aries* Linnæus.

Hay, O. P. 1902 A, 687.  
 Adams, C. C. 1905 A, 60.  
 Agassiz, L. 1859 B, 186 ("sheep").  
 Allen, J. A. 1892 A.  
 1903 A.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1905 A.  
 Anderson, R. J. 1902 C, 785 ("sheep").

Atzkern, J. 1923 A, 127 ("schafe").  
 Aulmann, G. 1909 A, 68.  
 Beddard, F. E. 1902 A, 321.  
 Beecker, A. 1903 A, 596.  
 Bertelli, D. 1909 A, 166, figs. 7, 19.  
 Black, D. 1915 A, 347, fig. 11.  
 Blendinger, W. 1904 A, 459, figs. 1, 2-9.  
 Boas, J. E. V. 1884 B, 397 ("schaf").

- Bojanus, L. H. 1819 A, 1362, pl. xvi, fig. 1 ("schaf").  
 1824 A, 269, pl. xxi, figs. 9-20.  
 1824 B, 293, pls. xxiv, xxv.  
 1824 C, 697, pl. lviii, figs. 2, 3; pl. lix.
- Bolk, L. 1913 A, 87, fig. 67.
- Bradley, O. C. 1906 B, 530 ("sheep").
- Bronn, H. G. 1849 A, 708.
- Broom, R. 1926 A, 261 ("sheep").
- Brown, A. E. 1904 B, 68.
- Bugnion, E. 1901 A, 94 ("mouton").
- Camerano, L. 1915 B, 5, pl. i, figs. 3-5.  
 1916 B, 6, pl. iv, fig. 4; pl. v, fig. 9; pl. vi, fig. 8.
- Carus and Engelmann 1861 A, 1783.
- Claus, T. 1911 A, 320, 364, pls. i, ii, figs. 1-19.
- Cleland, J. 1836 B, 298 ("sheep").
- Cuvier, G. 1805 A.
- Dieulaufé and Herpin 1906 A, 247 ("mouton").
- Disselhorst, R. 1906 A, 325.
- Doran, A. H. G. 1878 A, 427, pl. lxi ("sheep").
- Duerst, J. U. 1902 B, 35.  
 1903 A, 361.  
 1908 A, 370.
- Eichwald, E. 1832 A, 865 ("schaf").
- Elliot, D. G. 1901 A, 46.
- Fawcett, E. 1917 A, 327.
- Foot, J. S. 1916 A, 102, 127, 135, pls. xi, xvi, xviii.  
 1921 A, 9, pl. ii, figs. 18, 19.
- Frassetto, F. 1903 A, 340.
- Frech, F. 1906 A, 434.
- Gaupp, E. 1899 A, 1014 ("schaf").
- Gervais, P. 1852 A, 75.  
 1859 A, 137.
- Gidley, J. W. 1912 C, 20.
- Giebel, C. G. 1883 A, pls. xxxii, xliva, lxxv, lxxxi.
- Goodsir, J. 1868 A, 54.
- Grant, M. 1904 B, 197.
- Grevé, C. 1900 A, 131.
- Hasse and Schwarck 1870 A, 134.
- Hensel, R. 1879 A, 555 ("schaf").
- Holmes, F. S. 1859 A, 184 ("sheep").
- Hrdlička, A. 1903 A, 374.
- Hue, E. 1907 A, pls. lxvi, lxvii, xc, cv, cxix, cxxxi, cxliii, clvi, clxxiii, clxxv.
- Huxley, T. H. 1859 D, 386, figs. 1, 4.
- Kampfen, P. N. 1905 A, 605.
- Kingsley, J. S. 1896 A, 137 ("sheep").
- Klaauw, C. J. 1924 B, 600.
- Klatt, B. 1912 A, 156 ("schaf").
- Köstlin, O. 1844 A.
- Kowarsik, R. 1913 A, 439.
- Kükenthal, W. 1908 B, 498, fig. 1 ("schaf").
- Leche, W. 1887 A, pl. xcv.
- Le Damany, P. 1906 B, 164 ("mouton").
- Leunis and Ludwig 1883 A, 248.
- Lewis, F. T. 1906 A, 507 ("sheep").
- Loomis, F. B. 1925 E, 600, figs. 15, 16.
- Lydekker, R. 1898 D, 149.  
 1907 B, 21.  
 1910 C, 12.  
 1913 B, 73.
- Magitot, E. 1875 A, 81 ("mouton").
- Matsumoto, H. 1926 E, 39, pls. xvi, xvii.
- Meckel, J. F. 1825 A.
- Merriam, C. H. 1892 A, 62.
- Miller, G. S. 1924 C, 495.
- Miyawaki, K. 1925 A, 177, figs. 1-5 ("schaf").
- Nehring, A. 1880 A.
- Osborn, H. F. 1910 B, 433, 474, 490, 554.
- Owen, R. 1848 B, 21, fig. 7.  
 1863 A, 897.
- Palmer, T. S. 1904 A, 490, 919.
- Paulli, S. 1900 A, 222, pl. xi; text-figs. 33-36 ("schaf").
- Perna, G. A. 122, 133, pl. v, figs. 15-17.
- Peter, K. 1924 B, 499, fig. 13 ("schaf").
- Pictet, F. J. 1853 A, 362.
- Pouchet and Chabry 1884 A, 151 ("mouton").
- Reichert, C. 1837 A, 219, pl. ix ("schaf").
- Retterer and Lelièvre 1910 B, 988 ("mouton").
- Retzius, A. 1837 A, 489.  
 1849 A, 667.
- Rhumbar, L. 1913 B, 89, figs. 9-11 ("lämmer").
- Rosenberg, A. 1873 A, 127 ("schaf").
- Rudolf, G. de M. 1922 A, 142, fig. 9 ("sheep").
- Salsensky, W. 1880 A, 420 ("schaf").
- Scharff, R. F. 1911 A, 80, 86.
- Schlosser, M. 1897 B, 20 ("schaf").  
 1899 T, 451 ("schaf").  
 1903 I, 160 ("schafe").
- Scott, W. B. 1896 D, 60 ("sheep").  
 1913 A, 419.  
 1917 A, 181 ("sheep").
- Shitkov and Sabanejew 1909 A, 457.
- Stadelmann, F. 1916 A, 114, pls. viii, ix.
- Stock and Furlong 1927 A, 423.
- Strecker, C. 1887 A, 314.
- Taschenberg, O. 1899 A, 4645.
- Thompson, A. 1907 A, 100, fig. 1.
- Toldt, C. 1905 A, 331 ("schaf").
- Tourneux, F., and J. P. 1912 A, 73, figs. 12-15 ("mouton").
- Trouessart, E. L. 1905 A, 740.
- Van Bemmelen, J. F. 1918 A, 571 ("sheep").
- Voit, M. 1923 A, 71, fig. 2 ("schaf").
- Weber, M. 1904 A, 631.
- Weber and Abel 1928 A, 327, 589, fig. 354.
- Weber and Burlet 1927 A.
- Wherry, G. 1902 A, 974.
- Wilder, B. 1872 B, 320.
- Winz, H. 1890 A, 648, pl. xxiv ("schaf").
- Zimmerman, A. 1912 A, 646.
- Zittel and Schlosser 1911 A, 500.  
 1923 A, 591, fig. 723.

### Ovis canadensis Shaw.

- Shaw, G. 1804, Naturalist's Misc., xv, 610.
- Allen, J. A. 1912 B, 9 (O. cervina).
- Baird, S. F. 1857 A, 673 (O. montana).
- Biddulph, J. 1885 A, 678 (O. montana).
- Brandt and Woldrich 1887 A, 111 (O. montana).
- Elliot, D. G. 1901 A, 46, pl. xxi (O. cervina).
- Fischer, J. B. 1829 A, 487 (Capra? columbiana).
- Foot, J. S. 1916 A, 135, pl. xviii.
- Giebel, C. G. 1878 B, 349 (O. montana).
- Grant, M. 1904 B, 198 (O. cervina).
- Grevé, C. 1900 A, 142 (O. montana).
- Grinnell, G. B. 1904 A, 271.  
 1912 A (O. cervina).

- Hornaday, W. T. 1901 A, 101, figs. (O. montana).
- Jones, J. C. 1928 A, 7 ("bighorn sheep").
- Lambe, L. M. 1912 B, 349 (O. montana).
- Lobley, J. L. 1908 A, 195.
- Lydekker, R. 1898 D, 204, pl. xvii; text-fig. 40.  
1907 B, 22.  
1913 B, 111.
- Miller, G. S. 1912 B, 395.  
1924 C, 495.
- Osborn, H. F. 1910 B, 474, 476, 490 (O. montana).
- Osgood, W. H. 1913 A, 57.
- Richardson, J. 1854 A, 87, pl. i (O. montana)
- Scott, W. B. 1913 A, 419.  
1917 A, 181.
- Trouessart, E. L. 1905 A, 741.
- Wright, R. R. 1883 A, 345 (O. montana).  
Recent; (including subspecies); in mountain regions from Alaska to British Columbia, south to Mexican Boundary and southwest Texas: Pleistocene; (Last Chance Creek); Yukon: Kowak (Clays); Alaska: (Delight) Washington.
- Ovis dalli Nelson.**
- Nelson, E. W. 1884, Proc. U. S. Nat. Mus., vii, 12.
- Allen, J. A. 1912 B, 27.
- Buddulph, J. 1885 A, 678 (O. montana dalli).
- Elliott, D. G. 1901 A, 47.
- Grant, M. 1904 B, 197.
- Lydekker, R. 1898 D, 219 (Subsp. O. canadensis).  
1913 B, 118 (O. canadensis dalli).
- Miller, G. S. 1912 B, 396.  
1924 C, 497.
- Quackenbush, L. S. 1909 A, 127 ("Ovis"). This species?
- Trouessart, E. L. 1905 A, 741.  
Recent; Alaska, Yukon: Pleistocene; Yukon.
- Ovis mamillaris Hildreth.**
- Hildreth, S. P. 1837 A, 82, figs. 19a, 19b.
- Hay, O. P. 1902 A, 687.  
1923 A, 70, 278.
- Lydekker, R. 1910 C, 310.  
Pleistocene or Recent; Ohio. Probably the domestic sheep.
- Ovis? scaphoceras (Cope).**
- Cope, E. D. 1894 H, 457 (Bos).
- Leidy, J. 1836 D, 275 (Bos sp.).
- Lucas, F. A. 1898, in Hill and Vaughan 1898 A, 252.  
1899 A, 756 ("Ovis," This genus?).
- Lydekker, R. 1898 B, 92 (Bos).  
1898 D, 92 (Bos).
- Rhoads, S. N. 1897 A, 500 (Bison).
- Scharff, R. F. 1911 A, 66 (Bison).
- Trouessart, E. L. 1897 A, 1356 (Bison).  
1905 A, 746 (Bison).  
Pleistocene; Nicaragua, Mexico, Texas.
- Ovis sp. indet.**
- Gilmore, C. W. 1908 A, 36.
- Hay, O. P. 1923 A, 337, 338, fig. 13. Pleistocene (Late); Illinois.
- McConnell, R. G. 1905 A, 29 ("mountain sheep"). Pleistocene; Klondike, Canada.

**AFTONIUS Hay. Type *A. calvini* Hay.**

- Hay, O. P. 1913 A, 6.  
1914 A, 287.
- Zittel and Schlosser 1923 A, 591, 680.
- Aftonius calvini Hay.**
- Hay, O. P. 1913 A, 6.
- Baker, F. C. 1920 A, 226, 243, 396.
- Calvin, S. 1909 B, 350, pl. xxiii, fig. 1 ("horn-core").
- Hay, O. P. 1914 A, 26, 287, pl. xxxiv, figs. 1, 2, 4, 5; text-fig. 95.  
1928 C, 425.  
Pleistocene (Aftonian); Iowa.

**OVI BOVINÆ GILL.**

- Gill, T. 1872 B, 9, 77.
- Abel, O. 1913 B, 746.
- Allen, J. A. 1914 A, 210 ("musk-ox").
- Aldt, T. 1912 A, 744.
- Gaudry, A. 1903 A, 553 ("boeufs musqués").
- Hay, O. P. 1912 D, 632.  
1914 A, 290.  
1924 D, 382.
- Knotnerus-Meyer, T. 1907 A, 84, 100, 142 (Ovibovina); 81, 100 (Ovibovidae).
- Kowarszik, R. 1911 A, 106.
- Lydekker, R. 1898 D, 141.
- Lydekker, R. 1913 B, 221.
- Matschie, P. 1898 A, 31.
- Matthew, W. D. 1915 A, 248, fig. 24.
- Miller, G. S. 1912 B, 394.
- Osborn, H. F. 1910 B, 554.
- Scott, W. B. 1916 A, 118 ("musk-oxen").
- Staudinger, W. 1908 A, 483 ("ovibovinen").
- Stock and Furlong 1927 A, 426.
- Weber, M. 1904 A, 680.
- Weber and Abel 1928 A, 591.
- Zittel and Schlosser 1911 A, 501.  
1923 A, 530.

**PREPTOCERAS Furlong. Type *P. sinclairi* Furlong.**

- Furlong, E. L. 1905 A, 163.  
1906 A, 244.  
1907 A, 394.
- Merriam, J. C. 1915 G, 101.
- Miller, L. H. 1912 A, 71, 74.  
1915 B, 71.
- Osborn, H. F. 1909 D, 89.
- Osborn, H. F. 1910 B, 466, 478, 554.
- Scharff, R. F. 1911 A, 154.
- Scott, W. B. 1913 A, 202, 203, 418, fig. 116.
- Stock, C. 1926 B, 404.
- Stock and Furlong 1927 A, 409-434.
- Zittel and Schlosser 1911 A, 501.  
1923 A, 592, 680, 681.

**Preptoceras mayfieldi** Troxell.

Troxell, E. L. 1915 B, 479, figs. 1, 2.

Freudenberg, W. 1922 A, 5.

Hay, O. P. 1927 D, 113.

Stock and Furlong 1927 A, 411.

Pleistocene (Early); Texas.

**Preptoceras sinclairi** Furlong.

Furlong, E. L. 1905 A, 164, pls. xxiv, xxv.

Freudenberg, W. 1921 A, 137 (This species?).

**EUCERATHERIUM** Sinclair and Furlong.

Sinclair and Furlong 1904 A, 411.

Allen, J. A. 1913 A, 169 (Uceratherium).

Diener, C. 1912 A, 216.

Furlong, E. L. 1905 A, 164.

1906 A, 244.

1907 A, 394.

Hay, O. P. 1918 B, 26.

Merriam, J. C. 1915 G, 101.

Miller, L. H. 1912 A, 74.

1915 B, 71.

Osborn, H. F. 1905 I, 110.

1909 D, 89.

1910 B, 440, 466, 476, 478, 554.

1912 G, 251.

Scharff, R. F. 1911 A, 154.

Scott, W. B. 1913 A, 202, 418.

Sinclair, W. J. 1904 A, 18.

1905 B, 150.

Stock, C. 1926 B, 404.

Stock and Furlong 1927 A, 409-434.

Zittel and Schlosser 1911 A, 501.

1923 A, 591, 682.

Freudenberg, W. 1922 A, 5 (This species?).

Furlong, E. L. 1906 A, 245.

Hay, O. P. 1927 D, 113, 214.

Merriam, J. C. 1906 E, 226 ("Preptoceras").

Miller, L. H. 1912 A, 73.

Stock, C. 1925 A, 113.

Stock and Furlong 1927 A, 410, pls. lx-lxvi; text-figs. 2-5 (This species?).

Troxell, E. L. 1915 B, 479, fig. 3.

Pleistocene (Samwel Cave); California, Mexico?.

**Type** *E. collinum* Sinclair and Furlong.**Euceratherium collinum** Furlong and Sinclair.

Furlong and Sinclair 1904 A, 18.

Furlong, E. L. 1904 A, 55.

1906 A, 243, 245.

Hay, O. P. 1927 D, 305.

Merriam, J. C. 1906 E, 226 ("Euceratherium").

Merriam and Stock 1925 A, 10.

Miller, L. H. 1912 A, 70, 73.

Putnam, F. W. 1906 A, 232 ("Euceratherium").

Sinclair, W. J. 1904 A, 18.

1905 B, 150, pl. xx, figs. 1, 2.

Sinclair and Furlong 1904 A, 412, pls. 1, li, text-fig. 1.

Stock, C. 1925 A, 113.

Pleistocene; (Caves); California.

**Euceratherium** sp. indet.

Furlong, E. L. 1904 A, 54. Pleistocene (Samwel Cave); California.

Stock and Furlong 1927 A, 413, text-fig. 1. Pleistocene; Gottville, California.

**GIDLEYA** Cossman. **Type** *Liops zuniensis* Gidley.

Cossman, M. 1907 A, 64.

Allen, J. A. 1913 A, 159, 216.

Gidley, J. W. 1906 B, 165, fig. 3 (*Liops*; pre-occupied).

**Gidleya zuniensis** (Gidley).

Gidley, J. W. 1906 B, 165, figs. 1-3. (*Liops*; pre-occupied).

Allen, J. A. 1913 A, 216.

Hay, O. P. 1922 A, 446.

1924 D, 378 (*Liops*, *Lissops*, *Gidleya*).

Staudinger, W. 1908 A, 481, 495.

Troxell, E. L. 1915 B, 479.

Pleistocene (Early); New Mexico.

**OVIPOS** Blainville. **Type** *O. moschatus* (Zimmerman).

Hay, O. P. 1902 A, 687.

Allen, J. A. 1913 A, 105.

Altmann, F. 1925 A, 108 (*Ovibus*).

Arlt, T. 1907 D, 670.

Boule, M. 1923 A, 176, 405 ("Musk-ox").

Depéret, C. 1912 A, 709.

Doran, A. H. G. 1878 A, 429, pl. lxi, figs. 32, 40.

Elliot, D. G. 1901 A, 48.

Frech, F. 1907 A, 313.

Furlong, E. L. 1905 A, 166.

Geinitz, E. 1903 A.

1904 A.

Gidley, J. W. 1912 C, 19.

Giebel, C. G. 1883 A, pls. xxxiii, lxi.

Grant, M. 1904 B, 196.

Hay, O. P. 1912 D, 639.

1914 A, 292.

Hay, O. P. 1926 E, 390 ("musk-ox").

Heilprin, A. 1887 A, 3/9, 380.

Hilzheimer, M. 1921 A, 142.

Hrdlička, A. 1920 A, 463, pl. v, fig. 3.

Hue, E. 1907 A, pls. lxx, xcii, cvi, cxx, cxlii, clxxiii, clxxiv.

Hull, E. 1914 A, 612, 616 ("musk-ox").

Kampfen, P. N. 1905 A, 605.

Knottneus-Meyer, T. 1907 A, 81, 84, 143, pl. vi, fig. 40.

1911 A, 16.

Kobelt, W. 1900 A, 61.

Kowarz, R. 1908 A, 616.

1910 A, 90.

1911 A, 107 (*Ovibus*, *Bovovis*).

1912 A, 505.

Kukuk, P. 1913 A, 596.

- Leunis and Ludwig 1883 A, 248.  
 Loomis, F. B. 1925 E, 600, figs. 15, 16.  
 Lydekker, R. 1898 D, 139.  
     1910 E, 352 ("musk-oxen").  
     1913 A, 7 (Ovibos, Bosovis, Bovovis).  
     1913 B, 222.  
     1925 A, 322.  
 Lyon, M. W. 1925 A, 322.  
 Matschie, P. 1896 A, 250 ("moschusochse").  
     1898 A, 30.  
     1901 A, 308.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 394.  
     1924 C, 494.  
 Nathorst, A. G. 1901 A, 5, figs. 3, 4.  
 Osborn, H. F. 1909 D, 87, 89.  
     1910 A, 214.  
     1910 B, 626.  
     1912 G, 251.  
 Palmer, T. S. 1904 A, 490, 918.  
 Scharff, R. F. 1911 A, 8, 80, 154.  
 Schlosser, M. 1903 I, 155.  
 Schwarz, E. 1924 A, 421 ("musk-ox").  
 Scott, W. B. 1913 A, 202, 208, 362, 418.  
     1917 A, 120, 130 ("musk-ox").  
 Staudinger, W. 1908 A, 481.  
 Stock and Furlong 1927 A, 414, 426  
 Trouessart, E. L. 1905 A, 742.  
 Wallace, A. R. 1876 A, i, 130; ii, 224, 225  
 Weber, M. 1904 A, 680.  
 Weber and Abel 1928 A, 591.  
 Wright, R. R. 1883 A, 343, 351.  
 Zittel and Schlosser 1911 A, 501.  
     1923 A, 591, 682.
- Ovibos appalachicolus Rhoads.**  
 Hay, O. P. 1902 A, 687.  
 Allen, J. A. 1913 A, 203.  
 Hay, O. P. 1923 A, 249 (Bison).  
 Osgood, W. H. 1905 A, 181.  
 Rhoads, S. N. 1903 A, 239.  
 Staudinger, W. 1908 A, 481, 494.  
     Pleistocene; Pennsylvania.
- Ovibos moschatus (Zimmerman).**  
 Hay, O. P. 1902 A, 688.  
 Abel, O. 1922 C, 45, fig. 46.  
 Adams, A. Leith 1879 A, 116 ("musk-ox").  
 Alden and Leighton 1917 A, 134  
 Allen, J. A. 1901 A, 69, pl. xii; text-figs. 2, 4, 7.  
     1912 A, 720.  
     1913 A, 105.  
     1914 A, 210.  
 Arldt, T. 1907 D, 605.  
 Baker, F. C. 1920 A, 465.  
 Beddard, F. E. 1902 A, 327.  
 Bell, R. 1898 A, 373 ("musk-ox").  
 Bensley, B. A. 1923 A, 4.  
 Brandt and Woldrich 1887 A, 112.  
 Brower, C. D. 1911 A, 754 ("musk-ox").  
 Brown, A. E. 1904 B, 73.  
 Brown, B. 1908 A, 203 ("Ovibos").  
 Chadbourne, P. A. 1871 A ("musk-ox" This species?).  
 Conwentz, — 1900 A, 427.  
 Cuvier, G. 1825 A, iv, 133, 140, 155, pl. x, figs. 15-17; pl. xii, figs. 9, 10 (Bos moschatus).  
 Dall, W. H. 1870 A, 238 ("musk-ox").  
     1870 B, 136 ("musk-ox").  
     1896 A, 854.  
 Dall and Harris 1892 A, 264.  
 Dawkins, W. B. 1885 A, 242, fig.  
 Dawson, G. M. 1899 A, 19.  
 Dawson, J. W. 1894 D, 4.  
 Diener, C. 1912 A, 218.  
 Doran, A. H. G. 1878 A, 429, pl. lxi.  
 Elliot, D. G. 1901 A, 48, pl. xxii.  
 Fielden, H. W. 1877 A, 488.  
 Fielden and De Rance 1878 A, 566.  
 Fischer, J. B. 1829 A, 494 (Bos).  
 Foote, J. S. 1916 A, 107, pl. xii.  
 Foster, J. W. 1873 A, 85 ("musk-ox").  
 Frech, F. 1906 A, 473.  
 Frech and Gernitz 1903 A, 36.  
 Geike, J. 1914 A, 325 ("musk-ox").  
 Gervais, P. 1859 A, 365.  
 Giebel, C. G. 1883 A, pl. lxi (Bos).  
 Gilmore, C. W. 1903 A, 35.  
 Girtanner, A. 1901 A, 120-146.  
 Goddard, P. E. 1927 A, 68 ("musk-ox").  
 Grant, M. 1904 B, 196  
 Grévy, C. 1901 A, 371.  
 Harlé, E. 1901 A, 455 ("bœuf musqué").  
 Haug, E. 1911 A, 1873, 1887.  
 Hay, O. P. 1912 B, 8.  
     1912 D, 641, pl. ix.  
     1914 A, 293, pl. xxxvi, figs. 1-3.  
     1920 B, 126.  
     1923 A, 493.  
     1924 D, 382.  
     1927 D, 284.  
 Hornaday, W. T. 1911 A, 754.  
 Kobelt, W. 1900 A, 61, pl. vii, text-fig. 1.  
 Koken, E. 1893 B, 596  
 Kowarszik, R. 1903 A, 616.  
     1909 A, 857.  
     1910 A, 89, pl. i; text-figs. 1-16.  
     1911 A, 106.  
     1912 A, pls. i, ii.  
     1913 B, 757.  
 Lambe, L. M. 1904 C, 31, 39, 51.  
     1907 A, 15 (This species?).  
     1908 B, 110 (This species?).  
     1912 A, 14.  
 Lartet, E. 1865 A, 474.  
 Lobley, J. L. 1908 A, 195.  
 Lydekker, R. 1898 D, 142, pl. xi.  
     1907 B, 31, fig. 12.  
     1913 B, 224.  
 Matschie, P. 1901 A, 308.  
 Miller, G. S. 1912 B, 394.  
     1924 C, 494.  
 Moreau, L. J. 1900 A, 115 ("bœuf-musqué").  
 Murdoch, J. 1892 A, 56.  
 Nehring, A. 1880 A.  
 Newton, E. T. 1891 A, 22.  
 Obalski, T. 1904 A, 216 ("bœuf-musqué").  
 Osborn, H. F. 1910 B, 438, 490, 492.  
     1916 B, 542.  
 Osgood, W. H. 1905 A, 184, pl. xxxvii, fig. 1; pl. xxxviii, fig. 1, pl. xxxix.  
 Peabody, C. 1913 A, 4 ("musk-ox").  
 Putnam, F. W. 1900 A, 11 ("musk-ox").  
     1911 A, vi ("musk-ox").  
     1911 B, 248 ("musk-ox").

- Quackenbush, L. S. 1909 A, 127.  
 Rhoads, S. N. 1895 A, 247.  
     1903 A, 239.  
 Römer, F. 1907 A, 64.  
 Scharff, R. F. 1907 A, 124 ("musk-ox").  
     1911 A, 6.  
 Scott, W. B. 1913 A, 208.  
 Soergel, W. 1913 A, 103 (Pseovibos).  
 Staudinger, W. 1908 A, 481.  
 Stefánsson, V. 1912 A, 720 ("musk-ox").  
 Stehlin, H. G. 1916 A, 93.  
 Stejneger, L. 1901 B, 92.  
     1928 A, 157 ("musk-ox").  
 Taschenberg, O. 1899 A, 4644.  
 Trouessart, E. L. 1905 A, 742.  
 Volk, E. 1911 A, 111, pl. lxxxvii, fig. 1 (Bos).  
     1912 A, 185 ("musk-ox").  
 Wanderer, K. 1910 A, 83.  
 Webster, F. S. 893 A, 68, fig.  
 Wilson, T. 1901 A, 333.  
 Winchell, N. H. 1910 A, 419, pl. xi (O. cavi-  
     frons).  
 Winge, H. 1904 A, 286.  
 Wissler, C. 1916 A, 236 ("musk-ox." This  
     genus?).  
 Woodward, A. S. 1898 B, 373.

**Boötherium** Leidy. Type *Bos bombifrons* Harlan.

- Leidy, J. 1852 F, 71.  
 Hay, O. P. 1902 A, 687 (Ovibos, part).  
 Allen, J. A. 1913 A, 159, 209.  
 Bunsley, B. A. 1923 A, 9.  
 Hay, O. P. 1910 D, 372.  
     1912 D, 632.  
     1915 A, 527.  
     1923 A, 14, 96.  
 Kowarszik, R. 1912 A, 559.  
 Osgood, W. H. 1905 A, 81.  
 Palmer, T. S. 1904 A, 139, 915.  
 Scharff, R. F. 1911 A, 7, 154.  
 Staudinger, W. 1908 A, 495.  
 Wallace, A. R. 1876 A, II, 225.  
 Zittel and Schlosser 1911 A, 501 (Syn. of Ovi-  
     bos).  
     1923 A, 591 (Syn. of Ovibos).

**Boötherium bombifrons** Leidy.

- Hay, O. P. 1902 A, 687 (Ovibos).  
 Agassiz, L. 1851 B, 179 (Bos).  
 Allen, J. A. 1913 A, 209, fig. 45.  
 Baker, F. C. 1920 A, 315, 341, 396.  
 Cooper, Smith, and Dekay 1831 A, 371 (Bos).  
 Fischer, J. B. 1829 A, 498 (Bos).  
 Foster, J. W. 1869 A, 238,, 254.  
     1873 A, 87 (Ovibos).  
 Gervais, P. 1859 A, 365 (Bos).  
 Godman, J. D. 1860 A, II, 266, pl. ("Wistar's  
     fossil ox").  
 Hay, O. P. 1912 D, 633, pl. viii.  
     1914 A, 291, pl. xxxv; text-fig. 96.  
     1923 A, 367.

- Woodward, A. S. 1923 C, 47.  
 Woodworth, J. B. 1911 A, 273 ("musk-ox").  
 Wright, G. F. 1911 B, 675 ("musk-ox").  
     1911 C, 42 ("musk-ox").  
 Wright, R. R. 1833 A, 351, fig. 171.  
     Recent; Arctic regions of northeast America  
     and Greenland: Pleistocene; Grinnell Land,  
     New Jersey?, Ohio, Indiana, Colorado?, Iowa,  
     Nebraska, Minnesota, South Dakota, Alberta?.

**Ovibos proximus** Bunsley.

- Bunsley, B. A. 1923 A, 1-11, pls. i, II.  
     Pleistocene (Late); Ontario.

**Ovibos yukonensis** Gidley.

- Gidley, J. W. 1908 A, 681, pls. lvii, lviii; text-  
     fig. 1.  
 Allen, J. A. 1913 A, 201.  
 Bunsley, B. A. 1923 A, 4.  
 Diener, C. 1912 A, 218.  
 Haug, E. 1911 A, 1873.  
 Osborn, H. F. 1910 B, 490.  
 Quackenbush, L. S. 1909 A, 92, 127.  
 Wanderer, K. 1910 A, 84 (Syn. of O. m. macken-  
     zianus).  
     Pleistocene; Yukon.

- Holland, W. J. 1919 A, 39 ("Boötherium").

- Kowarszik, R. 1909 A, 859.  
     1912 A, 560.

- Lydekker, R. 1898 D, 148 (Ovibos).  
 Osborn, H. F. 1910 B, 490.  
 Osgood, W. H. 1905 A, 180, 181, pl. xxxix, fig.  
     2; pl. xli, fig. 2; pl. xlii, fig. 2.  
 Peterson, O. A. 1926 A, 258, pl. xix, figs. 1-13;  
     pl. xx, figs. 1-8; pl. xx (This species?).  
 Quackenbush, L. S. 1909 A, 127.  
 Rhoads, S. N. 1895 A, 247 (Ovibos).  
 Ruschenberger and Tryon 1879 A, 14.  
 Scharff, R. F. 1911 A, 80, 154.  
 Staudinger, W. 1908 A, 481, 494, 495.  
 Trouessart, E. L. 1905 A, 742 (Ovibos).  
     Pleistocene (Middle); Kentucky.

**Boötherium nivicolens** Hay.

- Hay, O. P. 1915 A, 523, pl. xxxi, fig. 1.  
     Pleistocene; Alaska.

**Boötherium sargenti** Gidley.

- Gidley, J. W. 1908 A, 683, pl. lix.  
 Baker, F. C. 1920 A, 455.  
 Hay, O. P. 1910 D, 372.  
     1914 A, 304.  
     1915 A, 525, pl. xxxi, fig. 2.  
     1923 A, 83, 331.  
     Pleistocene (Late Wisconsin); Michigan.

**Boötherium** sp. indet.

- Hay, O. P. 1923 A, 252 (This genus?). Pleisto-  
     cene (Late Wisconsin); Illinois.

**SYMOS** Osgood. Type *S. tyrelli* Osgood.

- Osgood, W. H. 1905 D, 223.  
 Allen, J. A. 1913 A, 159, 169, 213.  
 Bunsley, B. A. 1923 A, 5.  
 Falconer, H. 1863 A, 62 (Boötherium).

- Hay, O. P. 1910 D, 372.  
     1912 D, 634.  
     1914 A, 293.  
     1926 E, 390 ("musk-oxen").

- Matthew, W. D. 1915 K, 403.  
 Osborn, H. F. 1909 D, 90.  
     1910 B, 487, 488, 490, 554.  
 Osgood, W. H. 1905 A, 174 (Scaphoceros, pre-occupied).  
 Scharff, R. F. 1911 A, 153, 154, 155.  
 Scott, W. B. 1913 A, 208, 362, 418.  
 Zittel and Schlosser 1911 A, 501 (Syn. of *Ovibos*).  
     1923 A, 591, 681 (Syn. of *Ovibos*).

### ***Symbos australis* B. Brown.**

- Brown, B. 1908 A, 203, pl. xxii.  
 Haug, E. 1911 A, 1887.  
 Hay, O. P. 1914 A, 32.  
     1920 B, 125.  
     1924 D, 178, 251.  
 Osborn, H. F. 1910 B, 483.  
     Pleistocene (Middle); Arkansas.

### ***Symbos cavifrons* (Leidy).**

- Hay, O. P. 1902 A, 687 (*Ovibos*).  
 Allen, J. A. 1913 A, 214, pls. xvii, xviii.  
 Baker, F. C. 1920 A, 473.  
 Bradley, F. H. 1870 A, 229 ("Boötherium." This species?).  
 Brown, B. 1908 A, 202.  
 Calvin, S. 1897 A, 19 (*Ovibos*).  
 Case, E. C. 1915 B, 1, pls. i, ii.  
 Dall, W. H. 1896 A, 854 (*Ovibos*).  
 Dall and Harris 1892 A, 264 (*Ovibos*).  
 Dawkins, W. B. 1885 A, 243 (*Ovibos*).  
 Foster, J. W. 1869 A, 254 (*Boötherium*).  
     1873 A, 87 (*Ovibos*).  
 Fuller, M. L. 1912 A, 77 (*Boötherium bombifrons*).  
 Gervais, P. 1859 A, 365 (Bos).  
 Gilbert, G. K. 1890 A, 211, 305 ("musk-ox").  
 Gilmore, C. W. 1908 A, 35 (*Ovibos maximus*).  
     1918 B, 59.  
 Hatcher, J. B. 1902 E, 707, 709.  
 Hay, O. P. 1910 D, 372.  
     1912 B, 9.  
     1912 D, 635, text-figs. 49, 50.  
     1914 A, 42, 298, pl. xxxvi, fig. 4; pl. xxxvii, fig. 3; text-figs. 97-99.  
     1918 B, 22.  
     1920 B, 125.  
     1923 A, 496.  
     1924 D, 384 (*Symbos*, *Ovibos*).  
     1927 C, 282 ("musk-ox").  
     1927 D, 112, 278, pl. i, fig. 3.  
     1928 C, 425, 428, 429.  
 Keyes, C. R. 1889 A, 121 (*Ovibos*).  
 Kowarik, R. 1909 A, 859 (*Boötherium*).  
     1912 A, 560 (*Boötherium*).  
 Lydekker, R. 1898 D, 148 (Syn. of *Ovibos bombifrons*).  
 Lyon, M. W. 1925 A, 321, fig. 1.

- McGee, W. J. 1902 A, 200 (*Ovibos*).  
 Moodie, R. L. 1923 B, 129, pl. xxvi.  
 Osgood, W. H. 1905 A, 180, pl. xl, fig. 1; pl. xli, fig. 1 (*Scaphoceros*).  
     1905 D, 224.  
 Rhoads, S. N. 1895 A, 245 (*Ovibos*).  
 Richardson, J. 1854 A, 25, pl. xi, fig. 2-4 (*Ovibos maximus*).  
 Ruschenberger and Tryon 1879 A, 14 (*Boötherium*).  
 Shaler, N. S. 1877 A, 197 (*Ovibos*).  
 Shimek, B. 1902 A, 285 (*Boötherium*).  
 Staudinger, W. 1908 A, 481, 495.  
 Tilton, J. L. 1915 A, 236.  
 Trouessart, E. L. 1905 A, 742 (*Ovibos*).  
 Udden, J. A. 1901 A, 361.  
 Winchell, N. H. 1907 A, 164 (*Ovibos*).  
 Wright, G. F. 1905 A, 18 ("musk-ox." This species).  
     1911 A, 282 ("musk-ox." This species?).  
     Pleistocene; Oklahoma, Missouri, Illinois, Kentucky, Kansas, Iowa, Utah, Ohio, Michigan, Indiana, Alaska.

### ***Symbos promptus* Hay.**

- Hay, O. P. 1920 B, 115, 125, pl. vi, figs. 9, 10; pl. viii, figs. 1-6.  
     1923 A, 254.  
     1924 D, 178, 254, 255.  
 Leighton, M. M. 1921 A, 513.  
     Pleistocene (Middle); Oklahoma, Illinois?

### ***Symbos tyrrelli* Osgood.**

- Osgood, W. H. 1905 A, 173, pl. xxvii, fig. 2; pl. xxxviii, fig. 2; pl. xxxix, fig. 1; pl. xl, fig. 2; pl. xlii, fig. 1 (*Scaphoceros*).  
 Allen, J. A. 1913 A, 215.  
 Bensley, B. A. 1923 A, 6 (*S. tyrrelli*).  
 Dall, W. H. 1868 A, 35 ("musk-ox." This species?).  
 Diener, C. 1912 A, 218.  
 Gilmore, C. W. 1908 A, 34.  
 Haug, E. 1911 A, 1873 (*O. tyrrelli*).  
 Hay, O. P. 1914 A, 298, 302, pl. xxxvii, figs. 1, 2.  
 Lambe, L. M. 1912 A, 14.  
     1917 E, 295.  
 Osgood, W. H. 1905 C, 788 ("extinct musk-ox").  
     1905 D, 224.  
 Quackenbush, L. S. 1909 A, 127 (*Ovibos*).  
 Scharff, R. F. 1911 A, 80.  
 Staudinger, W. 1908 A, 481.  
     Pleistocene; Alaska.
- ### ***Symbos* sp. indet.**
- Hay, O. P. 1923 A, 68, 184, 248. Pleistocene; Pennsylvania.  
     1924 D, 179. Pleistocene; Iowa.  
 Tilton, J. L. 1910, 950. Pleistocene; Iowa.

## BOVINÆ.

- Hay, O. P. 1902 A, 688.  
 Abel, O. 1913 B, 746.  
     1914 A, 184.  
     1919 A, 815 (*Cavicornia*).  
 Adam, W. 1854 A, 237 ("bovinæ").  
 Arldt, T. 1907 D, 256 (*Bisoninæ*).  
     1912 A, 744 (*Bisoninæ*).

- Auerbach, M. 1908 A, 5.  
 Bonaparte, C. L. 1832 A, 291 (*Bovina*).  
 Cuvier, G. 1825 A, iv, 107-165, pls. x-xii ("bovæ").  
 Duerst, J. U. 1902 B, 9 ("rind").  
     1903 B, 342 ("bovidæ").  
     1908 A, 359.  
 Gadow, H. 1902 A, 220.



- Hay, O. P. 1912 D, 644.  
1914 A, 308.  
Hoernes, R. 1886 A, 680.  
Kampfen, P. N. 1905 A, 606.  
Knottnerus-Meyer, T. 1907 A, 87, 89, 145 (Bovinae); 144 (Bisontinae).  
La Baume, W. 1909 A, 45.  
Lydekker, R. 1898 D, 3.  
1913 B, 11.  
Major, C. J. F. 1901 B, 243.  
Matsumoto, H. 1918 D, 83 ("bisontines").  
Matthew, W. D. 1915 A, 248, fig. 24
- Matthew, W. D. 1928 B, 968, 981, fig. 16 ("cattle").  
Nopcsa, F. 1926 A, 645.  
Osborn, H. F. 1909 D, 88.  
1910 B, 255, 311, 329, 555.  
Röse, C. 1897 A, 54, fig. 20 (Bos).  
Schlosser, M. 1903 I, 172 ("bovinen").  
Weber, M. 1904 A, 677.  
Weber and Abel 1928 A, 583, 591.  
Wherry, G. 1901 A, 348 ("oxen").  
Zittel and Schlosser 1911 A, 504.  
1923 A, 595.

BISON H. Smith. Type *Bos bison* Linnæus.

- Hay, O. P. 1902 A, 688.  
Abel, O. 1912 F, 663.  
Allen, G. M. 1920 B, 161.  
Allen, J. A. 1892 A.  
Altmann, F. 1925 A, 108.  
Arlt, T. 1907 D, 200.  
Auerbach, M. 1908 A, 8.  
Baker, F. C. 1920 A, 455.  
Beddard, F. E. 1902 A, 318.  
Beyer, H. 1908 A, 81 ("bchse").  
Boas, J. E. V. 1884 B, 396 ("rind").  
Brauer, A. 1914 A, 282.  
Cope, E. D. 1880 U, 158 (Bos).  
1895 G, 596 (Bos).  
Depéret, C. 1912 A, 709.  
De Stefani, C. 1921 A, 258.  
Diener, C. 1912 A, 216 ("bisonten").  
Elliot, D. G. 1901 A, 48.  
Filatov, D. 1912 A.  
Foote, J. S. 1916 A, 128, pl. xvi.  
Frech, F. 1906 A, 479.  
Gaudry, A. 1875 D, 1282 ("bisons").  
Geike, J. 1914 A, 320.  
Geinitz, E. 1903 A.  
1904 A.  
Gidley, J. W. 1912 C, 19 ("bisons").  
1913, in Matson and Stanford 1913 A, 143.  
Gilmore, C. W. 1908 A, 34.  
Grant, M. 1904 B, 196.  
Gregory, W. K. 1912 F, 288.  
Hay, O. P. 1912 B, 13.  
1912 D, 645.  
1913 C, 162.  
1914 A, 309.  
1917 I, 212.  
1918 B, 10, 13.  
1923 A, 480.  
1925 D, 245.  
1927 E, 77 ("bisons").  
Heilprin, A. 1887 A, 379.  
Hensel, R. 1879 A, 555 ("rind").  
Hilsheimer, M. 1909 A, 241.  
1910 A, 136.  
1910 B, 42.  
1920 A, 44, 77.  
1921 B, 1.  
Hrdlička, A. 1920 A, 464.  
Hull, E. 1914 A, 618.  
Kingsbury, B. F. 1926 A, 102 ("ox").  
Knottnerus-Meyer, T. 1907 A, 89, 145, fig.  
1910 A, 589.  
La Baume, W. 1909 A, 45, 50.  
Leunis and Ludwig 1883 A, 246.
- Lindgren, W. 1911 A, 52 (Bos).  
Lydekker, R. 1898 D, 50.  
1913 B, 34.  
Manigault, G. E. 1887 A, 130 ("bison").  
Matsumoto, H. 1918 D, 83.  
Matthew, W. D. 1915 A, 250.  
1915 K, 410 ("bisons").  
1924 E, 748.  
Matthew and Cook 1909 A, 367.  
1909 B, 197.  
Meckel, J. F. 1825 A.  
Merriam, C. H. 1892 A, 62.  
Merriam, J. C. 1906 D, 249.  
1918 D, 519.  
Meunier, S. 1903 A, 775 ("bisons").  
Miller, G. S. 1912 B, 394.  
1924 C, 494.  
Osborn, H. F. 1909 D, 87, 89.  
1910 B, 607.  
1912 G, 251.  
1916 B, 536.  
Owen, R. 1868 A, 367.  
Palacký, J. 1903 B, 318.  
Palmer, T. S. 1904 A, 187, 915.  
Pavlov, W. 1906 A, 200.  
1906 B, 53.  
Roberts, F. H. H. 1927 A, xiv ("buffalo").  
Sauvage, H. E. 1899 C, 148.  
Schlosser, M. 1903 H, 146.  
Schmidt, E. 1872 A, ("buffel").  
Scott, W. B. 1913 A, 202, 362, 420, 677.  
1916 A, 118 ("bison").  
1917 A, 132.  
Seton, E. T. 1909 A, 247.  
Shimek, B. 1910 A, 135 (Bos).  
Spencer, J. W. 1898 A, 27 ("bison").  
Strecker, C. 1887 A, 312.  
Trouessart, E. L. 1905 A, 745.  
Tscherski, J. D. 1892 A, 75.  
Troxell, E. L. 1917 C, 212.  
Upham, W. 1902 A, 149 ("bison").  
1903 C, 22679 ("bison").  
Virchow, H. 1910 F, 285 ("rind").  
1910 G, 269 ("rind").  
Wallace, A. R. 1876 A, II, 222, 225.  
Weber, M. 1904 A, 679.  
Weber and Abel 1928 A, 592, 595.  
Werth, E. 1917 A, 248.  
Wilder, B. 1872 B, 320 (Bos).  
Winchell, N. H. 1917 A, 133 (Bos).  
Winge, E. 1906 A, 125.  
Wright, G. F. 1911 B, 744 ("bison").  
Wright, R. R. 1883 A, 315.

Yermoloff, A. 1907 A, 278.  
Zittel and Schlosser 1911 A, 505.  
1923 A, 595, 680, 681.

### **Bison alleni Marsh.**

Hay, O. P. 1902 A, 688.  
Baker, F. C. 1920 A, 455.  
Beddard, F. E. 1902 A, 319.  
Cook, H. J. 1928 A, 36.  
Espinosa, L. 1902 A, 26, pl. opp. p. 8 ("Bos").  
Gidley, J. W. 1924 A, 70 (B. sp.).  
Gilmore, C. W. 1908 A, 33, pl. xii.  
Haug, E. 1911 A, 1873, 1886.  
Hay, O. P. 1913 C, 182, pl. xv, fig. 3; pls. xvi, xvii; text-figs. 7-9.  
1914 A, 326, pl. xli, text-fig. 103.  
1919 D, 364.  
1923 A, 256.  
1923 C, 3.  
1924 D, 374 (B. alleni); 95 (B. cramptonus).  
1927 D, 302, 307.

Hilzheimer, M. 1910 A, 145.  
1920 A, 60.

Holmes, W. H. 1903 A, 244 ("bison." This species?).

King, C. 1878 A, 494 (B. latifrons. This species?).

Lambe, L. M. 1917 E, 295.

Lull, R. S. 1921 B, 167.

Lydekker, R. 1912 D, 261 (Bos).

Matsumoto, H., 1918 D, 101.

McClung, C. E. 1905 A, 158.

McConnell, R. G. 1901 A, 185 (B. laticornis. This species?).

McGee, W. J. 1888 A, 27 ("ox." This species?).

Martin, H. T. 1924 A, 273, pl. xxvi, fig. 1; pl. xxvii, figs. 4, 4a (B. willistoni).

Mudge, B. F. 1877 A, 10 (B. latifrons).

Osborn, H. F. 1910 B, 464, 481, 483, 490.

Palacky, J. 1903 B, 318.

Quackenbush, L. S. 1909 A, 127, pl. xvii.

Richardson, J. 1854 A, 35, pl. xiii, fig. 3 (B. priscus?).

Scharff, R. F. 1911 A, 66, 80.

Shuler, E. W. 1923 A, 333 ("bison." This species?).

Soergel, W. 1921 A, 10, text-fig. 2 (B. latifrons).

Trouessart, E. L. 1905 A, 745.

Pleistocene; Kansas, Texas, Idaho, California, Nevada, Alaska, Yukon, Ontario.

### **Bison antiquus Leidy.**

Hay, O. P. 1902 A, 688.

Abel, O. 1926 B, 238.

Archer, W. J. 1918 B, 13 ("bison").

Baker, F. C. 1920 A, 455.

Beddard, F. E. 1902 A, 319.

Chandler, A. C. 1916 B, 121; figs. 1-4, 7-12.

1916 D, 170.

Condon, T. 1871 A, 470 ("broad-faced ox").

1902 A, 153 (B. latifrons).

1910 A, 130, pl. xxix (B. latifrons).

Cooper, J. G. 1875 A, 390 (B. latifrons).

Foster, J. W. 1869 A, 254.

1873 A, 89.

Frech, F. 1906 A, 479.

Frech and Geinitz 1908 A, 36.

Gilbert, J. Z. 1910 B, 25, 36, fig. (Bos).

Haug, E. 1911 A, 1887.

Hay, O. P. 1912 D, 649, text-figs. 50, 51.

1913 C, 164, text-figs. 1-3.

1914 A, 309, 317, text-figs. 100, 101.

1923 A, 480.

1924 D, 189, 196.

1926 F, 426 ("bisons").

1927 D, 302.

Holmes, W. H. 1901 A, 423 ("bison." This species?).

La Baume, W. 1909 A, 57.

Lawson, A. 1914 A, 15.

Lundgren, W. 1911 A, 51 (Bos latifrons).

Lydekker, R. 1898 D, 61 (Syn. of Bos priscus).

1912 D, 260 (Bos).

McClung, C. E. 1905 A, 158.

McCornack, E. C. 1920 A, 16, 19.

Merrim, J. C. 1908 D, 473 ("bison").

1909 A, 293.

1909 C, 12, fig. ("bison").

1914 D, 15.

1915 G, 101 ("bison").

1918 D, 519 ("bison").

Merrim and Stock 1925 A, 11.

Miller, L. H. 1909 B, 306.

1912 A, 78.

Osborn, H. F. 1910 B, 607.

1925 D, 523, 531, 539, fig.

Rhoads, S. N. 1895 A, 248.

Ruschenberger and Tryon 1879 A, 92.

Schmidt, O. 1886 A, 187.

Sinclair, W. J. 1904 A, 20.

1908 A, 112 ("bison" This species?).

Stock, C. 1925 A, 30, 35, 201.

Swarth, H. S. 1915 A, 24, fig. 12.

Trouessart, E. L. 1905 A, 745.

Whitney, J. D. 1879 A, 249 (B. latifrons).

Wilson, T. 1901 A, 311 (B. latifrons. This species?).

Wyman, L. E. 1922 A, 28, fig. 19.

Yates, L. G. 1874 B, 18 (B. latifrons).

1903 A, 101 (B. latifrons).

Pleistocene; Indiana, West Virginia?, Kentucky, Iowa, California, Oregon, Utah?.

### **Bison bison (Linnaeus).**

Hay, O. P. 1902 A, 689.

Abbott, C. C. 1881 A, 482, 483 ("bison").

Abel, O. 1926 B, 440 (B. americanus).

Adam, W. 1854 A, 238 ("American bison").

Allen, G. M. 1920 B, 162, figs. 2, 3 (This species?).

1926 A, 452 (This species?).

Allen, J. A. 1900 C, 63.

Altmann, F. 1925 A, 108 (B. americanus).

Bailey, V. 1923 A, 254.

Baker, F. C. 1920 A, 455.

Bell, R. 1898 A, 373 ("bison").

Brandt and Woldrich 1887 A, 7 (Bos).

Broadhead, J. C. 1875 A, 186 ("bison").

Brown, A. E. 1904 B, 64.

Chandler, A. C. 1916 B, 122, figs. 5, 6.

Clapp, F. G. 1908 A, 520 (Bos americanus).

Collett, J. 1883 A, 73 ("buffalo").

Cooper, W. 1831 A, 211 (Bos americanus).

- Cooper, Smith and Dekay 1831 A, 371 (Bos americanus).
- Cuvier, G. 1825 A, iv, 138, 139, pl. x, figs. 3, 4; v, 2, 530 (Bos bison).
- Elliot, D. G. 1901 A, 49, pl. xxiii.
- Fischer, J. B. 1829 A, 495 (Bos).
- Frech, F. 1906 A, 487 (B. americanus).
- Gervais, P. 1859 A, 365 (Bos americanus).
- Gidley, J. W. 1911 A, 436 (B. bison?).
- 1912 C, 19.
- Grant, U. S. 1899 A, 189 (Bos americanus).
- Hahn, W. L. 1909 A, 452.
- Hartnagel and Bishop 1923 A, 92, pl. xxv.
- Haug, E. 1911 A, 1886.
- Hawn, F. 1866 A, 101 (B. americanus).
- Hay, O. P. 1912 B, 13.
- 1912 D, 645, pl. x.
- 1913 B, 585.
- 1914 A, 38, 309, 310, pl. xxxviii; pl. xxxix, fig. 1.
- 1915 A, 520.
- 1918 C, 346 (This species?).
- 1920 B, 127.
- 1923 A, 480.
- 1923 C, 1-6.
- 1924 D, 374.
- 1927 D, 302.
- Hayden, F. V. 1872 A, 10 ("buffalo").
- Hilsheimer, M. 1909 A, 243, 257, 266 (B. bison); pl. vii, figs. 3, 4 (B. americanus).
- 1910 B, 44 (B. americanus).
- 1920 A, 54, 79.
- 1921 B, 1-63, figs. 3, 6, 9, 14, 19, 27, 30, 33, 36, 39, 42, 44.
- Holmes, W. H. 1903 A, 242 ("bison").
- Hornaday, W. T. 1889 A, 369-548, pls. i-xxix (B. americanus).
- Hrdlička, A. 1903 A, 378.
- Hue, E. 1907 A, pls. xx, lxxiii, xcvi, cxvi, ccxviii, cxlv, clviii, clxxv, clxxvi (Bos americana).
- Kermode, F. 1916 A, 21.
- Knottnerus-Meyer, T. 1907 A, 145.
- Koken, E. 1893 B, 596 (B. americanus).
- La Baume, W. 1909 A, 57 (B. americanus).
- Lambe, L. M. 1916 C, 21.
- Lawson, A. C. 1889 A, 172 F (Bos americanus).
- Leche, W. 1887 A, 603 (Bos).
- Loomis, F. B. 1925 E, 602.
- 1925 F, 602.
- Lucas, F. A. 1887 A, 460 (B. americanus).
- Lydekker, R. 1893 D, 79 (Bos).
- 1907 B, 19 (Bos).
- 1912 D, 216, 260, pl. xxii (Bos).
- 1913 B, 37 (Bos).
- Lyell, C. 1845 B, ii, 65 ("bison").
- Martin, H. T. 1924 A, pl. xxvii, figs. 6, 6a.
- Matthew, W. D. 1915 K, 410 ("bison").
- McClung, C. E. 1905 A, 158.
- McGee, W. J. 1891 A, 431 (B. americanus?).
- Merriam, C. H. 1926 A, 211.
- Miller, G. S. 1924 C, 494.
- Miller, R. 1912 B, 394.
- Moodie, R. L. 1923 B, 126, pls. xviii, xxiv, lvi, lvii.
- Moreau, L. J. 1900 A, 112 ("bisons").
- Osborn, H. F. 1910 B, 368 ("Bison"); 464, 607 (B. bison).
- Owen, R. 1868 A, 625 (B. americanus).
- Packard, A. S. 1867 A, 243, 246, 260, 261 ("bison").
- 1868 B, 268 ("bison").
- Pavlow, M. 1906 B, 54 (B. americanus).
- Peabody, C. 1913 A, 4 ("bison").
- Rhoads, S. N. 1895 A, 244.
- 1903 A, 239.
- Savage, J. 1878 A, 10 ("buffalo").
- Scharff, R. F. 1911 A, 65, 145.
- Schmidt, O. 1886 A, 180, fig. 28 (B. americanus).
- Scott, W. B. 1913 A, 152, 203, 419.
- Seton, E. T. 1906 F, 385-405, figs. (B. americanus).
- 1909 A, 247, pls. xxii-xxxi; text-figs. 100-107, maps 10-12.
- Shaler, N. S. 1870 A, 136 (Bos americanus).
- 1877 A, 197 ("buffalo").
- Slade, D. D. 1887 A, 460 (B. americanus).
- Smith, B. 1914 B, 67, pl. ii.
- Spencer, J. W. 1895 A, 137 (B. americanus. This species?).
- Sternberg, C. S. 1903 A, 511 ("buffalo").
- 1903 D, 90 ("buffalo." This species?).
- Stone, G. H. 1899 A, 55 ("bison").
- Trouessart, E. L. 1905 A, 745.
- Tscherski, J. D. 1892 A, 86 seq.
- Underhill, B. M. 1910 A, 82 (Bos americanus).
- Volk, E. 1911 A, 136, 210, pl. cxx (This species?).
- Werth, E. 1917 A, 253.
- White, C. A. 1885 A, 47 ("bison").
- Whitney, J. D. 1862 A, 136 (Bos americanus).
- 1866 A, 162 ("buffalo").
- Wilson, T. 1901 A, 338 (B. americanus).
- Winchell, N. H. 1910 A, 420, pl. xi, figs. 1, 2 (B. latifrons?).
- Worthen, A. H. 1873 A, 308 ("buffalo").
- 1890 A, 23 ("buffalo").
- Wright, G. F. 1905 A, 18 ("bison." This species?).
- 1911 A, 282 ("bison." This species?).
- 1911 C, 42 ("bison." This species )
- Wright, R. R. 1883 A, 316 (B. americanus).
- Recent; greater part of North America (except Atlantic, Gulf, and Pacific coasts) north to Great Lakes and Great Slave Lake: Pleistocene; Ontario, Massachusetts, New York, New Jersey, Pennsylvania, Indiana, Illinois, Wisconsin, Kentucky, Texas, Oklahoma, Missouri, Kansas, Colorado, Iowa, Nebraska, Wyoming, Minnesota, South Dakota, Washington, Alberta.

### **Bison chaneyi Cook.**

Cook, H. J. 1928 A, 34, figs. 1, 2.  
Pleistocene; Texas.

### **Bison crassicornis Richardson.**

Hay, O. P. 1902 A, 689.

Dall, W. H. 1896 A, 354.

Dall and Harris 1892 A, 264.

Dawson, J. W. 1894 D, 4.

Gilmore, C. W. 1908 A, 18, 31, pl. x; text-fig. 4.

Haug, E. 1911 A, 1873.

Hay, O. P. 1887 A, 53 ("buffaloes").

1913 C, 179, pl. xiv.

- Joleaud, L. 1920 A, 499.  
 Lambe, L. M. 1904 C, 31, 39, 51.  
 Lucas, F. A. 1901 A, 307.  
 Lydekker, R. 1898 D, 61 (Syn. of *Bos priscus*).  
 1912 D, 261 (Bos).  
 McClung, C. E. 1905 A, 158.  
 Matsumoto, H. 1918 D, 93, pls. xx, xxviii, xxix;  
 text-figs. 1-3.  
 Merrill, G. P. 1907 A, 25.  
 Osborn, H. F. 1910 B, 481, 483, 490.  
 Quackenbush, L. S. 1909 A, 127.  
 Scharff, R. F. 1911 A, 67, 80.  
 Scott, W. B. 1913 A, 203, 420.  
 Trouessart, E. L. 1905 A, 745.  
 Whiteaves, J. F. 1903 A, 240.  
 Pleistocene; Alaska, Yukon.
- Bison latifrons (Harlan).**  
 Hay, O. P. 1902 A, 689 (B. latifrons, B. ferox).  
 Allen, G. M. 1926 A, 452.  
 Baker, F. C. 1920 A, 455.  
 Bárcena, M. 1882 A, 20 ("toro fossil." This species?).  
 Beddard, F. E. 1902 A, 319 (B. latifrons, B. ferox).  
 Blake, W. P. 1908 A, 67 ("Bos").  
 Brown, A. E. 1904 B, 66.  
 Cook, H. J. 1928 A, 36.  
 Deussen, A. 1924 A, 108.  
 Dollo, L. 1869 I, 685 (Bos).  
 Falconer, H. 1863 A, 53 (This species?).  
 1868 A, 223.  
 Felix and Lenk 1891 A, 126, 128, 138.  
 Foster, J. W. 1869 A, 238, 254.  
 1873 A, 89.  
 Frech, F. 1906 A, 477.  
 Frech and Geinitz 1903 A, 35 (This species?).  
 Freudenberg, W. 1921 A, 139.  
 1922 A, 5 (This species?).  
 Furlong, E. L. 1925 A, 139 (This species?).  
 Gervais, P. 1859 A, 365 (Bos).  
 Gidley, J. W. 1927 E, 274 (This species?).  
 Godman, J. D. 1860 A, 266, pl. ("fossil ox").  
 Haug, E. 1911 A, 1887.  
 Hay, O. P. 1910 D, 371.  
 1912 D, 652, pl. xi.  
 1913 C, 192, pl. xix.  
 1914 A, 327, pl. xlii, fig. 1.  
 1917 I, 213.  
 1919 D, 362, 363, 364.  
 1923 A, 480.  
 1924 D, 374 (B. latifrons); 199 (B. ferox).  
 1927 C, 281 ("long-horned bison").  
 1927 D, 302 (Bos arizonica, Bison latifrons).  
 1928 B, 237.  
 Hay, R. 1890 A, 40, 42 (Bison. This species?).  
 Hrdlička, A. 1907 A, 17 ("Bos"); 18 (B. latifrons. This species?).  
 La Baume, W. 1909 A, 57.  
 Leidy, J. 1859 J, 181 ("broad-fronted bison").  
 Lucas, F. A. 1902 B, 260.  
 Lydekker, R. 1912 D, 262 (Bos).  
 Lyell, C. 1855 A, i, 348; ii, 261 (Harlanus americanus. Species doubtful).  
 McAdams, W. 1883 A, lxxx (This species?).  
 McClung, C. E. 1905 A, 158.  
 Martin, H. T. 1927 A, 399 (Syn. of B. latifrons).  
 Matson and Clapp 1909 A, 136 (B. americanus. This species?); 137 (B. latifrons).  
 Matthew, W. D. 1909 B, 198.  
 Merriam, J. C. 1912 C, 221.  
 Merrill, G. P. 1907 A, 26.  
 Norton, O. D. 1875 A, 386 (Bos).  
 Osborn, H. F. 1905 E, 932.  
 1910 B, 607, fig. 212 (B. latifrons); 481, 483 (B. ferox).  
 Owen, R. 1845, Cat. Foss. Mam. Mus. Coll. Surg., 197 (Lophiodon bathygnathus).  
 1845 B, 548 (Sus americana. This species?).  
 Palacky, J. 1903 B, 317 (Harlanus americanus. This species?).  
 Peale, R. 1803 B, 84 ("great buffalo").  
 Plummer, J. T. 1843 A, 300, fig. 12 ("horns." Young of this species?).  
 Rath, G. 1886 A, 106 (Bos. This species?).  
 Rhoads, S. N. 1895 A, 245.  
 Rogers, A. F. 1924 A, 544 (B. ferox).  
 Schmidt, O. 1886 A, 187.  
 Schrader, F. C. 1915 A, 56 ("Bos").  
 Scott, W. B. 1913 A, 203, 420.  
 Sellards, E. H. 1915 D, 77.  
 1916 B, 102, 112.  
 Shaler, N. S. 1877 A, 197.  
 Shimek, B. 1902 A, 285.  
 1904 A, 305.  
 Trouessart, E. L. 1905 A, 745 (B. latifrons, B. ferox).  
 Villada, M. M. 1903 A, 448, pl. v (This species?).  
 Wilson, T. 1892 A, 629 (This species?).  
 1901 A, 322, 338 (This species?).  
 Yates, L. G. 1903 A, 101.  
 Pleistocene (Early and Middle); Kentucky, Ohio, Illinois?, South Carolina?, Georgia, Florida, Mississippi, Texas, Colorado?, Nebraska, Arizona, California.
- Bison occidentalis Lucas.**  
 Hay, O. P. 1902 A, 690.  
 Abel, O. 1914 A, 186, fig. 143.  
 Anonymous 1906 C, 711 (B. crassicornis).  
 Baker, F. C. 1920 A, 455.  
 Boule, M. 1923 A, 400.  
 Carman, J. E. 1917 A, 410.  
 Condon, T. 1902 A, 153, pl. xxix (Bos latifrons).  
 Cook, H. J. 1928 A, 36.  
 Cossmann, M. 1899 C, 85.  
 Dall and Harris 1892 A, 266 (B. antiquus).  
 Goddard, P. E. 1926 A, 259.  
 1927 A, 68 ("bison").  
 Haug, E. 1911 A, 1873, 1886.  
 Hay, O. P. 1913 B, 584 (B. kansensis).  
 1913 C, 167, pl. ix, figs. 3-4; pls. x-xiii; text-figs. 4-6.  
 1914 A, 34, 319, pl. xxxix, figs. 2, 3; pl. xl; text-fig. 102.  
 1917 C, 359 ("extinct bison").  
 1917 E, 68.  
 1918 B, 24.  
 1919 D, 364.  
 1923 A, 480.  
 1923 C, 1, pls. i, ii.  
 1924 D, 374 (B. occidentalis); 193, 204 (B. kansensis).

- Hay, O. P. 1927 D, 302 (*B. occidentalis*); 278 (*B. willistoni*).
- Hay, R. 1885 A, 98 (This species?).
- Hilzheimer, M. 1920 A, 59, 78.
- Holland, W. J. 1915 A, 225, pl. xliii (*B. crassicornis*).
- Joleaud, L. 1920 A, 499.
- Lull, R. S. 1919 A, 222.
- Lydekker, R. 1912 D, 260 (*Bos*).
- McClung, C. E. 1905 A, 157, fig. 10 (*B. kansensis*); 158 (*B. occidentalis*).  
1908 A, 249, pl. xiv.
- Martin, H. T. 1924 A, 277, pl. xxvi, fig. 2; pl. xxvii, figs. 5, 5a; 274 (*B. kansensis*).
- Matsumoto, H. 1918 D, 85, pls. xxiv-xxviii, text-figs. 1-3.  
1927 A, 51, 52, pl. xxv, figs. 3, 4; pl. xxvi, figs. 1-3 (*B. o. curvicornis*).
- Merrill, G. P. 1907 A, 26.
- Moodie, R. L. 1909 C, 128.
- Osborn, H. F. 1909 D, 88.  
1910 B, 607, fig. 213.  
1922 G, 449.
- Osgood, W. H. 1907 A, 65.
- Pavlov, M. 1906 B, 55, pl. v, fig. (Syn. *B. priscus*).
- Quackenbush, L. S. 1909 A, 91, 127, pl. xvii.
- Scharff, R. F. 1911 A, 80.
- Scott, W. B. 1913 A, 420, 589.
- Trouessart, E. L. 1905 A, 745.
- Upham, W. 1903 A, 32.  
1903 B, 187 ("bison").
- Werth, E. 1917 A, 253, fig. 3.
- Williston, S. W. 1902 M, 313.  
1905 A, 335.
- Wilson, T. 1901 A, 305, fig. 2.
- Winchell, N. H. 1907 A, 164 (*B. latifrons*).  
1917 A, 139.
- Worthen, A. H. 1890 A, 8 (*Bos primigenius*).  
Species doubtful.  
Pleistocene; Kansas, Iowa, Nebraska, New Mexico, Minnesota, South Dakota, Manitoba, Alaska, Yukon.
- Bison pacificus** Hay.
- Hay, O. P. 1927 D, 118, 212 (*B. pacificus*); 122 ("bison." This species?).  
Pleistocene; California.
- Bison regius** Hay.
- Hay, O. P. 1913 C, 192, pl. xviii; text-fig. 10.
- Abel, O. 1914 A, 135, fig. 142 (*B. latifrons*).
- Cook, H. J. 1928 A, 36.
- Hay, O. P. 1914 A, 327, pl. xlii, figs. 2, 3.  
1923 A, 15.  
1924 D, 374.  
1927 D, 302.
- Lydekker, R. 1914 A, 631, fig. 1.
- McClung, C. E. 1905 A, 159 (*B. latifrons*).
- Martin, H. T. 1927 A, 397, pls. xlii, xliii.
- Matthew, W. D. 1909 E, 198 (*B. latifrons*).  
1921 E, 606, fig.
- Osborn, H. F. 1920 A, 240, 243, fig.
- Sternberg, C. H. 1909 C, 267, fig. 43 ("Bison").  
Pleistocene; Kansas, Texas.

**Bison sylvestris** Hay.

- Hay, O. P. 1915 A, 515, pl. xxx; text-fig. 1.  
1923 A, 32, 257.  
1924 D, 198, 208.  
Pleistocene (Late Wisconsin); Ohio.

**Bison taylori** Hay and Cook.

- Hay and Cook 1928 A, 36.  
Pleistocene; New Mexico.

**Bison texanus** Hay and Cook.

- Hay and Cook 1928 A, 31.  
Pleistocene; Texas.

**Bison** sp. indet.

- Adams, A. L. 1879 A, 116, 117 ("bison," *B. priscus*?).
- Anonymous 1927 A, 477. Pleistocene; Texas, New Mexico.
- Antevs, E. 1925 A, 75 ("bison"). Pleistocene (Walker River); Nevada.
- Blake, J. H. 1874 A, 270 (*B. latifrons*?). Pleistocene; California.
- Blake, W. P. 1884 A, 273.
- Bolton, H. C. 1888 A, 123 ("buffalo").
- Broadhead, J. C. 1870 B, xxiii (*B. latifrons*).
- Cahn, A. R. 1922 A, 23.
- Cannon, G. L. 1888 B, 59, 61 ("bison"). Pleistocene; Colorado.  
1896 in Emmons, S. F. 1896 A, 260, 261 ("bison"). Pleistocene; Colorado.
- Coleman, A. P. 1900 A, 329, 331 ("bison").  
Pleistocene (Don beds); Ontario.  
1901 A, 301 (*B. americanus*?).
- 1907 A, 1248 ("bison"). Pleistocene (Don beds); Ontario.  
1913 B, 18, 20. Pleistocene (Don beds); Ontario.  
1917 A, 359 ("bison").
- Cook, H. J. 1912 D, 45. Pliocene (Snake Creek); Nebraska.  
1925 A, 460. Pleistocene; Texas.  
1926 D, 335, fig. 2. Pleistocene; Texas.
- Dall, W. H. 1870 A, 238 ("fossil buffalo").  
1870 B, 136 ("buffalo").
- Dawson, G. M. 1901 A, 185 A (*Bison?* *laticornis*).
- Diller, J. S. 1906 A, 11 ("bison"). Pleistocene (Potter Creek); California.
- Figgins, J. D. 1925 A, 17. Pleistocene; Texas.
- Figgins and Cook 1927 A, 477. Pleistocene; Texas, New Mexico, Oklahoma.
- Freudenberg, W. 1910 A, 5. Pleistocene; Mexico.
- Gidley, J. W. 1915 D, 20 ("Bison"). Pleistocene; Florida.  
1924 A, 69. Pleistocene (Early); Nevada.  
1926 C, 484. Pleistocene (Early); Arizona.  
1928 B, 16 ("bison"). Pleistocene; Florida.
- Gilbert, G. K. 1890 A, 303 ("ox"). Pleistocene (Lake Lahontan); Nevada.
- Goddard, P. E. 1926 A, 253. Pleistocene; Texas.
- Gregory, H. E. 1917 A, 82 ("Bison?"). Pleistocene; Arizona.
- Habersham, J. 1846, in Hodgson, W. B. 1846 A, 29 ("bos"). Pleistocene; Georgia.

- Hay, O. P. 1914 A, 26.  
 1917 E, 45. Pleistocene (Vero); Florida.  
 1920 B, 115 (Illinois); 127 (Oklahoma); 131 (Texas).  
 1921 A, 600, 611. Pleistocene (Early); Colorado, Washington (This genus?).  
 1923 A, 480.  
 1924 B, 260 ("bison"). Pleistocene; Florida.  
 1926 D, 359.  
 1926 G, 129 ("bison"). Pleistocene (Walker River); Nevada.  
 1927 D, 301, 302, 309. Pleistocene; California, Idaho, Nevada, Iowa, New Mexico, Oklahoma, Oregon, Texas, Washington.  
 1928 C, 425, 429.  
 Hilgard, E. W. 1869 A, 82 ("buffalo"). Pleistocene; Louisiana.  
 1872 A, 14 ("buffalo").  
 Holland, W. J. 1908 A, 231 ("Bison").  
 Hrdlička, A. 1926 A, 7 ("buffalo").  
 Jones, J. C. 1928 A, 7 ("buffalo"). Pleistocene (Lahontan); Nevada.  
 Kellogg, R. 1922 A, 80. Pleistocene (San Pedro); California.  
 Lambe, L. M. 1912 B, 347 (B. americanus). Pleistocene; Alberta; 349 (B. crassicornis). Pleistocene; Yukon.  
 Lee, Stone, and Gale 1915 A, 173 ("ox"). Pleistocene (Lake Lahontan); Nevada.  
 Leidy, J. 1886 D, 275. Nicaragua.  
 Lyell, C. 1855 A, 348 ("ox").  
 McAdams, W. 1887 A, 35 ("buffalo").  
 McCormack, E. C. 1914 A, 15. Pleistocene; Oregon.  
 1920 A, 15. Pleistocene (Washtucna Lake); Washington.  
 McCourt, W. E. 1917 A, 70 ("bison"). Pleistocene; Missouri.  
 McGee, W. J. 1888 A, 35 ("bison").  
 1889 A, 303 ("ox"). Pleistocene (Lake Lahontan); Nevada.  
 Matthew, W. D. 1925 A, 97. Pleistocene (Early); Florida.  
 Matthew and Cook 1909 A, 367, 414.  
 Merriam, J. C. 1917 A, 437. Pliocene (Snake Creek); Nebraska.  
 Merriam and Stock 1921 A, 567. Pleistocene (Early); California.  
 1925 A, 10, 11. Pleistocene (Potter Creek); California.  
 Miller, L. H. 1912 A, 71. Pleistocene (Potter Creek Cave); California.  
 1925 A, 309 ("bison"). Pleistocene (McKittrick); California.  
 Murdoch, J. 1892 A, 56. Pleistocene (Point Barrow); Alaska.  
 Obalski, T. 1904 A, 216 ("bison").  
 Osborn, H. F. 1910 B, 474. Pleistocene (Washtucna Lake); Washington; 477. Pleistocene; California.  
 Parks, W. A. 1924 A, 38. Pleistocene (Late); Saskatchewan.  
 1925 A, 226 ("Bison"). Post-glacial; Saskatchewan.  
 Rhoads, S. N. 1903 A, 239. Pleistocene (Port Kennedy); Pennsylvania.  
 Russell, I. C. 1885 A, 238 ("ox"). Pleistocene (Lake Lahontan); Nevada.  
 Schmidt, E. 1872 A, 254 ("Bison"). Pleistocene (Table Mountain); California.  
 Sellards, E. H. 1916 B, 103. Pleistocene; Florida.  
 1916 C, 150, 153 ("bison"). Pleistocene; Florida.  
 1916 E, 16. Pleistocene; Florida.  
 1916 F, 9 (B. sp.).  
 Sinclair, W. J. 1904 A, 18 ("Bison sp.").  
 1904 B, 11. Pleistocene; Nevada.  
 1915 A, 77 ("bovid genus indet"). Pliocene (Snake Creek); Nebraska.  
 Smith, D. T. 1904 A ("ox"). Pleistocene (Lahontan); Nevada.  
 Stock, C. 1925 A, 113. Pleistocene (Upper San Pedro and caves); California.  
 Stone, G. H. 1899 A, 54 ("bison"?). Maine.  
 Tilton, J. L. 1910 A, 950.  
 Todd, J. E. 1918 A, 45 ("bison"). Pleistocene; Kansas.  
 Udden, J. A. 1901 A, 260 (B. latifrons).  
 Whiteaves, J. F. 1901 B, 185 (B. laticornis). Pleistocene; Klondike.  
 Wyman, J. 1875 A, 81 ("ox").

SIMOBISON Hay and Cook. New genus. Type *Bison figginsii* Hay and Cook.

Hay and Cook 1928 A, 33 (Bison).

Figgins, J. D. 1928 A, 19, fig. 7 ("extinct bison").  
 Pleistocene (Aftonian); Texas.

## Order TILLODONTIA Marsh.

- Hay, O. P. 1902 A, 715.  
 Abel, O. 1913 B, 711 (Tillodontidae).  
 Ameghino, F. 1889 A, 1026 (Tillodonta).  
 1897 B, 261.  
 1901 A, 418 (Tillodonta).  
 1902 B, 10 ("tillodontes").  
 1902 D, 428 ("tillodontes").  
 1904 B, 52 (Tillodonta).  
 1906 A, 347 ("tillodontes").  
 Arldt, T. 1907 A, 238, 243.  
 1907 B, 452 ("tillodontier").  
 1907 D, 685.  
 1912 A, 686.  
 Baird, S. F. 1876 A, 305, 337.  
 Beddard, F. E. 1902 A, 506.  
 Case, E. C. 1899 B, 182.  
 Cope, E. D. 1875 Y, 447, 448.  
 1880 U, 151 ("tillodontes"); 152 (Tillodonta).  
 1885 BB, 72 (Tillodonta).  
 1891 N, 73, 75 (Tillodonta).  
 Delafontaine, M. 1875 A, 169.  
 Depéret, C. 1905 C, 703 ("tillodontes").  
 Gregory, W. K. 1910 A, 100, 292, 445.  
 1920 A, 171.  
 Hoernes, R. 1886 A, 664.

Höfer, H. 1911 A, 486.  
 Jaekel, O. 1911 A, 223 (Tillodonti).  
 Kingsley, J. S. 1925 A, 209.  
 Koken, E. 1893 B, 486 (Tillodonta).  
 Leche, W. 1902 A, 28.  
 Major, C. J. F. 1899 B, 68.  
 Matthew, W. D. 1909 C, 94, 97, 101.  
 1912 B, 186.  
 1918 H, 607.  
 1921 D, 214.  
 1928 B, 966, 977 ("tillodonts").  
 Osborn, H. F. 1898 U, 686.  
 1899 J, 415.  
 1901 D, 623.  
 1902 E, 356, fig. 1.  
 1907 G, 13, 151.  
 1909 D, 136.  
 1910 B, 633.  
 1925 B, 18.

Palacký, J. 1902 A, 3 ("tillodontien").  
 Reynolds, S. H. 1897 A, 365, 435, 511, 520.  
 Schaff, R. F. 1911 A, 244.  
 Schlosser, M. 1902 I, 738.  
 1905 A, 329.  
 1911 A, 102.  
 Scott, W. B. 1913 A, 267, 276.  
 Steinmann, G. 1907 A, 477.  
 Stromer, E. 1912 A, 177.  
 Tims, H. W. M. 1901 A, 283.  
 Trouessart, E. L. 1905 A, 547.  
 1897 B, 87.  
 Wallace, A. R. 1876 A, 1, 139.  
 Weber, M. 1904 A, 468, 510, 513.  
 Weber and Abel 1928 A, 90, 168, 294.  
 Weber and Burlet 1927 A, 237.  
 Zittel and Schlosser 1911 A, 371 (Tillodontidae).  
 1923 A, 450 (Tillodontidae).

### ESTHONYCHIDÆ Cope.

Hay, O. P. 1902 A, 715.  
 Ameghino, F. 1906 A, 347.  
 Arldt, T. 1907 D, 653.  
 1912 A, 700.  
 Matthew, W. D. 1921 D, 214.  
 Trouessart, E. L. 1905 A, 547.

Winge, H. 1917 A, 91, 100, 101 (Esthonychum).  
 1923 A, 123, 130 (Esthonychini).  
 Zittel and Schlosser 1911 A, 371, 413 (Tillodontidae); 372 (Esthynchinae).  
 1923 A, 450 (Esthynchinae).

### ESTHONYX Cope. Type *E. bisulcatus* Cope.

Hay, O. P. 1902 A, 715.  
 Abel, O. 1913 B, 711.  
 Beddard, F. E. 1902 A, 507.  
 Case, E. C. 1899 B, 182.  
 Chardin, T. 1922 A, 63, 80, pl. iii.  
 Depéret, C. 1908 A, 112.  
 1912 A, 707.  
 Granger, W. 1914 A, 204.  
 Gregory, W. K. 1910 A, 293.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 348.  
 Lemoine, V. 1889 A, 237.  
 Loomis, F. B. 1905 C, 296.  
 Matthew, W. D. 1909 C, 101.  
 1915 K, 420.  
 1918 H, 607.  
 1928 B, 966, 977.  
 Osborn, H. F. 1907 G, 151, fig. 116.  
 1909 D, 33, 45, 46.  
 1910 B, 125, 132, 523.  
 1912 G, 236, fig. 3.  
 1919 B, 558.  
 Palacký, J. 1902 A, 3.  
 Palmer, T. S. 1904 A, 271, 906.  
 Schlosser, M. 1898 B, 366.  
 1899 U, 462.  
 Seeley, H. G. 1886 A, 415.  
 Stehlin, H. G. 1905 A, 555.  
 Tims, H. W. M. 1901 A, 283.  
 Trouessart, E. L. 1905 A, 547.  
 Wallace, A. R. 1876 A, 1, 139.  
 Weber, M. 1904 A, 514.  
 Weber and Abel 1928 A, 168.  
 Winge, H. 1917 A, 100.  
 1923 A, 130, 212, 215, 216.  
 Zittel and Schlosser 1923 A, 451, 666.

### *Esthonyx acer* Cope.

Hay, O. P. 1902 A, 715.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 36.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); New Mexico.

### *Esthonyx acutidens* Cope.

Hay, O. P. 1902 A, 715.  
 Ameghino, F. 1904 A, 414, fig. 541.  
 Matthew, W. D. 1909 C, 94.  
 Schlosser, M. 1899 U, 462.  
 Trouessart, E. L. 1905 A, 547.  
 Lower Eocene (Wind River); Wyoming.

### *Esthonyx bisulcatus* Cope.

Hay, O. P. 1902 A, 715.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 36.  
 Reeside, J. B. 1924 A, 46.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

### *Esthonyx burmeisteri* Cope.

Hay, O. P. 1902 A, 715.  
 Loomis, F. B. 1907 B, 357.  
 Matthew, W. D. 1909 C, 94.  
 Merrill, G. P. 1907 A, 37.  
 Reeside, J. B. 1924 A, 46 (*E. burmeisteri*).  
 Seeley, H. G. 1886 A, 415, fig.  
 Zittel and Schlosser 1911 A, 372, fig. 535.  
 1923 A, 450, fig. 572.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

**Esthonyx spatularius** Cope.

- Hay, O. P. 1902 A, 716.  
 Matthew, W. D. 1909 C, 94.  
 Reeside, J. B. 1924 A, 46 (*E. spatularia*).  
 Lower Eocene (Wasatch); New Mexico:  
 (Wind River); Wyoming.

**Esthonyx** sp. indet.

- Sinclair and Granger 1912 A, 60 (Fort Union?);  
 Wyoming.

## ANCHIPPODONTIDÆ Gill.

- Hay, O. P. 1902 A, 716 (Includes Tillotheriidæ).  
 Ameghino, F. 1906 A, 347 (Tillotheriidæ).  
 Arldt, T. 1907 D, 685 (Tillotheriidæ).  
 1912 A, 700.  
 Matthew, W. D. 1909 C, 94, 97, 101.

- Matthew, W. D. 1909 D, 301.  
 1913 E, 791.  
 Trouessart, E. L. 1905 A, 547.  
 Weber and Abel 1928 A, 125 (Tillotheriidæ).  
 See citations under Tillotheriidæ).

ANCHIPPODUS Leidy. Type *A. riparius* Leidy.

- Hay, O. P. 1902 A, 716.  
 Ameghino, F. 1889 A, 962.  
 Beddard, F. E. 1902 A, 507.  
 Cope, E. D. 1872 RR, 1.  
 1875 Y, 447.  
 Matthew, W. D. 1909 C, 97.  
 1913 E, 791.  
 1928 B, 977.  
 Palmer, T. S. 1904 A, 101, 906.  
 Trouessart, E. L. 1905 A, 547.

- Wallace, A. R. 1876 A, 1, 139.  
 Weber, M. 1904 A, 514.  
 Weber and Abel 1928 A, 168.

**Anchippodus riparius** Leidy.

- Hay, O. P. 1902 A, 717.  
 Matthew, W. D. 1909 C, 97 (*A. vetulus*).  
 1913 E, 791.  
 Rhoads, S. N. 1903 A, 233.  
 Eocene; New Jersey.

## TILLOTHERIIDÆ Marsh.

- Marsh, O. C. 1875 C, 221.  
 Hay, O. P. 1902 A, 716 (Anchippodontidæ, in part).  
 Abel, O. 1919 A, 728.  
 1922 C, 291 ("tillotheriiden").  
 Baird, S. F. 1876 A, 337 (Tillotheridæ).  
 Matthew, W. D. 1913 E, 791.  
 1914 B, 387.  
 1921 D, 214.

- Palmer, T. S. 1904 A, 774, 906 (Tillotheriidæ).  
 Winge, H. 1917 A, 91, 99, 101 (Tillotheriidæ, Tillotheriini?).  
 1923 A, 123, 129, 131, 195 (Tillotheriidæ, Tillotheriinae).  
 Zittel and Schlosser 1911 A, 372 (Tillotheriinae).  
 1923 A, 451 (Tillotheriinae); 667 (Tillotheriidæ).  
 See citations under Anchippodontidæ.

TROGOSUS Leidy. Type *T. castoridens* Leidy.

- Leidy, J. 1871 F, 114.  
 Hay, O. P. 1902 A, 716 (Anchippodus, part).  
 Granger, W. 1918 A, 148.  
 Haug, E. 1911 A, 1528 (Trogostus).  
 Matthew, W. D. 1909 C, 97, 101.  
 1913 E, 791.  
 Osborn, H. F. 1909 D, 52, 97.  
 1919 B, 558.  
 Palmer, T. S. 1904 A, 695, 906.  
**Trogosus castoridens** Leidy.  
 Hay, O. P. 1902 A, 717 (Anchippodus minor, part).  
 Matthew, W. D. 1909 C, 97.  
 1913 E, 791.  
 Middle Eocene (Lower Bridger); Wyoming.

**Trogosus minor** (Marsh).

- Hay, O. P. 1902 A, 717 (Anchippodus minor, part).  
 Matthew, W. D. 1909 C, 97.  
 1913 E, 791 (Palæosyops. This genus?).  
 Middle Eocene (Lower Bridger); Wyoming.

**Trogosus vetulus** Leidy.

- Hay, O. P. 1902 A, 717 (Anchippodus).  
 Matthew, W. D. 1909 C, 97 (This genus?).  
 Middle Eocene (Bridger); Wyoming.

TILLOTHERIUM Marsh. Type *T. hyracoides* Marsh.

- Hay, O. P. 1902 A, 716.  
 Abel, O. 1913 B, 711.  
 1914 A, 53.  
 1922 C, 291.  
 Ameghino, F. 1904 A, 413, 415.  
 Anonymous 1916 B, 474.  
 Baird, S. F. 1876 A, 337.  
 Beddard, F. E. 1902 A, 507.  
 Boule, M. 1891 A, 34.  
 Case, E. C. 1899 B, 183.

- Delafontaine, M. 1875 A, 170.  
 Gregory, W. K. 1910 A, 292-294.  
 1920 A, 171.  
 Haug, E. 1911 A, 1528.  
 Höfer, H. 1911 A, 486.  
 Hoernes, R. 1886 A, 664.  
 Leche, W. 1887 A.  
 1905 A, 583.  
 Matthew, W. D. 1909 C, 97, 101.  
 1913 E, 491.



Matthew, W. D. 1918 H, 607.

1924 E, 748.

1928 B, 977.

Osborn, H. F. 1898 V, 206.

1909 D, 49, 50, 52.

1910 B, 155, 162, 523, fig. 61.

Palmer, T. S. 1904 A, 680, 906.

Schlosser, M. 1898 B, 366.

1911 A, 102.

Schmidt, O. 1886 A, 285.

Steinmann, G. 1907 A, 478.

Trouessart, E. L. 1905 A, 548.

Wallace, A. R. 1876 A, 1, 139.

Weber, M. 1904 A, 514.

Weber, and Abel 1928 A, 168.

Winge, H. 1917 A, 100.

1923 A, 130, 212.

Zittel and Schlosser 1911 A, 372.

1923 A, 450.

### **Tillotherium fodiens Marsh.**

Hay, O. P. 1902 A, 716.

Abel, O. 1914 A, 53, fig. 26.

1922 C, 291.

Ameghino, F. 1904 A, 411, fig. 539.

1906 A, 347, fig. 180.

Beddard, F. E. 1902 A, 507, fig. 247.

Matthew, W. D. 1909 C, 97.

Schmidt, O. 1886 A, 286, fig. 50.

Trouessart, E. L. 1905 A, 548.

Weber, M. 1904 A, 512, fig. 385.

Weber and Abel 1928 A, 168, fig. 96.

Zittel and Schlosser 1911 A, 372, fig. 536.

1923 A, 450, fig. 573.

Middle Eocene (Bridger); Wyoming.

### **Tillotherium hyracoides Marsh.**

Hay, O. P. 1902 A, 716.

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

### **Tillotherium latidens Marsh.**

Hay, O. P. 1902 A, 716.

Matthew, W. D. 1909 C, 97.

Middle Eocene (Bridger); Wyoming.

### **Tillotherium sp. indet.**

Granger, W. 1918 A, 148 ("Tillotherium").

Middle Eocene (Huerfano); Colorado.

Hills, R. C. 1889 A, 221. Middle Eocene (Huerfano); Colorado.

Matthew, W. D. 1909 C, 97 (This genus?).

Middle Eocene (Bridger); Wyoming.

## *Superorder GLIRES Linnaeus.*

Unless otherwise stated the name *Rodentia* was used by the authors here cited.

Hay, O. P. 1902 A, 717 (Glirres).

Abel, O. 1901 B, 313 ("nagethiere").

1908 F (234) ("rodentier").

1910 B (186).

1912 F, 294, 302, 365, 507, 687.

1913 B, 728.

1914 A, 117 ("nagethiere").

1919 A, 786.

1920 A, 480.

Addison and Appleton 1915 A, 43.

Adloff, P. 1901 C, 425 ("nager").

1902 A, 197 ("nager").

1903 A, 359 ("rodentien").

1904 A, 144 ("rodentien").

1907 A, 534 ("nagethiere").

1910 A, 257 ("nagethiere").

1910 B, 232 ("rodentien").

1913 A, 238 ("nagethier").

1913 C, 11 ("rodent").

1917 A, 287 ("nagethiere").

Alezais, H. 1902 A, 585 ("rongeurs").

Allen, J. A. 1904 B, 135 ("rodents").

Ameghino, F. 1889 A, 1024.

1903 A, 83, 154.

1906 A, 239, 407 ("rongeurs").

Anderson, R. J. 1912 D, 252.

Anonymous 1897 B, 367.

Anthony, R. 1912 A ("rongeurs").

Ardt, T. 1907 A, 237, 243.

1907 B, 450, 452 ("rodentier").

1907 D, 679.

1912 A, 686.

Bardeleben, K. 1885 A, 28 ("nagethiere").

1885 B, 85 ("nager").

1889 A, 107 ("nager").

1889 B, 259 ("rodents").

Bardeleben, K. 1904 A, 111 ("nager").

Bardenfleth, K. S. 1913 A, 70 ("rodents").

Beddard, F. E. 1902 A, 458.

Bergmann, C. 1841 A, 205 ("nager").

Bertelli, D. 1909 A, 171 ("roditori").

Berthold, A. A. 1825 A, 907, 983 ("nager").

Beyer, H. 1908 A, 78, 81, 87, 95 ("nager").

1909 A, 23 ("nagethiere").

Black, N. 1900 A, 16.

Boas, J. E. V. 1914 B, 577 ("nager").

Bonaparte, C. L. 1832 A, 288 (Glirres).

1833 A, 1044 ("rongeurs").

Bonsdorff, E. J. 1871 A, 318 (Glirres).

Boule and Thevenin 1920 A, 223 ("rongeurs").

Branca, W. 1907 A, 10 ("nager").

1915 A, 43.

Brandt, J. F. 1885 A (Glirres).

Braus, H. 1906 A, 304 ("nager").

Broom, R. 1897 C, 279 ("rodents").

1905 E, 75 ("rodents").

1911 C, 319.

1915 A, 162.

1926 A, 257, 262.

Brubacher, H. 1892 A, 1 ("nagethiere").

Carter, J. T. 1922 A, 599 ("rodents").

Carus, J. V. 1875 A, 90.

Carus and Engelmann 1861 A, 1298 (Rodentia).

Case, E. C. 1899 B, 182.

Causch, D. E. 1904 A, 157 ("rodents").

Chandler, A. C. 1914 B, 134.

Chapman, H. C. 1904 A, 149.

Chardin, T. 1922 A, 62 ("rongeurs").

Clark and Sonntag 1926 A, 454, 461, 463.

Cleland, J. 1863 B, 301.

Cockerell, Miller and Prinz 1914 A, 347 ("rodents").

Cope, E. D. 1885 BB, 72.

1891 N, 67, 90.

- Coues, E. 1883 A, 68.  
 Cuvier, F. 1812 A, 268 ("rongeurs").  
 1825 A, 141 ("rongeurs").  
 Cuvier, G. 1825 A, v. 1, 1-65, pls. i-iii ("rongeurs").  
 Dana, J. D. 1863 C, 334 ("rodents").  
 Dependorf, T. 1907 C, 109 ("rodentien").  
 Dollo, L. 1889 E, 196 ("rongeurs").  
 1889 G, 675 ("rongeurs").  
 Doran, A. H. G. 1878 A, 407.  
 Dublin, L. I. 1903 A, 785.  
 Duméril, A. M. C. 1806 A, 18 (Rosores).  
 Eggeling, H. 1904 A, 90 ("nager").  
 Emmer, G. H. T. 1901 A, 260 ("nager").  
 Elliot, D. G. 1901 A, 50.  
 Emery, C. 1890 A, 288 ("nagetièr").  
 Erdl, M. 1843 A, 485 ("nager").  
 Fischer, E. 1903 A, 697 ("nager").  
 Fischer, J. B. 1829 A, 287.  
 Flower, W. H. 1870 A, 244.  
 Frassetto, F. 1903 A, 185.  
 1915 A.  
 Freund, P. 1892 A, 525 ("nagethiere").  
 1893 A, 301 ("rodents").  
 Frey, H. 1911 A, 401.  
 Fuchs, C. H. 1906 A, 17 ("nager").  
 1914 A, 31 ("rodentien").  
 Gadow, H. 1913 A, 122 ("rodents").  
 Ganzer, H. 1908 A, 159, 161 ("nagetièr").  
 Gaudry, A. 1906 A, 12 ("rongeurs").  
 Gaupp, E. 1905 D, 1040 ("nager").  
 1906 B, 850.  
 1908 A, 184 ("nager").  
 1911 B, 101.  
 1911 D, 621 ("rodentier").  
 1913 A, 63.  
 Gegenbaur, C. 1864 A, 182 ("nagethiere").  
 1865 C, 563.  
 Gervais, P. 1852 A, 16 ("rongeurs").  
 1853 B, 40 ("rongeurs").  
 1859 A, 16 ("rongeurs").  
 Ghigi, A. 1900 B, 99 ("roditori").  
 Gidley, J. W. 1912 A, 286.  
 Giebel, C. G. 1855 A, 44.  
 1865 C, 427 ("nagethiere").  
 1883 A ("nager").  
 Gottlieb, H. 1914 A, 186.  
 Grant, M. 1904 B, 195 ("rodents").  
 Gray, J. E. 1821 A, 302 (Rosores).  
 1825 B, 237.  
 Gregory, W. K. 1910 A, 324, 325, 330, 331, 445, 460, 465.  
 1914 G, 380 ("rodents").  
 1916 A, 248 ("rodents").  
 1920 A, 172, 241.  
 1921 A, 69.  
 Haeckel, E. 1873 A, 544.  
 Hasse and Schwarck 1870 A, 109.  
 Hay, O. P. 1912 D, 750.  
 1914 A, 449.  
 Hayek, H. 1926 A, 177 ("nager").  
 Heilprin, A. 1887 A, 354.  
 Hilzheimer, M. 1913 A, 569 ("rodentier").  
 Höfer, H. 1911 A, 431.  
 Hoernes, R. 1886 A, 688.  
 Hogben, L. T. 1919 A, 72, 75.  
 Howes, G. B. 1893 C, 591.  
 Hoyer and Babik 1924 A, 456 ("nager").  
 Hrdlička, A. 1903 A, 381.  
 Hubrecht, A. A. W. 1908 A, 167.  
 Huene, F. 1912 F, 522 ("nager").  
 Huxley, T. H. 1863 E, 553.  
 1870 F, 527.  
 Jaekel, O. 1911 A, 221 (Rodentia).  
 Kampfen, P. N. 1905 A, 552.  
 Klein, E. E. 1868 A ("rodentier").  
 Kostlin, O. 1844 A ("nager").  
 Krumbach, T. 1904 A, 273 ("nagetièr").  
 Kükenthal, W. 1913 A, 679.  
 Lataste, F. 1887 A, 270 ("rongeurs").  
 Leche, W. 1887 A.  
 1900 A, 1020 (Glires).  
 Le Damany, P. 1903 G, 322 ("rongeurs").  
 Ledouble, A. F. 1906 A, 589 ("rongeurs").  
 Leunis and Ludwig 1883 A, 211.  
 Lilljeborg, W. 1866 A, 9.  
 Longman, H. A. 1924 A, 10.  
 Loomis, F. B. 1921 A, 190 ("rodents").  
 Lull, R. S. 1904 C, 2.  
 1906 B, 556.  
 1917 B, 295, 308, 322.  
 1918 C, 136 ("rodents").  
 Lydekker, R. 1903 D, 125 ("rodents").  
 Macartney, J. 1802, Lect. Comp. Anat., tab. i.  
 Major, C. J. F. 1899 B, 62.  
 Martins, C. 1857 A, 82 ("rongeurs").  
 Matthew, W. D. 1905 D, 50.  
 1907 A, 215.  
 1909 C, 135.  
 1909 D, 300, 308.  
 1910 B, 44.  
 1910 G, 158.  
 1912 A, 156 ("rodents").  
 1912 B, 185.  
 1912 C, 185.  
 1914 H, 350, 380 ("rodents").  
 1915 A, 187, 228.  
 1915 K, 466.  
 1916 C, 522 ("rodents").  
 1917 A, 574 ("rodents").  
 1918 H, 614.  
 1918 I, 659.  
 1921 D, 214.  
 1924 C, 81 ("rodents").  
 1928 B, 948, 961, 964, 976.  
 Matthew and Granger 1923 B, 4 ("rodents").  
 Mead, C. S. 1906 A, 480.  
 Meckel, J. F. 1825 A ("nager").  
 Meunier, S. 1903 A, 776 ("rongeurs").  
 Miller, G. S. 1912 A, 481.  
 1912 B, 126.  
 1924 C, 173.  
 Miller and Gidley 1918 A, 432.  
 Mitchell, P. C. 1905 A.  
 Moodie, R. L. 1922 C, 347.  
 Mysberg, W. A. 1917 A, 654.  
 Oehngren, S. 1919 A, 177.  
 O'Harra, C. C. 1910 A, 86, 150.  
 1920 A, 88 ("rodents").  
 Oken, L. 1823 A, 322 ("nagethiere").  
 Osborn, H. F. 1899 J, 415.  
 1902 E, 356, fig. 1.  
 1905 I, 99, 101.  
 1905 N, 241 ("rodents").  
 1907 G, 13, 144.  
 1907 H, 613 (Glires).

- Osborn, H. F. 1909 D, 135.  
 1910 B, 630.  
 1915 D, 284 ("rodents").  
 1917 B, 320 ("rodents").  
 1925 B, 18.  
 1925 F, 962 ("rodents").
- Owen, R. 1857 E.  
 1858 A, 22.  
 1868 A, 906.
- Palacký, J. 1902 B, 142 ("nager").  
 1904 A.
- Pander and Alton 1823 B, 5 ("nagethiere").  
 1824 A, 1 ("nagethiere").
- Parker and Haswell 1897 A, 456, 515.
- Perna, G. 1906 A, 122.
- Peterson, O. A. 1912 B, 164.
- Pictet, F. J. 1853 A, 234 ("rongeurs").
- Pocock, R. I. 1916 G, 548.
- Rehs, J. 1914 A, 2, 68.
- Retterer, E. 1884 A, 483, 507 ("rongeurs").  
 Retterer and Vallois 1912 B, 410 ("rongeurs").
- Reynolds, S. H. 1897 A, 553.
- Schapiro, B. 1913 A, 220.
- Scharff, R. F. 1911 A, 223 ("rodents").
- Schlosser, M. 1898 B, 360.  
 1900 B, 301.  
 1900 G, 306 ("nagethiere").  
 1902 I, 705 ("nager").  
 1903 I, 178.  
 1905 A, 324 ("nager").  
 1910 A, 501 ("nager").  
 1911 A, 150.
- Schmidt, O. 1886 A, 291.
- Sciater, P. L. 1875 A, 209.
- Scott, W. B. 1896 C, 308 ("rodents").  
 1905 B, 384 (Glires).  
 1913 A, 280, 689.  
 1916 A, 117 ("rodents").  
 1917 A, 181.  
 1928 B, 257 ("rodents").
- Seeley, H. G. 1876 C, 176 ("rodents").  
 1886 A, 413, 514.
- Serres, M. 1852 A, 145 ("rongeurs").  
 1852 B, 197 ("rongeurs").  
 1860 A, 301 ("rongeurs").
- Sinclair, W. J. 1905 D, 384.
- Steinmann, G. 1907 A, 476.  
 1909 A, 81 ("nagetiere").
- Stromer, E. 1912 A, 168, 243.  
 1924 A, 255 ("nagetiere").
- Taschenberg, O. 1899 A, 4436.
- Terra, P. 1911 A, 295.
- Thacker, A. G. 1922 A, 601, 603.
- Thomas, O. 1920 A, 289 ("rodents").
- Tims, H. W. M. 1901 A, 261.  
 1902 A, 321.  
 1903 A, 135 ("rodents").  
 1905 B, 1785.  
 1911 A, 294.
- Todd, T. W. 1922 A, 268.
- Toldt, C. 1905 A, 326 ("nagetiere").
- Tomes, C. S. 1906 A, 46 ("rodents").
- Tormer, G. 1891 A, 119, 171 ("nager").
- Trouessart, E. L. 1904 A, 289.
- Turner, H. N. 1847 A, 110.
- Vallois, H. V. 1921 B, 975 ("rongeurs").
- Van den Broeck, A. J. P. 1912 A, 782.
- Viey-d'Azyr, F. 1792 A, xcvi, 280, 626 (Rodentes).
- Wagner, A. 1841 A, 111 ("nager").
- Wagner, R. 1843 A, 12.
- Wallace, A. R. 1876 A, i, 501; ii, 229.  
 1894 A, 436.
- Wallisch, W. 1906 A, 308 ("nagetiere").
- Waterhouse, G. R. 1839 C, 172.  
 1839 D.  
 1842 A, 197, 344.
- Weber, M. 1904 A, 470, 585.
- Weber and Abel 1928 A, 238, 261, 895.
- Weber and Burlet 1927 A.
- Winge, H. 1924 A, 1.
- Woodward, A. S. 1898 D, 330.  
 1923 C, 67.
- Woodward, H. 1904 B, 162.
- Worthmann, F. 1922 A, 307 ("nager").
- Wortman, J. L. 1903 A, 430.  
 1920 A, 16.  
 1921 A, 186.
- Zaaijer, T. 1894 A, 339.
- Zittel, K. A. 1897 A, 133 ("nager").
- Zittel and Schlosser 1911 A, 422.  
 1923 A, 506.

### Order DUPLICIDENTATA Illiger.

- Illiger, C. 1811 A, 91.
- Hay, O. P. 1902 A, 784 (Duplicidentata); 735 (Lagomorpha).
- Abel, O. 1912 F, 506.  
 1919 A, 787.
- Adloff, P. 1910 A, 259 ("lagomorphen").
- Ameghino, F. 1889 A, 107, 108 (Lagomorpha).  
 1906 A, 368 ("duplicidentés").  
 1912 B, 172 (Lagomorpha).
- Anonymous 1897 B, 367 (Lagomorpha).
- Ardt, T. 1907 D, 661 (Lagomorpha).
- Beddard, F. E. 1902 A, 502.
- Bonaparte, C. L. 1832 A, 290.
- Branca, W. 1915 A, 43 (Duplicidentata, Lagomorpha).
- Brandt, J. F. 1855 A.
- Carus, V. 1875 A, 112 (Leporida).
- Case, E. C. 1899 B, 183.
- Chardin, P. T. 1928 A, 58 ("duplicidentés").
- Cope, E. D. 1891 N, 70, 72, 90 ("lagomorphs").
- Coues, E. 1883 A, 71, 73 (Duplicidentata, Lagomorpha).
- Depéret, C. 1906 A, 620 ("lagomorphes").
- Dice, L. R. 1917 A, 179 ("lagomorphs").
- Freund, P. 1892 A, 527 (Lagomorpha).
- Gidley, J. W. 1912 A, 284, 285 (Duplicidentata, Lagomorpha).
- Gray, J. E. 1867 D, 220.
- Gregory, W. K. 1910 A, 70, 325.  
 1914 G, 380 (Lagomorpha).  
 1920 A, 174, 241 (Lagomorpha).
- Hay, O. P. 1914 A, 468 (Duplicidentata, Lagomorpha).
- Hilzheimer, M. 1913 A, 569.
- Hinton, M. A. C. 1923 A, 167 (Lagomorpha).
- Höfer, H. 1911 A, 437 (Duplicidentata); 475 ("lagomorphen").
- Hogben, I. T. 1919 A, 73

Jaekel, O. 1911 A, 221.  
 Kükenenthal, W. 1913 A, 680.  
 Leche, W. 1887 A.  
 Ledouble, A. F. 1901 A, 240 ("lagomorphes").  
 Lilljeborg, W. 1866 A, 57 (Lagomorpha).  
 Lyon, M. W. 1904 A, 337.  
 Matthew, W. D. 1907 A, 215 (Lagomorpha).  
 1910 B, 72 (Lagomorpha).  
 1912 B, 186.  
 1914 H, 351 (Lagomorpha).  
 1915 A, 233 (Lagomorpha).  
 1915 K, 466 (Lagomorpha).  
 Miller, G. S. 1912 A, 483.  
 1912 B, 343 (Lagomorpha).  
 1924 C, 446 (Lagomorpha).  
 Osborn, H. F. 1907 G, 148.  
 1910 B, 534.  
 Peterson, O. A. 1926 A, 281 (Lagomorpha).  
 Reynolds, S. H. 1897 A, 366, 435, 478.

Scharff, R. F. 1911 A, 226 (Lagomorpha).  
 Schlosser, M. 1903 F, 144 (Lagomorpha).  
 1924 A, 53 (Lagomorpha).  
 Scott, W. B. 1913 A, 159.  
 Steinmann, G. 1907 A, 477 (Lagomorpha).  
 Stromer, E. 1912 A, 169.  
 Trouessart, E. L. 1904 A, 530 (Lagomorpha).  
 Van Bemmelen, J. F. 1914 A, 524.  
 Vicq-d'Azyr, F. 1892 A, 546 ("duplicidentés").  
 Wagner, A. 1841 A, 128.  
 Waterhouse, G. R. 1839 D, 93 (Leporina).  
 Weber, M. 1904 A, 489 (Lagomorpha); 491, 493 (Duplicidentata).  
 Weber and Abel 1928 A, 246, 254, 257, 265, 267.  
 Weber and Burlet 1927 A, xiv.  
 Wmge, H. 1888 A, 156.  
 Wortman, J. L. 1920 A, 16 (Lagomorpha).  
 Zittel and Schlosser 1911 A, 433.  
 1923 A, 517.

*Superfamily LEPOROIDEÆ, new name.*

Winge, H. 1924 A, 7, 13 (Leporidae).

**OCHOTONIDÆ Thomas.**

Thomas, O. 1896 A (1897), 1026.  
 Hay, O. P. 1902 A, 735.  
 Ameghino, F. 1906 A, 368 (Lagomyidæ).  
 Arldt, T. 1907 D, 661 (Lagomyidæ).  
 1912 A, 744.  
 Beddard, F. E. 1902 A, 505 (Lagomyidæ).  
 Chandler, A. C. 1914 B, 134.  
 Cockerell and Miller 1914 A, 365.  
 Coues, E. 1883 A, 73 (Lagomyidæ).  
 Dice, L. R. 1917 A, 179.  
 Elliot, D. G. 1901 A, 266.  
 Flower, W. H. 1883 D, 421 (Lagomyidæ).  
 Gray, J. E. 1867 D, 219, 220 (Lagomyidæ).  
 Hay, O. P. 1923 A, 312.  
 Höfer, H. 1911 A, 441.  
 Lilljeborg, W. 1866 A, 58 (Lagomyidæ).  
 Lohley, J. L. 1908 A, 200 (Lagomyidæ).  
 Lyon, M. W. 1904 A, *passim*.  
 1904 B, 701.  
 Matthew, W. D. 1905 D, 54 (Lagomyidæ).  
 1907 A, 215.

Matthew, W. D. 1910 B, 72 (Lagomyidæ).  
 1914 H, 351.  
 1915 A, 228 ("picas").  
 Miller, G. S. 1912 B, 343.  
 1924 C, 446.  
 Osborn, H. F. 1910 B, 191, 534 (Lagomyidæ).  
 Palmer, T. S. 1904 A, 758, 860.  
 Roger, O. 1896 A, 141 (Lagomyidæ).  
 Schlosser, M. 1903 F, 144 (Lagomyidæ).  
 1924 A, 48, 52 (Lagomyidæ).  
 Schwarz, E. 1924 A, 421.  
 Stromer, E. 1926 A, 127.  
 Trouessart, E. L. 1904 A, 530.  
 Wallace, A. R. 1876 A, II, 242 (Lagomyidæ).  
 Weber, M. 1904 A, 494 (Lagomyidæ); 491, 494 (Ochotonidæ).  
 Weber and Abel 1928 A, 266, 268, 293.  
 Winge, H. 1888 A, 156 (Lagomyidæ).  
 Woodward, A. S. 1898 B, 377 (Lagomyidæ).  
 Zittel and Schlosser 1911 A, 433.  
 1923 A, 517, 518.

**BRACHYLAGUS Miller. Type *Lepus idahoensis* Merriam.**

Miller, G. S. 1900, Proc. Biol. Soc. Wash., XIII, 157.  
 Hay, O. P. 1921 A, 630.  
 Lyon, M. W. 1904 A, 337.  
 Palmer, T. S. 1904 A, 142, 850.

**Brachylagus sp. indet.**

Gudley, J. W. 1922 B, 120, 127, pl. xxxv, fig. 11 (This genus?). Pleistocene (San Pedro Valley); Arizona.  
 Hay, O. P. 1927 D, 136. Pliocene? (San Pedro Valley); Arizona.

**PRAOTHERIUM Cope. Type *P. palatinum* Cope.**

Cope, E. D. 1871 I, 93.  
 Hay, O. P. 1902 A, 735 (Ochotona, in part).  
**Praotherium palatinum Cope.**  
 Cope, E. D. 1871 I, 94, 102, fig. 20.  
 Hay, O. P. 1902 A, 735 (Ochotona).

Baker, F. C. 1920 A, 208, 214, 397 (Ochotona).  
 Dice, L. R. 1923 B, 260.  
 Hay, O. P. 1923 A, 312 (Ochotona).  
 Rhoads, S. N. 1903 A, 246 (Ochotona).  
 Pleistocene (Early); Pennsylvania.

**OCHOTONA Link. Included *O. pusilla*, *alpina*, and *ochotona*.**

Hay, O. P. 1902 A, 735.  
 Adams, C. C. 1905 A, 60.  
 Allen, J. A. 1892 A (Lagomys).  
 1903 A.

Arldt, T. 1907 D, 258 (Lagomys).  
 Beddard, F. E. 1902 A, 505 (Lagomys).  
 Boas, J. E. V. 1910 A, 445 (Lagomys).  
 Bonhote, J. L. 1905 A, 205.

- Bronn, H. G. 1849 A, 714 (Lagomys).  
 Chardin, P. T. 1928 A, 56 (Lagomys).  
 Cockerell and Miller 1914 A, 365, figs. 68-73.  
 Cope, E. D. 1880 U, 158 (Lagomys).  
 1895 G, 596 (Lagomys).  
 Coues, E. 1883 A, 80 (Lagomys).  
 Cuvier, F. 1825 A, 154, pl. h ("lagomys").  
 Cuvier, G. 1825 A, iv, 200; v, 1, 26 (Lagomys).  
 Depéret, C. 1892 A, 55 (Lagomys).  
 Elliot, D. S. 1901 A, 266.  
 Fischer, J. B. 1829 A, 377 (Lagomys).  
 Frech, F. 1906 A, 484.  
 Frech and Geinitz 1903 A, 36 (Lagomys).  
 Gervais, P. 1852 A, 31 (Lagomys).  
 1859 A, 49 (Lagomys).  
 Giebel, C. G. 1883 A, 152 (Lagomys).  
 Gray, J. E. 1867 D, 220 (Lagomys).  
 Haug, E. 1911 A, 1886 (Lagomys).  
 Hay, O. P. 1923 A, 316.  
 Heilprin, A. 1887 A, 28, 362, 364 (Lagomys).  
 Höfer, H. 1911 A, 439, fig. 1.  
 Howell, A. H. 1924 A, 7.  
 Hue, E. 1907 A, pl. xlv (Lagomys).  
 Kampfen, P. N. 1905 A, 555.  
 Leche, W. 1921 A, 70 (Lagomys).  
 Lilljeborg, W. 1866 A, 58 (Lagomys).  
 Lobley, J. L. 1908 A, 196 (Lagomys).  
 Lönnberg, E. 1910 A, 120.  
 Lyon, M. W. 1904 A, *passim*.  
 1904 B, 701.  
 Matschie, P. 1901 A, 316.  
 Matthew, W. D. 1910 B, 72 (Lagomys).  
 Miller, G. S. 1912 B, 343.  
 1924 C, 446.  
 Nehring, A. 1880 A (Lagomys).  
 1901 C, 465.  
 Osborn, H. F. 1910 B, 316, 469, 534 (Lagomys).  
 Osborn, H. F. 1916 B, 540 (Lagomys).  
 Owen, R. 1845 B, 401 (Lagomys).  
 1868 A, 887 (Lagomys).  
 Palmer, T. S. 1904 A, 468, 860.  
 Pander and Alton 1824 A, 2 (Lagomys).  
 Pictet, F. J. 1853 A, 257 (Lagomys).  
 Schlosser, M. 1903 F, 142 (Lagomys).  
 1924 A, 49, 52.  
 Scott, W. B. 1913 A, 153.  
 1916 A, 117 ("pikas").  
 Taylor, W. P. 1916 A, 471.  
 Tornier, G. 1891 A, 119 (Lagomys).  
 Trouessart, E. L. 1904 A, 532.  
 Vicq-d'Azyr, F. 1792 A, 578, 590 ("pika").  
 Waterhouse, G. R. 1839 C, 172 (Lagomys).  
 1842 A, 197 (Lagomys).  
 Weber, M. 1904 A, 494, 508 (Ochotona, Lagomys).  
 Weber and Abel 1928 A, 270, 293.  
 Zittel and Schlosser 1911 A, 433.  
 1923 A, 517.

### Ochotona princeps (Richardson).

- Richardson, J. 1828, Zool. Jour, III, 520 [Lepus (Lagomys)].  
 Elliot, D. G. 1901 A, 267, fig. 61.  
 Gidley, J. W. 1913 B, 96 (Ochotona. This species?).  
 Hay, O. P. 1923 A, 350.  
 Howell, A. H. 1924 A, 10, pls. in-vi.  
 Miller, G. S. 1912 B, 344.  
 1924 C, 447.  
 Recent, Alberta: Pleistocene; Maryland?

### Ochotona sp. indet.

- Gidley, J. W. 1920 B, 282 ("pikas"). Pleistocene (Middle); Maryland.

## LEPORIDÆ Gray.

- Gray, J. E. 1821 A, 304.  
 Hay, O. P. 1902 A, 735.  
 Abel, O. 1926 B, 359 ("leporiden").  
 Anthony, R. 1913 A, 257.  
 Arlitt, T. 1907 D, 602.  
 1912 A, 698, 744.  
 Beddard, F. E. 1902 A, 502.  
 Boas, J. E. V. 1909 A, 536 ("hasen").  
 Brandt and Woldrich 1887 A, 89 (Leporinæ).  
 Burne, R. H. 1891 A, 160 ("rabbits").  
 Chandler, A. C. 1914 B, 134.  
 Cockerell and Miller 1914 A, 365.  
 Cope, E. D. 1880 U, 158.  
 Coues, E. 1883 A, 73.  
 Cuvier, F. 1825 A, 152 ("lièvres").  
 Cuvier, G. 1825 A, v, 1, 24, 43, pl. i ("lièvres").  
 Depéret, C. 1907 B ("lièvres").  
 1908 A, 307.  
 1912 A, 708 ("léporidés").  
 Doran, A. H. G. 1878 A, 417.  
 Elliot, D. G. 1901 A, 269.  
 Emery, C. 1890 A, 291 ("leporiden").  
 Fretts, G. P. 1909 A, 115 ("hasen").  
 Freund, P. 1893 A, 306.  
 Ganzer, H. 1908 A, 161 ("leporiden").  
 Gervais, P. 1852 A, 20 (Lepusidæ).  
 1859 A, 46 ("leporides").  
 Giebel, C. G. 1878 C, 853 ("hasen").  
 1883 A ("leporinen").  
 Gray, J. E. 1825 B, 341.  
 1867 D, 219, 220.  
 Hay, O. P. 1914 A, 468.  
 1923 A, 312.  
 Heilprin, A. 1887 A, 420 ("hares").  
 Hoernes, R. 1886 A, 688.  
 Höfer, H. 1911 A, 437.  
 Honigsmann, H. L. 1913 A, 293 ("leporiden").  
 Krumbach, T. 1904 A, 274 ("leporiden").  
 Ledouble, A. F. 1901 A, 240 ("léporidés").  
 Leunis and Ludwig 1883 A, 230.  
 Lilljeborg, W. 1866 A, 59.  
 Lobley, J. L. 1908 A, 200, 205.  
 Lull, R. S. 1904 C, 2, 4.  
 Lyon, M. W. 1904 A, *passim*.  
 1904 B, 701.  
 Matthew, W. D. 1901 B, 370.  
 1905 D, 53.  
 1907 A, 215.  
 1909 C, 104, 105, 108, 110, 113, 116, 119.  
 1910 B, 72.  
 1914 H, 351.  
 1915 A, 228 ("rabbits"); 233 (Leporidæ).  
 1915 K, 466, fig. 17 ("rabbits").  
 1928 B, 977 ("rabbits").  
 Meckel, J. F. 1825 A ("hasen").  
 Miller, G. S. 1912 A, 484.  
 1912 B, 345.  
 1920 B, 190.

- Miller, G. S. 1924 C, 449.  
 Osborn, H. F. 1909 D, 61, 66, 68.  
     1910 B, 620.  
 Owen, R. 1868 A, 888.  
 Palmer, T. S. 1904 A, 750, 850.  
 Pander and Alton 1823 B, 6 ("hasen").  
 Pictet, F. J. 1853 A, 255 ("léporins").  
 Reynolds, S. H. 1897 A, 542 ("hares," "rabbits").  
 Scharff, R. F. 1911 A, 224.  
 Schlosser, M. 1903 F, 144.  
     1903 I, 211, 219 ("leporiden").  
     1911 A, 166 ("leporiden").  
     1924 A, 48.  
 Scott, W. B. 1916 A, 117 ("rabbits").  
     1917 A, 121, 134, 144 ("rabbits").  
 Seeley, H. G. 1886 A, 514 ("rabbits").  
 Seton, E. T. 1909 A, 621.

- Stromer, E. 1906 A, 216.  
 Taschenberg, O. 1899 A, 4600.  
 Terra, P. 1911 A, 298.  
 Trouessart, E. L. 1904 A, 533.  
 Turner, H. N. 1847 A, 110 ("hares").  
 Virchow, H. 1916 C, 255 ("kaninchen").  
 Wallace, A. R. 1876 A, II, 242.  
     1894 A, 436.  
 Waterhouse, G. R. 1839 C, 174.  
     1842 A, 197, 199.  
 Weber, M. 1904 A, 491, 494.  
 Weber and Abel 1928 A, 267, 268, 270, 293.  
 Winge, H. 1924 A, 7, 13 (Leporini).  
 Woodward, A. S. 1898 B, 377.  
 Zaaijer, T. 1894 A, 340 (Leporinæ).  
 Zittel and Schlosser 1911 A, 433.  
     1923 A, 517, 518, 670.

PANOLAX Cope. Type *P. sanctæfidei* Cope.

- Cope, E. D. 1874 U, 151.  
 Hay, O. P. 1902 A, 736.  
 Dice, L. R. 1923 A, 191.  
 Haug, E. 1911 A, 1706.  
 Matthew, W. D. 1909 C, 119.

*Panolax sanctæfidei* Cope.

- Cope, E. D. 1874 U, 151.  
 Hay, O. P. 1902 A, 736.  
 Dice, L. R. 1923 A, 192.  
 Matthew, W. D. 1909 C, 116.  
 Merrill, G. P. 1907 A, 53.  
     Upper Miocene (Sante Fe); New Mexico.

LEPUS Linnæus. Type *L. timidus* Linnæus.

- Hay, O. P. 1902 A, 736.  
 Adloff, P. 1910 A, 257.  
     1913 A, 238 ("kaninchen").  
 Aichel, O. 1919 A, 193.  
 Alezais, H. 1902 A, 585 ("lièvre").  
     1902 B, 87 ("lièvre").  
 Allen, J. A. 1892 A.  
     1903 A.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1909 A, 78, fig. 59.  
 Arldt, T. 1907 B, 451.  
     1907 D, 662.  
 Bardeleben, K. 1906 A, 141.  
 Beddard, F. E. 1902 A, 502.  
 Beer, G. R. 1926 A, 350, fig. 124.  
 Bensley, B. A. 1902 A, 4.  
 Bertelli, D. 1909 A, 171.  
 Berthold, A. A. 1825 A, 913, 985.  
 Beyer, H. 1903 A, 95 ("hasen").  
 Boas, J. E. V. 1910 A, 439 ("hasen").  
 Bradley, O. C. 1906 B, 529 ("rabbit").  
 Brandt and Woldrich 1887 A, 89.  
 Brauer, A. 1914 A, 282.  
 Braus, H. 1906 A, 268.  
 Bronn, H. G. 1843 A, 639.  
     1849 A, 714.  
 Broom, R. 1926 A, 262 ("rabbit").  
 Brubacher, H. 1892 A, 3.  
 Burne, R. H. 1891 A, 161, figs.  
 Cleland, J. 1863 B, 301 ("hare").  
 Cope, E. D. 1880 U, 158.  
 Coues, E. 1883 A, 75.  
 Coyle, R. F. 1909 A, 588 ("rabbit").  
 Cuvier, F. 1812 A, 294, pl. xv, fig. 20 ("lièvres").  
     1825 A, 152, pl. 1 ("lièvres").  
 Cuvier, G. 1805 A.  
 Depéret, C. 1907 B.

- Depéret, C. 1909 A, 141.  
     1912 A, 708.  
 Dieterich, K. 1841 A, 81.  
 Doran, A. H. G. 1878 A, 417, pl. lx.  
 Eggeling, H. 1904 A, 96.  
 Eimer, G. H. T. 1901 A, 192.  
 Elliot, D. G. 1901 A, 269.  
 Erdl, M. 1843 A, 529, pl. 1.  
 Fawcett, E. 1911 A, 400, fig. 23 ("rabbit").  
     1917 A, 327.  
 Fischer, J. B. 1829 A, 370.  
 Foote, J. S. 1916 A, 142, pl. xix.  
     1921 A, 10, pl. m, fig. 23.  
 Fretts, G. P. 1909 A, 115.  
 Freund, P. 1892 A, 532, pls. xxii, xxiii.  
     1893 A, 307.  
 Frey, H. 1911 A, 401.  
 Fuchs, H. 1905 B, 16, figs. ("kaninchen").  
     1906 A, 1 ("kaninchen").  
     1909 D, 22, 42, 72, 153, 189, 228, figs. 9, 14, 16, 29, 39-41, 54 ("kaninchen").  
     1912 D, 146.  
 Gaupp, E. 1905 D, 1041.  
     1908 A, 184.  
     1908 C, 683.  
     1910 C, 336.  
     1911 B, 101.  
     1911 E, 336 ("kaninchen").  
     1912 B, 219.  
     1913 A, 14, 103, figs. 6, 8, 12, 64, 65.  
 Gegenbaur, C. 1864 C, 183 ("kaninchen").  
 Geikie, J. 1914 A, 322 ("hare").  
 Geinitz, E. 1903 A.  
     1904 A.  
 Gervais, P. 1852 A, 29.  
     1859 A, 47.  
 Giebel, C. G. 1883 A, pls. xxvi, xlv, xlvi, lviii, lxxv, lxxvi, lxxvii, lxxviii, xcii.

- Gottlieb, H. 1914 A, 203.  
 Gray, J. E. 1867 D, 222.  
 Gregory, W. K. 1915 D, 370, fig. 12.  
 Haller, G. 1922 A ("kaninchen").  
 Hasse and Schwarck 1870 A, 109.  
 Haug, E. 1911 A, 1705.  
 Heilprin, A. 1887 A, 362, 364, 365.  
 Hemick, P. 1908 A, 390.  
 Hmstedt, R. 1870 A, pl. xi.  
 Hinton, M. A. C. 1923 A, 168.  
 Hofer, H. 1911 A, 437, pl. xix, figs. 1-3.  
 Hoernes, R. 1886 A, 688.  
 Hommes, J. H. 1924 A, 24, figs. 39, 40, 42, 48.  
 Honigsmann, H. L. 1913 A, 293.  
 Howes, G. B. 1891 A, 156, pl. xiv, fig. 3.  
 1893 C, 589, fig. 1.  
 1895 A, 521 ("rabbit").  
 1895 B, 736.  
 Hoyer and Babik 1924 A, 456, fig. 9 ("kaninchen").  
 Hue, E. 1907 A, pls. xlviii, lxxxiv, xcvi, cxii, cxix.  
 Huxley, T. H. 1879 A, 396, pl. viii.  
 Joleaud, L. 1919 A, 711-712, fig. 8.  
 1919 D, 412.  
 Kampfen, P. N. 1905 A, 553, figs. 59, 60.  
 Kingsbury, B. F. 1926 A, 89 ("rabbit").  
 Kjellberg, K. 1904 A, 163 ("kaninchen").  
 Klatt, B. 1912 A, 155 ("kaninchen").  
 Klein, E. E. 1888 A, 81.  
 Köstlin, O. 1844 A.  
 Kraglievich, L. 1926 C, 61, 67.  
 Krumbach, T. 1904 A, 274, figs. 1, 2.  
 Lapicque and Girard 1907 A, 1015 ("lapins").  
 Leche, W. 1887 A, pl. xevi, text-figs. 2-4.  
 Le Damany, P. 1903 C, 278 ("lapin").  
 1903 D, 352 ("lapin").  
 1903 F, 402, figs. 1, 3, 4 ("lapin").  
 1903 G, 145, 316, figs. 11, 22 ("lapin").  
 Ledouble, A. F. 1901 A, 241.  
 1903 A, 642 ("lapins").  
 Lepkowski, W. 1897 A, 584, figs. 12-18 ("kaninchen").  
 Leunis and Ludwig 1883 A, 231.  
 Lewis, F. T. 1906 A, 507 ("rabbit").  
 Lubosch, W. 1911 A, 318 ("kaninchen").  
 Lubsen, J. 1905 A, 462, figs. 23-25.  
 Lull, R. S. 1922 C, 603.  
 Lyon, M. W. 1904 A.  
 Mackenzie, W. 1911 A, 363.  
 Matschie, P. 1901 A, 308.  
 Matthes, E. 1921 C.  
 Matthew, W. D. 1907 A, 175, 177, 178.  
 1909 C, 110.  
 1910 B, 72.  
 1915 K, 403.  
 1924 C, 87.  
 Mead, C. S. 1906 A, 480.  
 1909 A, 197.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 62.  
 Merriam, J. C. 1911 B, 215.  
 Meunier, S. 1903 A, 776 ("lapins").  
 Miller, G. S. 1912 A, 495.  
 1912 B, 345.  
 1924 C, 449.  
 Moodie, R. L. 1922 C, 347.  
 Mysberg, W. A. 1917 A, 654.  
 Nehring, A. 1880 A.  
 Nelson, E. W. 1909 A.  
 Noordenbos, W. 1905 B, 374 ("kaninchen").  
 Nunn, E. 1882 A, 158, pl. ii, fig. 1 ("rabbit").  
 O'Harra, C. C. 1910 A, 88, 131.  
 Osborn, H. F. 1909 D, 128.  
 1910 B, 620.  
 1912 G, 246, 249.  
 1916 B, 541.  
 Owen, R. 1845 B, 400, pl. civ; pl. cix, fig. 1.  
 1868 A, 889, fig. 300.  
 Palmer, T. S. 1904 A, 373, 850.  
 Pander and Alton 1823 B, 6, pl. in ("hasen").  
 1824 A, 256.  
 Paramore, R. H. 1910 A, 1460, fig. 13 ("rabbit").  
 Parker, W. K. 1869 A, 505.  
 Parker and Haswell 1897 A, 418, figs. 1017-1036.  
 Pauli, S. 1900 B, 513, figs. 26-28.  
 Perna, G. 1906 A, 138, pl. vi, fig. 24.  
 Pietet, F. J. 1853 A, 256.  
 Pouchet and Chabry 1884 A, 166 ("lapin").  
 Reumiger, A. 1900 A, 5.  
 Retterer, E. 1884 A, 483 ("lapin").  
 Retterer and Vallois 1912 B, 410 ("lapin").  
 Retzius, A. 1837 A, 489, pl. xxii, fig. 2.  
 Römer, F. 1907 A, 74.  
 Schapiro, B. 1913 A, 218.  
 Scharff, R. F. 1895 A, 446, 467.  
 1911 A, 226.  
 Schlosser, M. 1900 G, 306.  
 1902 I, 738.  
 1902 J, 134, 231.  
 1903 F, 142.  
 1903 I, 211.  
 Schumann, A. 1904 A, 283.  
 Scott, W. B. 1913 A, 164.  
 Seeley, H. 1872 A, 276 ("rabbits").  
 1876 C, 156 ("rabbits").  
 Seton, E. T. 1909 A, 621.  
 Shore, T. W. 1887 A, 364.  
 Simpson, G. G. 1926 D, 248.  
 Spurrell, H. G. T. 1906 A, 114 ("hare").  
 Stach, J. 1905 A, 283, figs. 1-6 ("kaninchen").  
 Taschenberg, O. 1899 A, 4600.  
 Terra, P. 1911 A, 298, fig. 120.  
 Tims, H. W. M. 1902 A, 337.  
 1903 A, 143.  
 Toldt, C. 1905 A, 334, figs.  
 Tormier, G. 1891 A, 180 ("kaninchen").  
 Tourneux, F., and J. P. 1912 A, 85, figs. 19-23 ("lapin").  
 Trouessart, E. L. 1904 A, 540.  
 Troxell, E. L. 1921 C, 342, fig. 3.  
 Van Bemmelen, J. F. 1914 A, 524.  
 Van den Broeck, A. J. P. 1912 A, 783.  
 Vieq-d'Azyr, F. 1792 A, 546, 563, 595.  
 Voit, M. 1909 A, pls. xxxv-l.  
 Wagner, A. 1841 A, 128.  
 Wallace, A. R. 1876 A, i, 144, 145.  
 Waterhouse, G. R. 1839 C, 172.  
 1839 D, 91.  
 1842 A, 197.  
 Weber, M. 1904 A, 494.  
 Weber and Burlet 1927 A, figs. 58, 190.  
 Winge, H. 1888 A, 111, 139, 156.  
 Woodward, A. S. 1908 B, 377.  
 Zittel and Schlosser 1911 A, 493.

Zittel and Schlosser 1923 A, 517, 672.  
Zondek, M. 1895 A, 500 ("kaninchen").

**Lepus americanus** (Erxleben).

*Erxleben, J. C. P.* 1777, Syst. Regn. Anim., i, 330.

Brown, B. 1908 A, 198, pl. xxi.

Elliot, D. G. 1901 A, 273.

Frech, F. 1906 A, 454.

Gidley, J. W. 1913 B, 96 (This species?).

Hay, O. P. 1914 A, 32.

1920 B, 93.

1923 A, 350, 395.

1924 D, 252.

Miller, G. S. 1912 B, 347.

1924 C, 452.

Nelson, E. W. 1909 A, 87, pl. vi, figs. 1-4; text-fig. 8.

Peterson, O. A. 1926 A, 281.

Seton, E. T. 1909 A, 621, 653, pls. xlii-xliv; text-figs. 175-176, map 37.

Recent; northern half of North America:

Pleistocene; Pennsylvania, Maryland, Tennessee.

**Lepus benjamini** Hay.

Hay, O. P. 1921 A, 628, pl. cxxi, figs. 1-5b.

1923 A, 14.

1927 D, 129.

Pleistocene (Nebraskan?); Arizona

**Lepus californicus** Gray.

*Gray, J. E.* 1837, Charlesworth's Mag. Nat. Hist., i, 586 (L. californica)

Elliot, D. G. 1901 A, 291.

Kellogg, L. 1912 A, 163.

Lyon, M. W. 1904 A, *passim*, with figs.

Miller, G. S. 1912 B, 353.

1924 C, 458.

Miller, L. H. 1912 A, 70.

Nelson, E. W. 1909 A, 129, pl. vii, fig. 1; pl. viii, fig. 1.

Sinclair, W. J. 1903 A, 711.

1904 A, 17.

Recent; Oregon and California, New Mexico: Pleistocene (Potter Creek Cave); California.

**Lepus californicus orthognathus** Dice.

*Dice, L. R.* 1925 A, 126, fig. 3.

Hay, O. P. 1927 D, 184.

Pleistocene (La Brea); California.

**Lepus giganteus** Brown.

*Brown, B.* 1908 A, 199, pl. xxi.

Hay, O. P. 1914 A, 32.

1924 D, 252.

Pleistocene (Middle); Arkansas.

**Lepus macrocephalus** Matthew.

*Matthew, W. D.* 1907 A, 172, 214.

Abel, O. 1926 B, 359.

Matthew, W. D. 1909 C, 113.

O'Harra, C. C. 1920 A, 156.

Schlosser, M. 1924 A, 48.

Lower Miocene (Harrison); South Dakota.

**Lepus primigenius** Matthew.

*Matthew, W. D.* 1907 A, 172, 216.

1909 C, 113.

O'Harra, C. C. 1920 A, 156.

Lower Miocene (Harrison); South Dakota.

**Lepus townsendii** Bachman.

*Bachman, J.* 1839, Jour. Acad. Nat. Sci. Phila., viii, pt. 1, 90, pl. ii.

Elliot, D. G. 1901 A, 277 (L. campester).

Hay, O. P. 1914 A, 473 (L. campester).

1927 D, 243 (L. campestris).

Lyon, M. W. 1904 A, *passim*, with figs. (L. campester).

McCormack, E. C. 1920 A, 23 (L. campester).

Matthew, W. D. 1902 F, 320 (L. campester. This species?).

Miller, G. S. 1912 B, 346 (L. campester).

1924 C, 451.

Nelson, E. W. 1909 A, 74, pl. iv, fig. 3, pl. v, fig. 3 (L. campester).

Osborn, H. F. 1910 B, 460 (L. campester).

Seton, E. T. 1909 A, 654, pl. xlv; text-figs. 177, 178, map 38 (L. campester).

Stock, C. 1925 A, 195 (L. campester. This species?).

Recent; western Canada and United States: Pleistocene; Oregon.

**Lepus washingtonii klamathensis** Merriam, C. H.

*Merriam, C. H.* 1899, N. A. Fauna, No. 16, 100 (L. klamathensis).

Elliot, D. G. 1901 A, 276 (L. klamathensis).

Hay, O. P. 1927 D, 214.

Kellogg, L. 1912 A, 164 (L. "a." klamathensis).

Miller, G. S. 1912 B, 350.

1924 C, 454.

Miller, L. H. 1912 A, 70 (L. klamathensis).

Nelson, E. W. 1909 A, 107.

Sinclair, W. J. 1903 A, 711 (L. klamathensis).

Stock, C. 1925 A, 113.

Recent; Oregon, California: Pleistocene (Potter Creek Cave); California.

**Lepus** sp. indet.

Barbour and Cook 1917 B, 180. Pliocene (Valentine); Nebraska.

Cook, H. J. 1912 D, 40. Miocene (Lower Harrison); Nebraska.

Frick, C. 1921 A, 293. Pleistocene (Bautista); California.

Gidley, J. W. 1918 C, 180 (This genus?). Late Tertiary (Flaxville); Montana.

1920 B, 282 ("rabbits"). Pleistocene (Middle); Maryland.

1922 B, 120, 127, pl. xxxv, figs. 11-13, 15. Pleistocene (San Pedro Valley); Arizona.

1927 A, 274. Pleistocene; Florida.

Hay, O. P. 1923 A, 321, 350. Pleistocene: Pennsylvania, Maryland.

1927 D, 274. Pleistocene; Arizona, California, Florida, Washington.

1928 C, 425.

Lawson and Palache 1902 A, 390. Pliocene (Siesta); California.



- Matthew, W. D. 1907 A, 172 (Lower Rosebud); South Dakota.  
1909 C, 116.
- Merriam, J. C. 1913 E, 383.  
1914 D, 14. Pleistocene (Siesta); California.  
1917 A, 428. Pliocene (Rattlesnake); Oregon.  
430. Pliocene (Ricardo); Oregon.
- Merriam and Sinclair 1907 A, 196. Miocene (Mascall?); Oregon.
- Miller, L. H. 1912 A, 70, 73. Pleistocene (Fossil Lake); Oregon.
- Shufeldt, R. W. 1913 B, 159, pl. x, figs. 27-30 Oregon.
- Sinclair, W. J. 1903 A, 711. Pleistocene (Potter Creek Cave); California.  
1904 A, 17. Pleistocene (Potter Creek Cave); California.
- Stock, C. 1918 A, 487. Pleistocene (Hawver Cave); California.  
1924 B, 54 ("rabbit"). Upper Miocene (Mint Canyon); California.  
1925 A, 18. Lower Pliocene (Rattlesnake); Oregon: Pleistocene (Upper San Pedro and Caves); California.  
1927 A, 156. Pleistocene; California.

SYLVILAGUS Gray. Type *Lepus sylvaticus* Bachman.

- Gray, J. E. 1867 D, 221.
- Hay, O. P. 1902 A, 736 (*Lepus*, in part).
- Ameghino, F. 1907 A, 70.
- Cockerell and Miller 1914 A, 365, figs. 66, 67.
- Hay, O. P. 1914 A, 471.
- Höfer, H. 1911 A, 440.
- Honigsmann, H. L. 1913 A, 294.
- Lyon, M. W. 1904 A, *passim*.
- Major, C. J. F. 1899 A, 513, 514.
- Miller, G. S. 1912 B, 357.  
1924 C, 462.
- Palmer, T. S. 1904 A, 655, 851.
- Scharff, R. F. 1911 A, 225 (*Silvilagus*).
- Schlosser, M. 1903 F, 144.
- Trouessart, E. L. 1904 A, 535.
- Sylvilagus audubonii* (Baird).**
- Baird, S. F. 1857 A, 608 (*Lepus*).
- Dice, L. R. 1925 A, 128.
- Elliot, D. G. 1901 A, 283 (*Lepus*).
- Furlong, E. L. 1904 A, 54, 55 (*Lepus auduboni*?).  
1906 A, 243, 245 (*L. auduboni*?).
- Hay, O. P. 1927 D, 184, 215 (*S. auduboni*).
- Merriam and Stock 1925 A, 10.
- Miller, G. S. 1912 B, 365.  
1924 C, 470.
- Miller, L. H. 1912 A, 70, 73 (*L. auduboni*).
- Nelson, E. W. 1909 A, 214, pl. xi, figs. 1, 5.
- Sinclair, W. J. 1903 A, 711 (*L. auduboni*?).  
1904 A, 17 (*L. auduboni*).
- Stock, C. 1925 A, 113.
- Recent; north-central California: Pleistocene; California.
- Sylvilagus audubonii pix* Dice.**
- Dice, L. R. 1925 A, 128, figs. 4, 6, 8-12.
- Kellogg, L. 1912 A, 164, 167, fig. 16 (*S. auduboni*).  
Pleistocene (La Brea); California.
- Sylvilagus bachmani cinerascens* (Allen).**
- Allen, J. A. 1890, Bull. Amer. Mus. Nat. Hist., iii, 159 (*Lepus*).
- Dice, L. R. 1925 A, 130, figs. 5, 7.
- Hay, O. P. 1927 D, 184.
- Kellogg, L. 1912 A, 168.
- Miller, G. S. 1912 B, 371.  
1924 C, 476.
- Recent; southern California to Lower California: Pleistocene (LaBrea); California.
- Sylvilagus floridanus* (Allen).**
- Allen, J. A. 1890 Bull. Amer. Mus. Nat. Hist., iii, 160.
- Hay, O. P. 1902 A, 736 (*Lepus sylvaticus*).
- Agassiz, L. 1859 B, 186 ("hare").
- Baker, F. C. 1920 A, 208, 248 (*Lepus sylvaticus*);  
473 (*S. floridanus*).
- Bangs, O. 1898 A, 173 (*Lepus*).
- Brown, B. 1908 A, 199, pl. xvi (*Lepus*).
- Calvin, S. 1909 B, 342 (*L. sylvaticus*).
- Chamberlin, T. C. 1894 A, 759 (*L. sylvaticus*).
- Cope, E. D. 1895 G, 596 (*Lepus sylvaticus*).
- Dice, L. R. 1917 A, 181.
- Elliot, D. G. 1901 A, 380 (*Lepus*).
- Frech and Gemtitz 1903 A, 36 (*L. sylvaticus*).
- Hay, O. P. 1914 A, 32, 38 (*Lepus*); 472, pl. lxxiii, figs. 1-6 (*Sylvilagus*).  
1920 B, 106.  
1923 A, 496.
- 1924 D, 247, 252, 276, 283 (*Lepus, Sylvilagus*).
- Holmes, F. S. 1859 A, 184 ("rabbit").  
1860 A, vii ("rabbit").
- Joleaud, L. 1919 A, 712 (*L. sylvaticus*).
- Leidy, J. 1857 J, 100 (*Lepus sylvaticus*).  
1859 J, 181 (*Lepus sylvaticus*).  
1889 H, 19 (*Lepus sylvaticus*).
- Leverett, F. 1899 A, 42, 124 (*Lepus sylvaticus*).
- Lyon, M. W. 1904 A, *passim*, figs.
- McGee, W. J. 1891 A, 495 (*L. sylvaticus*).
- Matthew, W. D. 1925 A, 97 (*Lepus. This species?*).
- Mercer, H. C. 1894 A, 98 ("gray rabbit").
- Miller, G. S. 1912 B, 358.  
1924 C, 463.
- Nelson, E. W. 1909 A, 164, pl. ix, figs. 2, 5, text-fig. 11.
- Osborn, H. F. 1910 B, 472 (*Lepus sylvaticus*).
- Peterson, O. A. 1928 A, 281 (*Lepus sylvaticus*).
- Rhoads, S. N. 1903 A, 246 (*Lepus*).
- Simpson, G. G. 1928 H, 2.
- Upham, W. 1895 B, 282 ("rabbit").
- Whitney, J. D. 1862 A, 136 (*Lepus sylvaticus*).
- Recent; eastern half of United States: Pleistocene; Pennsylvania, Virginia, Illinois, Iowa, Arkansas, South Carolina, Florida, Maryland.
- Sylvilagus palustris* (Bachman).**
- Bachman, J. 1837, Jour. Acad. Nat. Sci. Phila., vii, 194 (*Lepus*).
- Baker, F. C. 1920 A, 374.
- Bangs, O. 1898 A, 173 (*Lepus*).
- Cope, E. D. 1871 I, 93 (*Lepus sylvaticus*).

Elliot, D. G. 1901 A, 279 (Lepus).

Hay, O. P. 1917 E, 45.

1923 A, 382.

1927 D, 274.

Loomis, F. B. 1924 C, 506.

Lyon, M. W. 1904 A, 330, 337, pl. lxxvi, fig. 6;  
pl. lxxvii, fig. 4; pl. lxxxix, fig. 7 (Limnolagus).

Miller, G. S. 1912 B, 373.

1924 C, 478.

Nelson, E. W. 1909 A, 266, pl. xii, figs. 3, 6.

Sellards, E. H. 1916 B, 103 (S. sp.).

1916 C, 151, 158, pl. xxix, figs. 3, 6 ("Sylvilagus sp." This species?).

1916 D, 616 (S. sp.).

1916 E, 16, 17 (S. sp.).

Simpson, G. G. 1923 H, 2.

Recent; Virginia to South Carolina and Florida: Pleistocene; Florida: (Port Kennedy); Pennsylvania.

### **Sylvilagus sp. indet.**

Gidley, J. W. 1922 B, 120. Pleistocene (San Pedro Valley); Arizona.

1927 E, 274. Pleistocene; Florida.

Hay, O. P. 1919 C, 106. Pleistocene; Florida.

1920 B, 141. Pleistocene; Texas.

1921 A, 613. Pleistocene (Middle?); Washington.

1923 A, 496. Pleistocene; Florida.

1924 D, 247. Pleistocene; Texas.

1927 D, 313.

Stock, C. 1925 A, 113. Pleistocene (Upper San Pedro); California.

### **PALEOLAGUS Leidy. Type *P. haydeni* Leidy.**

Hay, O. P. 1902 A, 735.

Coues, E. 1883 A, 74.

Dice, L. R. 1917 A, 180.

Douglass, E. 1901 B, 250.

1905 A, 211.

1909 C, 231, 283, 285.

Gidley, J. W. 1906 F, 99, fig. 12.

Haug, E. 1911 A, 1528.

Joleaud, L. 1919 A, 711, fig. 8.

Kraglevich, L. 1926 C, 47.

Matthew, W. D. 1901 B, 369, 370, 376.

1902 D, 306.

1905 D, 54, fig. 26.

1907 A, 177, 214.

1909 C, 110.

1910 B, 72.

1915 K, 420.

Merriam, J. C. 1911 B, 206.

1916 E, 169 ("new genus").

Moodie, R. L. 1922 C, 347.

O'Harra, C. C. 1910 A, 88, 127.

Osborn, H. F. 1907 G, 143, 150, figs. 113, 115.

1910 B, 221, 534.

Palmer, T. S. 1904 A, 501, 850.

Scharff, R. F. 1911 A, 226.

Schlosser, M. 1903 F, 142.

1924 A, 48.

Seeley, H. G. 1886 A, 516.

Thorpe, M. R. 1923 E, 241.

Trouessart, E. L. 1904 A, 533.

Troxell, E. L. 1921 C, 340.

Wallace, A. R. 1876 A, i, 140.

Weber, M. 1904 A, 508.

Weber and Abel 1923 A, 293.

Winge, H. 1888 A, 156.

Woodward, A. S. 1898 B, 377.

Zittel and Schlosser 1911 A, 433.

1923 A, 517.

### **Paleolagus agapetillus Cope.**

Hay, O. P. 1902 A, 735 (*P. haydeni*, in part).

Matthew, W. D. 1902 D, 307, fig. 16 (This species?).

1903 B, 218.

1909 C, 108.

Trouessart, E. L. 1904 A, 533.

Troxell, E. L. 1921 C, 347, figs. 17, 19 (Subsp. of *P. haydeni*).

Oligocene (White River); Colorado.

### **Paleolagus brachyodon Matthew.**

Matthew, W. D. 1903 B, 217, 218.

Douglass, E. 1903 A, 149.

Lambe, L. M. 1905 D, 369 A.

Matthew, W. D. 1907 A, 177.

1909 C, 104.

Oligocene (White River); Montana, Canada?

### **Paleolagus haydeni Leidy.**

Hay, O. P. 1902 A, 735.

Cook, H. J. 1912 D, 36.

Cope, E. D. 1891 N, 73, fig. 45 (*P. haydeni*).

Darton, N. H. 1905 A, 173.

Lambe, L. M. 1905 D, 368 A.

1908 A, 11, 58, pl. viii, figs. 21-25.

Matthew, W. D. 1901 B, 357, 377.

1902 D, 308.

1903 B, 218.

1909 C, 105.

O'Harra, C. C. 1920 A, 151.

Seeley, H. G. 1886 A, 516.

Sinclair, W. J. 1924 A, 102.

Trouessart, E. L. 1904 A, 533.

Troxell, E. L. 1921 C, 340, 345, figs. 1, 2, 9-16, 18, 20.

Weber, M. 1904 A, 508, fig. 382.

Oligocene (Middle); Colorado: ("Brule"); Nebraska.

### **Paleolagus intermedius Matthew.**

Hay, O. P. 1902 A, 736.

Matthew, W. D. 1901 B, 357, 377.

1902 D, 308, fig. 17.

1903 B, 218.

1909 C, 108.

Troxell, E. L. 1921 C, 343 (Subsp. of *P. haydeni*).  
Oligocene (White River); Colorado.

### **Paleolagus leporinus (Cope).**

Hay, O. P. 1902 A, 736.

Trouessart, E. L. 1904 A, 533 (Syn. of *P. haydeni*).

Oligocene (White River); Colorado.

**Palæologus nevadensis** Kellogg.*Kellogg, L.* 1910 A, 435, fig. 19.*Merriam, J. C.* 1911 B, 205, 214, 253, 255.

Miocene (Virgin Valley); Nevada.

**Palæologus temnodon** Douglass.*Douglass, E.* 1901 B, 242, 250.

1903 A, 149.

*Granger, W.* 1910 A, 240 (This species?).*Lambe, L. M.* 1905 D, 369 A.*Matthew, W. D.* 1902 D, 310.

1903 B, 216, 218.

1907 A, 177.

1909 C, 104.

*Trouessart, E. L.* 1904 A, 533.

Lower Oligocene (White River); Montana.

**Palæologus triplex** Cope.*Hay, O. P.* 1902 A, 736.*Douglass, E.* 1901 B, 242.*Matthew, W. D.* 1901 B, 377.1902 D, 309 (Syn. of *P. turgidus*).

Oligocene (White River); Colorado.

**Palæologus turgidus** Cope.*Hay, O. P.* 1902 A, 736.*Cook, H. J.* 1912 D, 36.*Douglass, E.* 1901 B, 242.*Lambe, L. M.* 1904 C, 29, 38, 52.

1905 D, 368, A.

1908 A, 11, 58.

*Matthew, W. D.* 1901 B, 377.

1902 D, 309.

1903 B, 218.

1909 C, 105.

*Sinclair, W. J.* 1924 A, 102.*Troxell, E. L.* 1921 C, 343, figs. 4-6.

Middle Oligocene (Biule); Nebraska: (Cedar Creek); Colorado.

HYPOLAGUS Dice. Type *Lepus vetus* Kellogg.*Dice, L. R.* 1917 A, 181.*Joleaud, L.* 1920 D, 98.*Matthew, W. D.* 1924 C, 87.**Hypologus browni** (Hay).*Hay, O. P.* 1921 A, 630, pl. cxxi, figs. 6-18 (Brachylagus).

1923 A, 9 (Brachylagus).

1927 D, 129.

Pleistocene (Nebraskan); Arizona.

**Hypologus edensis** Frick.*Frick, C.* 1921 A, 348, figs. 51-53.*Stock, C.* 1925 R, 21.

Pliocene (Eden); California.

**Hypologus vetus** (Kellogg).*Kellogg, L.* 1910 A, 436, fig. 20 (*Lepus*).*Dice, L. R.* 1917 A, 181, figs. 4, 5.

1923 A, 192.

*Frick, C.* 1921 A, 348.*Matthew, W. D.* 1924 C, 66, 86 [*Lepus* (*Hypologus*)].*Merriam, J. C.* 1911 B, 205, 211, 212, 214, 215, 253, 255 (*Lepus*).1916 A, 179, fig. 15 (*Lepus*. This species?).

1917 A, 429.

*Merriam, Stock, Moody* 1925 A, 58, 69, fig. 24 (This species?).

Pliocene (Thousand Creek); Nevada: (Cedar Mountain?); California.

**Hypologus sp. indet.***Stock, C.* 1925 A, 20. Lower Pliocene (Pinole-Orinda-Siesta); California.OREOLOGUS Dice. Type *Palæologus nevadensis* Kellogg.*Dice, L. R.* 1917 A, 182.*Joleaud, L.* 1920 D, 98.*Merriam, J. C.* 1911 B, 205, 214, 253, 255 (*Palæologus*).**Oreologus nevadensis** (Kellogg).*Kellogg, L.* 1910 A, 405, fig. 19 (*Palæologus*).*Dice, L. R.* 1917 A, 182, fig. 6.

Middle Miocene (Virgin Valley); Nevada.

ARCHÆOLOGUS Dice. Type *Lepus ennisi* Cope.*Dice, L. R.* 1917 A, 180.*Joleaud, L.* 1920 D, 98.*Matthew, W. D.* 1924 C, 87.**Archæologus ennisi** (Cope).*Hay, O. P.* 1902 A, 736 (*Lepus*).*Dice, L. R.* 1917 A, 180, figs. 1-3.

1923 A, 192.

*Matthew, W. D.* 1902 D, 306, fig. 15 (*Lepus*).*Matthew, W. D.* 1907 A, 214 (*Lepus*).1909 C, 108 (*Lepus*).1924 C, 87 (*Lepus*).*Merriam and Sinclair* 1907 A, 185, 188, 190, 191, 192 (*Lepus*).*Schlosser, M.* 1924 A, 48 (*Lepus*).*Seeley, H. G.* 1886 A, 516 (*Lepus*).*Trouessart, E. L.* 1904 A, 533 (*Palæologus*).

Oligocene (Upper); Oregon.

## Order SIMPLICIDENTATI Lilljeborg.

*Lilljeborg, W.* 1866.

Most authors give to this name the neuter termination *a*. For additional citations see under *Clires*.

*Hay, O. P.* 1902 A, 718.*Abel, O.* 1912 F, 506.*Beddard, F. E.* 1902 A, 462.*Case, E. C.* 1899 B, 183.*Gidley, J. W.* 1912 A, 285.*Gregory, W. K.* 1910 A, 465.*Hay, O. P.* 1912 D, 751.

1914 A, 450.

- Hilzheimer, M. 1913 A, 589.  
 Höfer, H. 1911 A, 442.  
 Jaekel, O. 1911 A, 221 (Simplicidentati).  
 Kükenthal, W. 1913 A, 680.  
 Lilljeborg, W. 1866 A, 9.  
 Major, C. J. F. 1908 B, 630.  
 Matthew, W. D. 1912 B, 186 ("simplicidentate rodents").  
     1914 H, 351 ("simplicidentates").  
     1928 B, 977 ("simplicident rodents").  
 Osborn, H. F. 1907 G, 145.

- Rehs, J. 1914 A, 68.  
 Schlosser, M. 1902 I, 708.  
 Scott, W. B. 1913 A, 60.  
 Stromer, E. 1912 A, 169.  
 Van Bemmelen, J. F. 1914 A, 524.  
 Weber, M. 1904 A, 490, 495.  
 Weber and Abel 1928 A, 252, 254, 267, 268, 271.  
 Weber and Burlet 1927 A, xiv.  
 Zittel and Schlosser 1911 A, 425.  
     1923 A, 509.

### Suborder SCIURIFORMES, new name.

- Unless otherwise indicated the writers, as cited, employ for this suborder the name *Sciuromorpha*.  
 Hay, O. P. 1902 A, 718.  
 Ameghino, F. 1889 A, 107, 109.  
     1906 A, 409.  
     1912 B, 172.  
 Anonymous 1897 B, 367.  
 Arldt, T. 1907 B, 451 ("sciuromorphen").  
     1907 D, 144, 252.  
 Beddard, F. E. 1902 A, 462.  
 Cope, E. D. 1891 N, 70, 72, 80 (*Sciuromorpha*. *Myomorpha*).  
 Coues, E. 1883 A, 116.  
 Doran, A. H. G. 1878 A, 418.  
 Gregory, W. K. 1910 A, 330.  
 Hay, O. P. 1912 D, 751.  
     1914 A, 451.  
 Hogben, L. T. 1919 A, 72.  
 Höfer, H. 1911 A, 445 (*Sciuroidea*).

- Kraglievich, L. 1926 C, 47.  
 Matthew, W. D. 1910 B, 64, 69, 71 (*Sciuromorpha*).  
     1915 A, 233.  
 Moodie, R. L. 1922 C, 347.  
 Osborn, H. F. 1910 B, 534 (*Sciuromorpha*); 536 (*Myomorpha*).  
 Rehs, J. 1914 A, 69, 93 (*Sciuromorphi*).  
 Reynold's, S. H. 1897 A, 477.  
 Schlosser, M. 1900 G, 306.  
     1902 I, 708 (*Sciuromorphi*).  
 Scott, W. B. 1913 A, 270.  
 Steinmann, G. 1907 A, 477.  
 Trouessart, E. L. 1904 A, 292.  
 Weber, M. 1904 A, 489.  
 Weber and Abel 1928 A, 267.  
 Winge, H. 1888 A, 155.  
 Zittel and Schlosser 1911 A, 424.  
     1923 A, 508.

### Superfamily SCIUROIDÆ Miller and Gidley.

- Miller and Gidley 1918 A, 432.  
 Abel, O. 1911 A, 148 (*Sciuroidea*).  
 Höfer, H. 1911 A, 445 (*Sciuroidea*).  
 Kraglievich, L. 1926 C, 47 (*Sciuroidea*).  
 Matthew, W. D. 1910 B, 69 (*Sciuroidea*).  
 Osborn, H. F. 1910 B, 535 (*Sciuroidea*, *Castoroidea*, *Geomyoidea*).

- Rehs, J. 1914 A, 69, 93 (*Sciuroidei*).  
 Weber and Abel 1928 A, 267, 272 (*Sciuroidea*); 276 (*Geomyoidea*).  
 Weber and Burlet 1927 A, xiv (*Sciuroidea*, *Castoroidea*, *Geomyoidea*).  
 Winge, H. 1924 A, 8, 79 (*Sciuridæ*, *Heteromyidæ*, *Adjidaumidæ*).

### SCIURIDÆ Gray.

- Gray, J. E. 1821 A, 304.  
 Hay, O. P. 1902 A, 718.  
 Abel, O. 1921 A, 263 ("sciuriden").  
 Adams, C. C. 1902 B, 355 ("squirrels").  
 Adloff, P. 1903 A, 368 ("sciuriden").  
     1904 A, 142 ("sciuriden").  
     1910 A, 253 ("sciuriden").  
     1910 B, 246 ("sciuriden").  
     1913 C, 9 ("sciuriden").  
 Ameghino, F. 1889 A, 894, 955.  
 Anthony, R. 1910 A, 781 ("sciuridés").  
     1912 A.  
 Arldt, T. 1907 D, 680.  
 Beddard, F. E. 1902 A, 463.  
 Branca, W. 1915 A, 45 ("sciuriden").  
 Brandt and Woldrich 1887 A, 57 (*Sciurina*).  
 Carter, J. T. 1922 A, 599.  
 Carus, V. 1875 A, 96 (*Sciurida*).  
 Chandler, A. C. 1914 B, 134.  
 Cookerell and Miller 1914 A, 366.  
 Coues, E. 1883 A, 122.  
 Cuvier, F. 1912 A, 277, pl. xv, fig. 1 ("écureuils").  
 Depéret, C. 1905 C, 703 ("sciuridés").

- Depéret, C. 1907 B ("sciuridés").  
     1908 A, 112.  
     1912 A, 708 ("sciuridés").  
 Doran, A. H. G. 1878 A, 407.  
 Elliot, D. G. 1901 A, 50.  
 Fawcett, E. 1923 A, 221, pls. i-iv (*Xerus*).  
 Fuchs, H. 1914 A, 311 ("sciuriden").  
 Gidley, J. W. 1907 B, 635.  
 Giebel, C. G. 1865 C, 432 ("sciurinen").  
     1878 C, 854 ("sciurinen").  
     1883 A ("sciurinen").  
 Gregory, W. K. 1914 G, 380.  
 Hay, O. P. 1923 A, 312.  
 Hoernes, R. 1886 A, 691.  
 Hogben, L. T. 1919 A, 73.  
 Kampfen, P. N. 1905 A, 554.  
 Krumbach, T. 1904 A, 281, 288 ("sciuriden," "arctomiden").  
 Leunis and Ludwig 1883 A, 213.  
 Lilljeborg, W. 1866 A, 37.  
 Lobley, J. L. 1908 A, 200, 205.  
 Martin, C. 1857 A, 82 ("écureuils").  
     1872 A, 308 ("écureuils").

- Matthew, W. D. 1901 B, 370.  
 1904 C, 264.  
 1909 C, 103, 105, 107, 110, 114, 116, 118.  
 1910 B, 65, 70, 71.  
 1915 A, 229 ("squirrels").  
 1915 K, 466, fig. 17 ("squirrels").  
 Miller, G. S. 1912 A, 897.  
 1912 B, 292.  
 1924 C, 173.  
 Miller and Gidley 1918 A, 433.  
 Osborn, H. F. 1909 D, 55, 61, 66, 80.  
 1910 B, 128, 221, 259, 535.  
 Owen, R. 1866 B, 383.  
 Palmer, T. S. 1904 A, 769, 804.  
 Pocock, R. I. 1923 A, 209.  
 Rehs, J. 1914 A, 69, 94.  
 Reynolds, S. H. 1897 A, 476.  
 Schlosser, M. 1902 I, 708.  
 1902 J, 232, 256.

- Scott, W. B. 1916 A, 117 ("squirrels").  
 Seton, E. T. 1909 A, 307.  
 Taschenberg, O. 1899 A, 4675.  
 Terra, P. 1911 A, 298.  
 Thomas, O. 1915 A, 383.  
 Trouessart, E. L. 1904 A, 297.  
 Troxell, E. L. 1923 D, 395.  
 Vicq-d'Azyr, F. 1792 A, xcvi, 2, 280 (Sciurini).  
 Wagner, A. 1841 A, 116 (Scurina).  
 Wallace, A. R. 1876 A, II, 234.  
 Waterhouse, G. R. 1839 C, 173.  
 1839 D, 91, 94.  
 1842 A, 193.  
 Weber and Abel 1928 A, 253, 257, 267, 268, 273,  
 fig. 72 (Sciuridae, Marmotidae); 274 (Tamiidae).  
 Winge, H. 1924 A, 84 (Sciurini).  
 Zittel and Schlosser 1911 A, 426 (Sciuroidea).  
 1923 A, 509, 518 (Sciuroidea).

## SCIURINÆ Baird.

- Baird, S. F. 1857 A, 240.  
 Hay, O. P. 1902 A, 719.  
 Adloff, P. 1910 A, 266 ("sciurinen").  
 Arltt, T. 1912 A, 742.  
 Elliot, D. G. 1901 A, 50.  
 Gray, J. E. 1821 A, 303 (Arctomydæ).  
 Lilljeborg, W. 1866 A, 38 (Sciurini).

- Miller and Gidley 1918 A, 433.  
 Thomas, O. 1914 A, 416.  
 Trouessart, E. L. 1904 A, 301.  
 Weber, M. 1904 A, 496.  
 Weber and Abel 1928 A, 274 (Tamiidae).  
 Zittel and Schlosser 1911 A, 426.  
 1923 A, 510.

## PALÆARCTOMYS Douglass.

- Douglass, E. 1903 A, 182.  
 Matthew, W. D. 1909 C, 113.  
 1910 B, 71.  
 Zittel and Schlosser 1923 A, 510.

**Palæarctomys macrorhinus** Douglass.

- Douglass, E. 1903 A, 154, 184, figs. 24, 25.  
 Matthew, W. D. 1909 C, 116.  
 Upper Miocene (Arikaree); Montana.

Type *P. montanus* Douglass.**Palæarctomys montanus** Douglass.

- Douglass, E. 1903 A, 154, 183, fig. 23.  
 Matthew, W. D. 1909 C, 116.  
 Upper Miocene (Arikaree); Montana.

**Palæarctomys vetus** (Marsh).

- Hay, O. P. 1902 A, 720 (Arctomys).  
 Matthew, W. D. 1909 C, 116.  
 Upper Miocene (Arikaree); Nebraska.

EUTAMIAS Trouessart. Type *Tamias striatus asiaticus* (Gmelin).

- Trouessart, E. L. 1880, Bull. Soc. d'Études Sci.  
 d'Angers, x, 86-87.  
 Allen, J. A. 1903 A.  
 Merriam, C. H. 1897 C, 189.  
 1906 A, 250, fig. 2.  
 Miller, G. S. 1912 B, 306.  
 1924 C, 199.  
 Osborn, H. F. 1910 B, 477.  
 Palmer, T. S. 1904 A, 282, 865.

**Eutamias** sp. indet.

- Hay, O. P. 1927 D, 215.  
 Kellogg, L. 1912 A, 156. Pleistocene (Potter  
 Creek Cave); California.  
 Merriam and Stock 1925 A, 10. Pleistocene  
 (Potter Creek Cave); California.  
 Miller, L. H. 1912 A, 70 (E. senex). Pleistocene  
 (Potter Creek Cave); California.  
 Sinclair, W. J. 1904 A, 17 (E. senex). Pleisto-  
 cene (Potter Creek Cave); California.  
 Stock, C. 1925 A, 113. Pleistocene (Caves);  
 California.  
 1927 A, 156. Pleistocene; California.

CITELLUS Oken. Type *Mus citellus* Linnæus.

- Oken, L. 1816, Lehrb. Zool., II, 342.  
 If not otherwise indicated the authors, as  
 quoted, use for this genus the name *Spermop-  
 hilus*.  
 Abel, O. 1921 A, 263.  
 Adloff, P. 1907 A, 534.  
 1910 A, 253.  
 1913 A, 238.  
 1913 C, 14.  
 1917 B, 287.

- Ahrens, H. 1912 B, 53.  
 Aichel, O. 1917 A, 102, fig. 1.  
 Allen, J. A. 1892 A.  
 1902 E, 375 (Citellus).  
 1903 A (Citellus).  
 Altmann, F. 1925 A, 101.  
 Arltt, T. 1907 D, 604.  
 Beddard, F. E. 1902 A, 464.  
 Berthold, A. A. 1825 A, 998 (Citillus).  
 Brandt and Woldrich 1837 A, 62.

- Bronn, H. G. 1848 B, 1161.  
1849 A, 717.
- Cockerell and Miller 1914 A, 368, figs. 82-85.
- Coues, E. 1883 A, 125 (Spermophilus).
- Cuvier, F. 1822 A, 293, 304, pl. ii ("spermophile").
- Cuvier, G. 1825 A, v, 1, 29, pl. i ("spermophiles").
- Doran, A. H. G. 1878 A, 408, pl. lx.
- Elliot, D. G. 1901 A, 81.
- Erdl, M. 1843 A, 525, 529.
- Frech, F. 1902 A, 484.
- Frey, H. 1911 A, 403.
- Fuchs, H. 1914 A, 31.
- Gervais, P. 1852 A, 19.  
1859 A, 24.
- Giebel, C. G. 1855 A, 46, pl. xx.
- Gottlieb, H. 1914 A, 204.
- Heilprin, A. 1887 A, 359.
- Heimick, P. 1908 A, 390.
- Höfer, H. 1911 A, 447, pl. xix, fig. 12.
- Hoernes, R. 1886 A, 692.
- Hrdlička, A. 1903 A, 881.
- Hue, E. 1907 A, pl. xlv.
- Leche, W. 1887 A.
- Leunis and Ludwig 1883 A, 214.
- Lilljeborg, W. 1866 A, 40.
- Lönnberg, E. 1910 A, 119.
- Matthew, W. D. 1910 B, 71.  
1915 K, 402.
- Merriam, C. H. 1892 A, 62.
- Merriam, Stock, Moody 1925 A, 68.
- Miller, G. S. 1912 A, 924 (Citellus).  
1912 B, 295 (Citellus).  
1924 C, 184 (Citellus).
- Nehring, A. 1880 A.  
1901 C, 464.
- Osborn, H. F. 1909 D, 90.  
1910 B, 632.
- Owen, R. 1845 B, 402, pl. cv, fig. 3 ("souslik").
- Palmer, T. S. 1904 A, 190, 864 (Citellus).
- Pictet, F. J. 1853 A, 237.
- Poock, R. I. 1923 A, 209-246.
- Rehs, J. 1914 A, 94.
- Scharff, R. F. 1895 A, 467.  
1911 A, 60 (Citellus).
- Schwalbe, G. 1904 A, 207.
- Scott, W. B., 1913 A, 163.
- Shimer, H. W. 1903 A, 824.
- Taschenberg, O. 1899 A, 4683.
- Tims, H. W. M. 1901 A, 278.
- Wallace, A. R. 1876 A, ix, 235, 236.
- Waterhouse, G. R. 1839 C, 172.  
1839 D, 96.
- Weber, M. 1904 A, 497.
- Weber and Abel 1928 A, 274 (Citellus).
- Winge, H. 1888 A, 109.  
1924 A, 82, 83.
- Woodward, H. 1904 B, 162.
- Citellus bensoni** Gidley.  
*Gidley, J. W.* 1922 B, 120, 122, pl. xxxiv, figs. 3, 4.  
*Hay, O. P.* 1927 D, 136.  
Pleistocene (San Pedro Valley); Arizona.
- Citellus cochisei** Gidley.  
*Gidley, J. W.* 1922 B, 120, 121, pl. xxxiv, figs. 1, 2.  
*Hay, O. P.* 1927 D, 136.  
Pleistocene (San Pedro Valley); Arizona.
- Citellus taylori** Hay.  
*Hay, O. P.* 1921 A, 616, pl. cxx, fig. 7.  
Pleistocene (Early?); Texas.
- Citellus tridecemlineatus** (Mitchill).  
*Mitchill, S. L.* 1821, Med. Repos., n.s., vi (xxi).  
248 (Saurus).
- Brown, B. 1908 A, 194 (Spermophilus).
- Coues, E. 1883 A, 125 (Spermophilus).
- Elliot, D. G. 1901 A, 100 (Spermophilus).
- Hay, O. P. 1914 A, 32.
- Merriam, C. H. 1906 A, 255, fig. 3.
- Miller, G. S. 1912 B, 305.  
1924 C, 193.
- Scharff, R. F. 1911 A, 61.
- Seton, E. T. 1909 A, 394, pl. xxxvi, text-figs. 122-123, map 2.  
Recent; Michigan to Montana, north to Saskatchewan, south to central Texas, Illinois and Ohio; Pleistocene (Middle); Arkansas.
- Citellus tuitus** Hay.  
*Hay, O. P.* 1921 A, 627, pl. cxx, figs. 5, 6.  
1923 A, 9.  
1927 D, 129.  
Pleistocene (Nebraskan?); Arizona.
- Citellus sp. indet.**  
*Kellogg, L. H.* 1910 A, 427, fig. 8. Pliocene (Thousand Creek); Nevada.  
*Merriam, J. C.* 1911 B, 211, 213, 214, 253. Pliocene (Thousand Creek); Nevada.  
1917 A, 429. Pliocene (Thousand Creek); Nevada.  
*Stock, C.* 1920 A, 272, fig. 6 ("sciurid"). Oligocene (San Lorenzo); California.

**CALLOSPERMOPHILUS Merriam, C. H. Type *Sciurus lateralis* Say.**

- Merriam, C. H.* 1897, Proc. Biol. Soc. Washington, xi, 189.
- Miller, G. S.* 1912 B, 315.  
1924 C, 182.
- Callospermophilus chrysodeirus** (Merriam).  
*Merriam, C. H.* 1890, N. Amer. Fauna, No. 4, 19 (Tamias).
- Elliot, D. G.* 1901 A, 84 (Spermophilus).
- Hay, O. P.* 1927 D, 214, 215.
- Kellogg, L.* 1912 A, 156.
- Merriam, C. H.* 1901, Proc. Biol. Soc. Washington, xiv, 126.
- Merriam and Stock* 1925 A, 10.
- Miller, G. S.* 1912 B, 315.  
1924 C, 182.
- Miller, L. H.* 1912 A, 70.
- Sinclair, W. J.* 1904 A, 17.
- Stock, C.* 1925 A, 113.  
Recent; northern California: Pleistocene (Caves); California.

**Callospermophilus trepidus** Taylor.

Taylor, W. P. 1910, Univ. Calif. Pub. Zool., v, 283.

Kellogg, L. 1910 A, 427, fig. 8 ("Citellus sp."

This species?).

Miller, G. S. 1924 C, 184.

Recent; Nevada: Pliocene (Thousand Creek); Nevada.

**MARMOTA** Blumenbach. Type *Mus marmota* Linnæus.

Blumenbach, C. H. C. 1779, Handb. Naturgesch., i, 79.

Unless otherwise stated, the authors here cited employ the name *Arctomys*.

Hay, O. P. 1902 A, 720.

Abel, O. 1912 F, 347, 379.  
1921 A, 263.

Allen, J. A. 1892 A.  
1903 A.

Altmann, F. 1925 A, 108.

Ameghino, F. 1903 A, 129.

Arlt, T. 1907 D, 303, 304.

Bärthold, — 1904 A, 367.

Bardleben, K. 1885 B, 86 (*Arctomys*).

Beddard, F. E. 1902 A, 465.

Berthold, A. A. 1825 A, 913, 986 (*Marmota*, *Arctomys*).

Blumenbach, J. F. 1779, Handb. Naturges., i, 79 (*Marmota*).

Bovero, A. 1905 A, 114, figs. 1-4.

Brandt and Woldrich 1887 A, 61.

Bronn, H. G. 1849 A, 717.

Brubacher, H. 1892 A, 3.

Cockerell and Miller 1914 A, 368, figs. 74-76.

Cope, E. D. 1880 U, 158.

Coues, E. 1883 A, 122.

Cuvier, F. 1812 A, 278, pl. xv, fig. 2 ("marmotte").

1822 A, 293, 297, pl. i (*Arctomys*).

1825 F, 159, pl. liv ("marmottes").

Cuvier, G. 1825 A, v, 1, 6, 29, pl. i.

Doran, A. H. G. 1878 A, 409, pl. lx.

Eggeling, H. 1904 A, 93.

Eimer, G. H. T. 1901 A, 139.

Elliot, D. G. 1901 A, 139.

Erdl, M. 1843 A, 524, 529.

Frech, F. 1906 A, 484.

Gaupp, E. 1912 B, 235.  
1913 A, 125.

Gegenbaur, C. 1864 C, 182.

Gervais, P. 1852 A, 20.

1859 A, 23.

Giebel, C. G. 1855 A, 45.

1873 C, 854.

1883 A, pls. xxii, lviii, lxxi, lxxviii.

Gottlieb, H. 1914 A, 186.

Gregory, W. K. 1910 A, 437.

1920 A, 173, 242, fig. 126.

Hagmann, G. 1909 A.

Hasse and Schwarck 1870 A, 114.

Heilprin, A. 1887 A, 359, 364.

Höfer, H. 1911 A, 447, pl. xix, figs. 5, 6.

Hoernes, R. 1898 A, 691.

Howell, A. H. 1915 A, 1, 18 (*Marmota*).

Hue, E. 1907 A, pls. xlii, lxxxiv, xcvi, cxli, cxlvi, cxlxi, cxlii, cxliii.

Köstlin, O. 1844 A.

Krumbach, T. 1904 A, 288.

Leunis and Ludwig 1883 A, 215.

Lilljeborg, W. 1868 A, 40.

Lobley, J. L. 1908 A, 196.

Lönnberg, E. 1910 A, 119.

Martins, C. 1857 A, 82 ("marmottes").

1872 A, 308 ("marmottes").

Matschie, P. 1901 A, 316.

Matthew, W. D. 1910 B, 46, 71.

1915 K, 402.

Meckel, J. F. 1825 A.

Merriam, C. H. 1893 A, 62.

Miller, G. S. 1912 A, 931 (*Marmota*).

1912 B, 292 (*Marmota*).

1924 C, 173.

Nehring, A. 1880 A.

1901 C, 464.

Osborn, H. F. 1910 B, 535; 622 (*Marmota*).

1916 B, 535.

Owen, R. 1845 B, pl. cv, fig. 4.

1866 B, 382.

Palmer, T. S. 1904 A, 118, 864; 400, 865 (*Marmota*).

Pander and Alton 1823 B, 6, pl. vi ("murmeltiere").

1824 A, 3 ("murmeltiere").

Paulli, S. 1900 B, 514.

Pictet, F. J. 1853 A, 236.

Scharff, R. W. 1907 A, 139.

Schwalbe, G. 1904 A, 207.

Scott, W. B. 1913 A, 152, fig. 59 (*Marmota*).

Seton, E. T. 1909 A, 416.

Taschenberg, O. 1899 A, 4465.

Tornier, G. 1889 A, 178 (*Arctomys*).

1891 A, 114, 174.

Trouessart, E. L. 1904 A, 343.

Vicq-d'Azyr, F. 1792 A, 340.

Wallace, A. R. 1876 A, ii, 235, 236.

Waterhouse, G. R. 1839 C, 172.

Weber, M. 1904 A, 497.

Weber and Abel 1928 A, 254, fig. 168.

Winge, H. 1888 A, 109.

1924 A, 9, 83, 84.

Zietzschmann, O. 1917 A, 437, pl. xxv.

Zittel and Schlosser 1911 A, 426.

1923 A, 510.

**Marmota arizonæ** Hay.

Hay, O. P. 1921 A, 627, pl. cxxiii, figs. 6-8.

1923 A, 9.

1927 D, 129.

Pleistocene (Nebraskan?); Arizona.

**Marmota arrodens** Hay.

Hay, O. P. 1921 A, 611, pl. cxvii, figs. 3-5, 7, 9; pl. cxviii, figs. 1, 3, 4.

1927 D, 259.

Pleistocene (Middle?); Washington.

**Marmota flaviventer** (Audubon and Bachman).

Audubon and Bachman 1841, Proc. Acad. Sci. Phila., 1841, 99 (*Arctomys*).

- Hay, O. P. 1921 A, 613, pl. cxviii, figs 6, 8.  
1927 D, 215, 259.  
Howell, A. H. 1915 A, 36-55, pls. i-iv; vi-viii, xii-xiv; text-fig. 2 (*M. flaviventris*).  
Kellogg, L. 1912 A, 154 (*Arctomys*, This species?).  
Merriam and Stock 1925 A, 10.  
Miller, G. S. 1912 B, 292.  
1924 C, 175.  
Stock, C. 1918 A, 468.  
1925 A, 113.  
Taylor, W. P. 1911 B, 211.  
Trouessart, E. L. 1904 A, 344.  
Recent; New Mexico to 49th parallel: Pleistocene; California, Washington.

### **Marmota minor (Kellogg).**

- Kellogg, L. 1910 A, 425, figs. 3-7 (*Arctomys*).  
Merriam, J. C. 1911 B, 211, 213, 214, 253 (*Arctomys*).  
1917 A, 429 (*Arctomys*).  
Pliocene (Thousand Creek); Nevada.

### **Marmota monax (Linnaeus).**

- Hay, O. P. 1902 A, 720 (*Arctomys monax*, *M. torta*).  
Ameghino, F. 1903 A, 138, fig. 59 (*Arctomys*).  
Baker, F. C. 1920 A, 354 (*Arctomys*).  
Brown, B. 1908 A, 192 (*Arctomys*).  
Cope, E. D. 1895 G, 596 (*Arctomys*).  
Coues, E. 1883 A, 123, fig. 66 (*Arctomys*).  
Cuvier, F. 1822 A, 293, 297 (*Arctomys empetra*).  
Dewey, M. 1918 A, 143, fig. 5 (*Arctomys*).  
Elliot, D. G. 1901 A, 105, fig. 24 (*Arctomys*).  
Fischer, J. B. 1829 A, 342 (*Arctomys*).  
Foote, J. S. 1916 A, 137, pl. xix (*Arctomys*).  
Frech and Geinitz 1903 A, 36 (*Arctomys*).  
Gidley, J. W. 1913 B, 96 (This species?).  
1920 B, 282 ("woodchucks." This species?).  
Giebel, C. G. 1883 A, pl. xxii, fig. 1 (*Arctomys*).

### **OTOSPERMOPHILUS Brandt. Type *Sciurus grammurus* Say.**

- Brandt, J. F. 1844, Bull. Acad. Sci. St. Pétersb., II, 379.  
Miller, G. S. 1912 B, 295 (*Citellus*).  
1924 C, 179.  
**Otospermophilus gidleyi** Merriam,  
Stock, Moody.  
Merriam, Stock, Moody 1925 A, 58, 68, fig. 23.  
Pliocene (Rattlesnake); Oregon.  
**Otospermophilus grammurus douglasii** (Richardson).  
Richardson, J. 1829, Fauna Bor.-Amer., I, 172 (*Arctomys*).  
Elliot, D. G. 1901 A, 89 (*Spermophilus g. douglasii*).  
Furlong, E. L. 1904 A, 54, 55 (*Citellus douglasii*).  
1906 A, 243, 245 (*Citellus douglasii*).  
Hay, O. P. 1927 D, 171, 172, 214, 215 (*Citellus beecheyi douglasii*).  
Kellogg, L. 1912 A, 155 (*Citellus beecheyi douglasii*).

- Hay, O. P. 1914 A, 32, 38.  
1920 B, 93, 105, 116.  
1921 A, 612, pl. cxvii, figs. 2, 6, 8, 10; pl. cxviii, figs. 3, 4.  
1923 A, 489.  
1928 C, 429.  
Howell, A. H. 1915 A, 1-36, pls. iii-vi, xi, xii; text-fig. 1.  
Leidy, J. 1857 J, 100 (*Arctomys*).  
Leighton, M. M. 1921 A, 513.  
Mercer, H. C. 1894 A, 98 ("woodchuck").  
Miller, G. S. 1912 B, 293.  
1924 C, 173.  
Rhoads, S. N. 1903 A, 243 (*Arctomys*).  
Seton, E. T. 1909 A, 416; text-figs. 125, 126, maps 22, 23.  
Trouessart, E. L. 1904 A, 344.  
Whitney, J. D. 1862 A, 136 (*Arctomys*).  
Recent; New York to Georgia northwest to Alaska: Pleistocene; Arkansas, Pennsylvania, Virginia, Illinois, Maryland.  
**Marmota nevadensis (Kellogg).**  
Kellogg, L. 1910 A, 422, figs. 1, 2 (*Arctomys*).  
Merriam, J. C. 1911 B, 211, 214, 253 (*Arctomys*).  
1917 A, 429 (*Arctomys*).  
Pliocene (Thousand Creek); Nevada.  
**Marmota sp. indet.**  
Cragin, F. W. 1899 A, 610 ("woodchuck"). Pleistocene; Colorado.  
1900 A, 23 ("woodchuck"). Pleistocene; Colorado.  
Furlong, E. L. 1904 A, 54.  
1906 A, 243. Pleistocene (Samwel Cave); California.  
Miller, L. H. 1912 A, 70, 73 ("*Arctomys* sp.").  
Pleistocene (Potter Creek Cave and Samwel Cave); California.  
Sinclair, W. J. 1904 A, 17 ("*Arctomys* sp.").  
Pleistocene; California.

- Merriam and Stock 1925 A, 10 (*Citellus beecheyi douglasii*).  
Miller, G. S. 1912 B, 299 (*Citellus*).  
1924 C, 181.  
Miller, L. H. 1912 A, 73 (*Citellus douglasii*); 70 (*Spermophilus douglasii*).  
1912 B, 299 (*Citellus*).  
1924 C, 181.  
Scharff, R. P. 1911 A, 61 (*Citellus douglasii*).  
Sinclair, W. J. 1903 A, 711 (*Spermophilus douglasii*).  
1904 A, 17 (*Spermophilus douglasii*).  
Stock, C. 1925 A, 113, 118 (*Citellus beecheyi douglasii*).  
Pleistocene (Caves); California.  
**Otospermophilus grammurus fisheri** Merriam.  
Merriam, C. H. 1893, Proc. Biol. Soc. Wash., VIII, 133 (*Spermophilus beecheyi fisheri*).  
Baird, S. F. 1857 A, 307, pl. iii, fig. 2; pl. xlv, fig. 3 (*Spermophilus beecheyi*).  
Dice, L. R. 1925 A, 125 (*Citellus beecheyi fisheri*).



- Hay, O. P. 1927 D, 183, 190 (*Citellus beecheyi captus*); 183 (*C. beecheyi fisheri*).  
 Kellogg, L. 1912 A, 164, figs. 12-15 (*Citellus beecheyi captus*).  
 Mearns, E. A. 1907, Mamm. Mex. Bound. U. S., pt. 1, 315 (*Otospermophilus grammurus*).  
 Miller, G. S. 1912 B, 299 (*Citellus grammurus fisheri*).  
 1924 C, 181.  
 Richardson, J. 1829 A, 170 [*Arctomys (Spermophilus) beecheyi*].

CYNOMYS Rafinesque. Type *Arctomys ludovicianus* Ord.

- Rafinesque, C. S. 1817, Amer. Month. Mag., II, 45.  
 Abel, O. 1921 A, 263.  
 Allen, J. A. 1892 A.  
 Ameghino, F. 1903 A, 118.  
 Cockerell and Miller 1914 A, 367, figs. 77-81.  
 Coues, E. 1883 A, 123.  
 Elliot, D. G. 1901 A, 102.  
 Haug, E. 1911 A, 1706, 1886.  
 Heilprin, A. 1887 A, 359.  
 Höfer, H. 1911 A, 447.  
 Hollister, N. 1916 A, 1, 10.  
 Leunis and Ludwig 1883 A, 215.  
 Lilljeborg, W. 1886 A, 40.  
 Lönnberg, E. 1910 A, 119.  
 Lydekker, R. 1910 E, 352.  
 Matthew, W. D. 1909 C, 118.  
 1910 B, 71.  
 1915 K, 402.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 294.  
 1924 C, 196.  
 Osborn, H. F. 1905 I, 110.  
 1909 D, 85.  
 1910 B, 457.  
 Palmer, T. S. 1904 A, 212, 864.  
 Scharff, R. F. 1911 A, 148.  
 Shimer, H. W. 1903 A, 824.  
 Taschenberg, O. 1899 A, 4536.  
 Thomas, O. 1916 A, 303.  
 Trouessart, E. L. 1904 A, 342.  
 Troxell, E. L. 1922 A, 124, 128.  
 Weber, M. 1904 A, 497.  
 Winge, H. 1888 A, 109.  
 1924 A, 9, 83, 84.  
 Zittel and Schlosser 1923 A, 510.

Say, T. 1823, Long's Exped. Rocky Mts., II, 72 (*Sciurus grammurus*).

Recent; California: Pleistocene (La Brea); California.

Inasmuch as the relationships of the sub-species *fisheri* are uncertain, citations are made to both species *grammurus* and *beecheyi*. The statement as to locality and geological age refers only to the subspecies *fisheri*.

*Cynomys ludovicianus* (Ord).

- Ord, G. 1815, Guthrie's Geogr., 2d Amer. ed., II, 292, 302 (*Arctomys*).  
 Ameghino, F. 1903 A, 118, figs. 36, 56.  
 Coues, E. 1883 A, 123, fig. 67.  
 Elliot, D. G. 1901 A, 102, fig. 23.  
 Foote, J. S. 1916 A, 96, pl. ix.  
 Fraas, E. 1902 C, lxvii (*Cercomys*).  
 Hay, O. P. 1914 A, 26 (*This species?*).  
 1921 A, 616.  
 1928 C, 425.  
 Hollister, N. 1916 A, 14-21, pls. i, ii, v-vii.  
 Lobley, J. L. 1908 A, 196.  
 Lydekker, R. 1905 F, 134.  
 Mansuy, — 1923 A, 103 (*C. lupovicianus*).  
 Matthew, W. D. 1902 F, 317 (*This species?*).  
 1918 A, 227 (*This species?*).  
 Miller, G. S. 1912 B, 294.  
 1924 C, 196.  
 Trouessart, E. L. 1904 A, 342 (*Syn. of C. socialis*).  
 Recent; Great Plains from northern Montana to Texas and Arizona: Pleistocene (Sheridan); Nebraska.  
*Cynomys niobrarius* Hay.  
 Hay, O. P. 1921 A, 615, pl. cxxii, fig. 7.  
 Pleistocene (Middle?); Washington.  
*Cynomys* sp. indet.  
 Hay, O. P. 1924 D, 304. Pleistocene; Nebraska.  
 Matthew, W. D. 1909 C, 116. Lower Pliocene? (Republican River); Kansas.  
 1918 A, 228. Pleistocene (Aftonian); Nebraska.  
 Merriam, J. C. 1917 A, 438.

TAMIAS Illiger. Type *Sciurus striatus* Linnæus.

- Hay, O. P. 1902 A, 720.  
 Abel, O. 1921 A, 263.  
 Allen, J. A. 1892 A.  
 Brunner, J. 1905 A, 264 ("chipmunk").  
 Coues, E. 1883 A, 126.  
 Cuvier, F. 1825 A, 162 ("tamias").  
 Doran, A. H. G. 1878 A, 408, pl. lx.  
 Elliot, D. G. 1901 A, 67.  
 Gegenbaur, C. 1864 C, 187.  
 Giebel, C. G. 1883 A, pl. xxii.  
 Gottlieb, H. 1914 A, 204.  
 Heilprin, A. 1887 A, 359, 365.  
 Höfer, H. 1911 A, 447.  
 Leunis and Ludwig 1883 A, 214.  
 Lilljeborg, W. 1886 A, 39.  
 Matschie, P. 1901 A, 315.

- Matthew, W. D. 1910 B, 71.  
 1915 K, 402.  
 Merriam, C. H. 1892 A, 62.  
 Miller, G. S. 1912 B, 318.  
 Palmer, T. S. 1904 A, 661, 867.  
 Pocock, R. I. 1923 A, 209.  
 Seton, E. T. 1909 A, 337.  
 Tornier, G. 1891 A, 119.  
 Waterhouse, G. R. 1839 C, 172.  
 Weber, M. 1904 A, 497.  
 Weber and Abel 1928 A, 274.  
 Winge, H. 1888 A, 109, 139.  
 1924 A, 8, 82, 84.  
 Zittel and Schlosser 1911 A, 426.  
 1923 A, 510.

**Tamias lavidens** Cope.

Hay, O. P. 1902 A, 720.

1923 A, 353.

Palmer, T. S. 1904 A, 282 (Eutamias).

Trouessart, E. L. 1904 A, 330 (Eutamias).

Pleistocene (Middle); Virginia.

**Tamias nasutus** Brown.

Brown, B. 1908 A, 193, pl. xx.

Hay, O. P. 1914 A, 32.

1924 D, 251.

Pleistocene (Middle); Arkansas.

**Tamias striatus** Linnæus.

Linnæus, C. 1758 A, 64 (Sciurus).

Hay, O. P. 1902 A, 720.

Brandt and Woldrich 1887 A, 58.

Coleman, A. P. 1901 B, 129, 137.

1901 C, 224.

Coues, E. 1883 A, 125.

Doran, A. H. G. 1878 A, 408, pl. lx, fig. 9.

Elliot, D. G. 1901 A, 80.

Fischer, J. B. 1829 A, 348 (Sciurus).

Hay, O. P. 1920 B, 93.

1923 A, 497.

Johnson, W. A. 1917 A, 25 ("chipmunk").

Jordan, D. S. 1905 B, 547.

Leidy, J. 1839 H, 5.

Mercer, H. C. 1894 A, 98.

Miller, G. S. 1912 B, 318.

Rhoads, S. N. 1903 A, 242.

Seton, E. T. 1909 A, 337, pl. xxxii; text-fig. 117.

Trouessart, E. L. 1897 A, 432.

Recent; eastern North America: Pleistocene;

Ontario, Pennsylvania, Tennessee.

**DIPLOLOPHUS** Troxell. Type *D. insolens* Troxell.

Troxell, E. L. 1923 C, 157.

**Diplolophus insolens** Troxell.

Troxell, E. L. 1923 C, 157, figs. 1, 2.

Middle Oligocene; Nebraska.

**SCIURUS** Linnæus. Type *S. vulgaris* Linnæus.

Hay, O. P. 1902 A, 719.

Adloff, P. 1903 A, 367.

1904 A, 143.

1907 A, 534.

1910 A, 258.

Ahrens, H. 1912 B, 49.

Alezaïs, H. 1902 A, 586 ("écureuil").

Allen, J. A. 1892 A.

1898 A, 249.

1903 A.

Ameghino, F. 1889 A, 1024.

1903 A, 129.

1906 A, 243.

Anthony, R. 1910 A, 781 ("écureuil").

1912 A ("écureuil").

Arlt, T. 1907 D, 237, 298.

Bangs, O. 1896 D, 145.

Bardeleben, K. 1904 A, 111.

Berthold, A. A. 1825 A, 919, 988.

Beyer, H. 1908 A, 96 ("eichhörnchen").

Bolk, L. 1913 A, 88, fig. 68.

Bovero, A. 1905 A, 119.

Brandt and Woldrich 1887 A, 57.

Brau, A. 1914 A, 282.

Bronn, H. G. 1849 A, 717, 783, seq.

Brubacher, H. 1892 A, 3 ("eichhörnchen").

Brunner, J. 1905 A, 264 ("squirrel").

Carlsson, A. 1922 A.

Cleveland, J. 1863 B, 30 ("squirrel").

Cockerell and Miller 1914 A, 369, figs. 95-97.

Cope, E. D. 1880 U, 158.

Coues, E. 1883 A, 122, 128.

Cuvier, G. 1805 A.

1825 A, v, 1, 9, 28, pl. i.

Depéret, C. 1912 A, 708.

Dieterich, K. 1841 A, 80.

Doran, A. H. G. 1878 A, 408, pl. lx.

Eggeling, H. 1904 A, 93.

Eimer, G. H. T. 1901 A, 257 ("eichhörnchen").

Elliot, D. G. 1901 A, 50.

Erdl, M. 1843 A, 524, pl. i.

Fischer, J. B. 1829 A, 348.

Foote, J. S. 1916 A, 115, pl. xiv.

Frassetto, F. 1915 A, 66.

Frech, F. 1906 A, 484.

Freund, P. 1892 A, 542.

1893 A, 317.

Gaupp, E. 1912 B, 235.

1913 A, 125.

Gegenbaur, C. 1864 C, 187.

1885 C, 558, figs. 9, 10.

Gervais, P. 1852 A, 18.

1859 A, 25.

Giebel, C. G. 1855 A, 45, pl. xx.

1883 A, pl. xxii, xlvii, lxxvii, lxxxiv.

Gottlieb, H. 1914 A, 204.

Hasse and Schwarck 1870 A, 118.

Heilprin, A. 1887 A, 358, 364, 365.

Heinick, P. 1908 A, 390.

Höfer, H. 1911 A, 445, 446, pl. xix, figs. 10, 11.

Hoernes, R. 1886 A, 692.

Holland, W. J. 1912 B, 750.

Howes, G. B. 1893 C, 589, fig. 1.

Hue, E. 1907 A, pl. xlvii.

Köstlin, O. 1844 A.

Kraglievich, L. 1926 C, 47.

Krumbach, T. 1904 A, 281, figs. 11-15.

Lapicque and Girard 1907 A, 1016.

Leche, W. 1887 A.

Leunis and Ludwig 1883 A, 213.

Lilljeborg, W. 1866 A, 33.

Lull, R. S. 1922 C, 603.

Matschie, P. 1901 A, 315.

Matthew, W. D. 1901 B, 369.

1909 C, 118.

1910 B, 71.

1915 K, 402, 466.

1924 C, 74.

Meckel, J. F. 1825 A, 402, 466.

Merriam, C. H. 1892 A, 62.

Miller, G. S. 1912 A, 898.

1912 B, 319.

1924 C, 209.

Nehring, A. 1880 A.

- Osborn, H. F. 1907 G, 146, fig. 105.  
1909 D, 90.  
1910 B, 631.
- Owen, R. 1845 B, 407, pl. cv, fig. 1; pl. cvii, fig. 1.
- Palacký, J. 1902 B, 142.
- Palmer, T. S. 1904 A, 625, 866.
- Pander and Alton 1823 B, 6, pl. iv ("eichhörnchen").
- Pauli, S. 1900 B, 514.
- Pictet, F. J. 1853 A, 236.
- Pocock, R. I. 1923 A, 209-246, fig. 19
- Pouchet and Chabry 1884 A, 172 ("écureuil").
- Rehs, J. 1914 A, 69, 94.
- Retterer and Vallois 1912 B, 411.
- Römer, F. 1907 A, 74.
- Scharff, R. F. 1895 A, 467.
- Schlosser, M. 1902 I, 738.
- Scott, W. B. 1913 A, 164.
- Seton, E. T. 1909 A, 307.
- Simpson, G. G. 1926 D, 248.
- Taschenberg, O. 1899 A, 4675.
- Terra, P. 1911 A, 296, figs. 119, 126.
- Thomas, O. 1915 A, 383.
- Tims, H. W. M. 1901 A, 278.  
1902 A, 337.
- Tornier, G. 1891 A, 182.
- Trouessart, E. L. 1880, *Le Naturaliste*, 292 (*Parasciurus*, *Neosciurus*, *Tamiasciurus*).  
1904 A, 309.
- Troxell, E. L. 1923 D, 385, 396.
- Van den Broeck, A. J. P. 1912 A, 57.
- Wagner, A. 1841 A, 116.
- Waterhouse, G. R. 1839 C, 172.  
1839 D, 94, fig.
- Weber, M. 1904 A, 497, 512.
- Weber and Abel 1928 A, 245, 250, 273, figs. 159, 165.
- Winge, H. 1888 A, 137.  
1924 A, 8, 82, 84, 170.
- Zittel and Schlosser 1911 A, 426.  
1923 A, 510.
- Sciurus aberti** Woodhouse.
- Woodhouse, S. W. 1885, *Proc. Acad. Nat. Sci. Phila.*, vii, 1884 (1885), 595
- Matthew, W. D. 1923 A, 12 (This species?).  
1924 C, 66, 84 (This species?).
- Miller, G. S. 1912 B, 533.  
Recent; Colorado to New Mexico, Arizona, and Mexico: Pliocene (Snake Creek); Nebraska.
- Sciurus arctomyoides** Douglass.
- Douglass, E. 1903 A, 154, 181, fig. 22.
- Matthew, W. D. 1909 C, 116.
- Trouessart, E. L. 1904 A, 318 [S. (*Parasciurus*)].  
Miocene (Arikaree); Montana.
- Sciurus calycinus** Cope.
- Hay, O. P. 1902 A, 719.
- Baker, F. C. 1920 A, 208, 214, 396.
- Haug, E. 1911 A, 1886 (C. *calycinus*).
- Hay, O. P. 1923 A, 812.
- Osborn, H. F. 1910 B, 469.
- Rhoads, S. N. 1903 A, 242.
- Trouessart, E. L. 1904 A, 318 [S. (*Parasciurus*)].
- Schlosser, M. 1902 H, 140.  
Pleistocene (Early); Pennsylvania.

### **Sciurus carolinensis** Gmelin.

- Gmelin, J. F. 1788, *syst. Nat.* i, 148.
- Hay, O. P. 1902 A, 719.
- Bangs, O. 1896 D, 153, pl. ix.
- Doran, A. H. G. 1878 A, 408.
- Elliot, D. G. 1901 A, 53-54, fig. 16.
- Hay, O. P. 1920 B, 92, 105.  
1923 A, 495.
- Leidy, J. 1889 H, 5.
- Loomis, F. B. 1907 A, 125.
- Mercer, H. C. 1894 A, 98 ("gray squirrel").
- Miller, G. S. 1912 B, 332.  
1924 C, 223.
- Pocock, R. I. 1923 A, 212.
- Rhoads, S. N. 1903 A, 242.
- Trouessart, E. L. 1904 A, 319 [S. (*Neosciurus*)].  
Recent; New York to Florida and west to Missouri and Oklahoma: Pleistocene? (Late); Pennsylvania, Tennessee.
- Sciurus douglasii albolimbatus** Allen.
- Allen, J. A. 1898, *Bull. Amer. Mus. Nat. Hist.*, x, 453 (S. *hudsonius* alb.).  
1898 A, 278 (S. d. *californicus*).
- Elliot, D. G. 1901 A, 66 (S. *douglasii* alb.).
- Hay, O. P. 1927 D, 214, 215.
- Kellogg, L. 1912 A, 157 (S. *douglasii* alb.).
- Merriam and Stock 1925 A, 10.
- Miller, G. S. 1912 B, 322.  
1924 C, 213.
- Miller, L. H. 1912 A, 70 (S. *hudsonicus* alb.).
- Sinclair, W. J. 1903 A, 711 (S. *hudsonicus* alb.).  
1904 A, 17 (S. *hudsonicus* alb.).
- Stock, C. 1925 A, 113.  
Recent; Sierra region of Oregon and northern California: Pleistocene; California.

### **Sciurus griseus** Ord.

- Ord, G. 1818, *Jour. de Phys.*, LXXXVII, 152.
- Hay, O. P. 1927 D, 214 (S. g. *fossilis*).
- Kellogg, L. 1912 A, 156, fig. 12 (S. g. *fossilis*).
- Miller, G. S. 1912 B, 332.  
1924 C, 222.
- Stock, C. 1918 A, 469 (S. g. *fossilis*).  
1925 A, 113 (S. g. *fossilis*).  
Recent; Washington to Lower California: Pleistocene (Cave deposits); California.

### **Sciurus hudsonicus** (Erxleben).

- Erxleben, J. C. P. 1777, *Syst. Regni Anim.*, i, 416.
- Allen, J. A. 1898 A, 255.
- Bangs, O. 1896 D, 159, pl. x, figs. 1, 2.
- Brown, B. 1908 A, 192, pl. xx.
- Coues, E. 1883 A, 129.
- Elliot, D. G. 1901 A, 60, fig. 15.
- Fischer, J. B. 1829 A, 349.
- Frech, F. 1906 A, 484.
- Gidley, J. W. 1913 B, 96.
- Hay, O. P. 1914 A, 32.  
1920 B, 92, 105.  
1923 A, 348, 350.  
1924 D, 251 (*Sciurus*).
- Miller, G. S. 1912 B, 319.  
1924 C, 209.
- Pocock, R. I. 1923 A, 213, fig. 18 (*Tamiasciurus*).

Seton, E. T. 1909 A, 307, text-figs. 108-117, map 13.

Trouessart, E. L. 1904 A, 320 [S. (*Tamiasciurus*) *hudsonius*].

Recent; greater part of the United States, western British America, Alaska: Pleistocene; Maryland, Arkansas, Tennessee.

### ***Sciurus panolius* Cope.**

Hay, O. P. 1902 A, 719.  
1923 A, 353.

Trouessart, E. L. 1904 A, 318 [S. (*Parasciurus*)].  
Pleistocene; Virginia.

### ***Sciurus? saskatchewanensis* Lambe.**

Lambe, L. M. 1908 A, 11, 55, pl. vii, figs. 16, 17.  
Oligocene (Cypress Hills); Saskatchewan.

### ***Sciurus tenuidens* Hay.**

Hay, O. P. 1920 B, 104, pl. iv, fig. 20.  
1923 A, 348.

Pleistocene (Middle); Maryland.

### ***Sciurus* sp. indet.**

Douglass, E. 1903 A, 3, 181, fig. 21. Miocene; Montana.

Furlong, E. L. 1904 A, 54, 55.

1906 A, 243, 245. Pleistocene (Samwel Cave); California

Gidley, J. W. 1920 B, 232. Pleistocene (Middle); Maryland.

Hay, O. P. 1923 A, 321. Pleistocene (Early); Pennsylvania.

Matthew, W. D. 1909 C, 114. Miocene (Middle); Montana.

Miller, L. H. 1912 A, 73. Pleistocene (Samwel Cave); California.

## **PTEROMYINÆ Major.**

Major, C. J. F. 1893 A, 187.

Hay, O. P. 1902 A, 718.

Arlt, T. 1912 A, 742.

Flower and Lydekker 1891 A, 453 ("flying squirrels").

Miller, G. S. 1912 B, 339 (Petauristidæ).  
1924 C, 230.

Miller and Gidley 1918 A, 433.

Vogt, C. 1879 A, 246 ("écureuils volants").

Weber, M. 1904 A, 493.

## **GLAUCOMYS Thomas. Type *Mus volans* Linnæus.**

Unless otherwise indicated the authors, as quoted, use for this genus the name *Sciuropterus*.

Thomas, O. 1908 B, 5 (*Glaucomys*).

Allen, J. A. 1877 A, 653.

1892 A.

1903 A.

Bangs, O. 1896 D, 162.

Beddard, F. E. 1902 A, 467.

Claus, C. 1895 A, 351 (*Pteromys*).

Coues, E. 1883 A, 130.

Cuvier, F. 1825 A, 161, 255.

Döderlein, L. 1900 B, 54.

Doran, A. H. G. 1878 A, 409, pl. ix (*Pteromys*).

Elliot, D. G. 1901 A, 107.

Frech, F. 1906 A, 484.

Heilprin, A. 1887 A, 359.

Kampfen, P. N. 1905 A, 555.

Kraglievich, L. 1926 C, 47 (*Sciuromys*).

Leche, W. 1921 A, 70.

Lilljeborg, W. 1866 A, 39.

Lull, R. S. 1917 B, 363.

Merriam, C. H. 1892 A, 62.

Miller, G. S. 1912 B, 339.

1924 C, 230.

Osborn, H. F. 1910 B, 631.

Palmer, T. S. 1904 A, 625, 866.

Scharff, R. F. 1895 A, 467.

1911 A, 63.

Scott, W. B. 1913 A, 164.

Seton, E. T. 1909 A, 437, map 24.

Vicq-d'Azyr, F. 1792 A, 322 (*Sciurus*).

Winge, H. 1924 A, 8, 82, 170.

Young, G. W. 1915 A, 257.

Zittel and Schlosser 1911 A, 426.

1923 A, 510.

### ***Glaucomys sabrinus klamathensis* (Merriam).**

Merriam, C. H. 1897, Proc. Biol. Soc. Wash., xi, 225 (*Sciuropterus alpinus* klam.).

Elliot, D. G. 1901 A, 111 (*S. volans* klam.).

Hay, O. P. 1927 D, 214, 215 (*Sciuropterus alpinus* klam.).

Howell, A. H. 1918 A, 52, pls. iii, v, vii.

Kellogg, L. 1912 A, 157, fig. 6 (*Sciuropterus alpinus* klam.).

Merriam and Stock 1925 A, 10 (*Sciuropterus alpinus* klam.).

Miller, G. S. 1912 B, 339 (*Sciuropterus*).

1924 C, 235.

Miller, L. H. 1912 A, 70 (*S. a. k.*).

Sinclair, W. J. 1904 A, 17 (*S. a. k.*).

Stock, C. 1925 A, 113 (*Sciuropterus alpinus* klam.).

Recent; region about Klamath County, Oregon: Pleistocene (Potter Creek Cave); California.

### ***Glaucomys volans* (Linnæus).**

Linnæus, C. 1758 A, 63 (*Mus*).

Allen, J. A. 1877 A, 655 (*Sciuropterus volucella*).

Bangs, O. 1896 D, 164, fig. 31 (*Sciuropterus*).

Coues, E. 1883 A, 130, fig. 70 (*Sciuropterus volucella*).

Gidley, J. W. 1913 B, 96 (*S. alpinus*?).

Hay, O. P. 1923 A, 350 (*Sciuropterus alpinus*).  
This species?.

Howell, A. H. 1918 A, 18-20, pls. i-vi; text-fig. 2.

Miller, G. S. 1912 B, 341 (*Sciuropterus*).

1924 C, 230.

Thomas, O. 1908 B, 6 [S. (*Glaucomys*)].

Recent; eastern United States: Pleistocene; Maryland.

## GEOMYIDÆ Gill.

- Gill, T. 1872 B, 21.  
 Hay, O. P. 1902 A, 730.  
 Abel, O. 1912 F, 84 ("geomyiden").  
 Adams, C. C. 1902 B, 355 ("gophers").  
 1905 A, 64 ("pocket gophers").  
 Arldt, T. 1907 D, 655.  
 1912 A, 698, 742 (Geomyidæ); 698 (Protop-tychidæ).  
 Beddard, F. E. 1902 A, 483.  
 Brauer, A. 1914 A, 282.  
 Carus, V. 1875 A, 100 (Geomyina).  
 Chandler, A. C. 1914 B, 134.  
 Cockerell and Miller 1914 A, 371.  
 Cope, E. D. 1880 U, 156 (Sacommydæ).  
 Coues, E. 1883 A, 96 (Sacommydæ); 98 (Geomyidæ).  
 Doran, A. H. G. 1878 A, 413 (Sacommydæ).  
 Elliot, D. G. 1901 A, 215.  
 Frech, F. 1906 A, 484.  
 Gill, T. 1885 B, 18.  
 Grant, M. 1904 B, 195, 205.  
 Höfer, H. 1911 A, 449 (Geomyoidea).  
 Kampfen, P. N. 1905 A, 555.  
 Kraglievich, L. 1926 C, 47 (Geomyoidea).  
 Leche, W. 1887 A (Sacommydæ).  
 Leunis and Ludwig 1883 A, 217.  
 Lilljeborg, W. 1886 A, 32 (Sallomydidæ).  
 Lobley, J. L. 1908 A, 205 (Sacommydæ).  
 Matthew, W. D. 1907 A, 211, 212.  
 1909 C, 99, 101, 107, 110, 112, 114, 116, 119.  
 1910 B, 66, 70.  
 1915 A, 229.  
 Miller, G. S. 1912 B, 233.  
 1924 C, 236.  
 Miller and Gidley 1918 A, 433 (Geomyidæ); 434 (Geomyinæ).  
 Osborn, H. F. 1909 D, 126.  
 1910 B, 230, 248, 357.  
 Palmer, T. S. 1904 A, 742, 848.  
 Rehs, J. 1914 A, 94 (Geomyoidei).  
 Schlosser, M. 1902 I, 708.  
 1911 A, 166 ("geomyiden").  
 Schwarz, E. 1924 A, 422 ("gophers").  
 Slater, P. L. 1875 A, 219 (Sacommydæ).  
 Scott, W. B. 1913 A, 265.  
 Seton, E. T. 1904 A, 301.  
 1909 A, 561.  
 Taschenberg, O. 1899 A, 4583.  
 Terra, P. 1911 A, 301.  
 Trouessart, E. L. 1904 A, 467.  
 Wallace, A. R. 1894 A, 436.  
 Weber, M. 1904 A, 490, 498 (Geomyoidea).  
 Weber and Abel 1928 A, 278, 297.  
 Winge, H. 1924 A, 9, 88, 90 (Geomyini).  
 Zittel and Schlosser 1911 A, 427 (Geomyoidea).  
 1923 A, 511 (Geomyoidea).

## ENTOPTYCHINÆ Miller and Gidley.

Miller and Gidley 1918 A, 434.

ENTOPTYCHUS Cope. Type *E. cavifrons* Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1907 A, 175, 211.  
 1909 C, 110.  
 1910 B, 72.  
 O'Harra, C. C. 1910 A, 88, 133.  
 Osborn, H. F. 1909 D, 68, 75.  
 1910 B, 536.  
 1912 G, 249.  
 Palmer, T. S. 1904 A, 261, 849.  
 Schlosser, M. 1899 D, 166.  
 Seeley, H. G. 1886 A, 515.  
 Trouessart, E. L. 1904 A, 475.  
 Weber, M. 1904 A, 511.  
 Weber and Abel 1928 A, 277.  
 Winge, H. 1888 A, 109, 138.  
 1924 A, 9, 89, 90.  
 Zittel and Schlosser 1923 A, 511, 672.  
**Entoptychus cavifrons** Cope.  
 Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 188, 190, 191, 192.  
 Sinclair, W. J. 1905 A, 127.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.  
**Entoptychus crassiramis** Cope.  
 Hay, O. P. 1902 A, 731.  
 Cope, E. D. 1891 N, 73, fig. 44.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 188, 190.  
 Sinclair, W. J. 1905 A, 127.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.  
**Entoptychus curtus** Matthew.  
 Matthew, W. D. 1907 A, 171, 172, 213.  
 1909 C, 112.  
 O'Harra, C. C. 1920 A, 156.  
 Miocene (Lower); South Dakota.  
**Entoptychus formosus** Matthew.  
 Matthew, W. D. 1907 A, 171, 172, 212, figs. 24-26.  
 1909 C, 112.  
 O'Harra, C. C. 1920 A, 156.  
 Miocene (Lower); South Dakota, Nebraska?.  
**Entoptychus lambdoides** Cope.  
 Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 189, 190.  
 Sinclair, W. J. 1905 A, 126.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.  
**Entoptychus minimus** Kellogg.  
 Kellogg, L. 1910 A, 431, fig. 15.  
 Merriam, J. C. 1911 B, 211, 213, 214, 253, 254.  
 1917 A, 429.  
 Miocene? (Thousand Creek); Nevada.

**Entoptychus minor** Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 188, 189, 190.  
 Sinclair, W. J. 1905 A, 127.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.

**Entoptychus planifrons** Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 188, 189, 190,  
 191, 192.  
 Sinclair, W. J. 1905 A, 126.  
 Oligocene (Upper); Oregon.

**Entoptychus rostratus** Sinclair.

- Sinclair, W. J. 1905 A, 128, pl. xiv, figs. 8, 9.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 191, 192.  
 Oligocene (Upper); Oregon.

**Entoptychus sperryi** Sinclair.

- Sinclair, W. J. 1905 A, 126, pl. xiv, figs. 6, 7.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 191, 192.  
 Oligocene (Upper); Oregon.

**Entoptychus sp. indet.**

- Cook, H. J. 1912 D, 40. Miocene (Lower Harri-  
 son); Nebraska.

## GEOMYINÆ.

- Miller, G. S. 1924 C, 236.  
 Weber and Abel 1928 A, 277.

- Zittel and Schlosser 1911 A, 427 (Geomyinæ).  
 1923 A, 511 (Geomyinæ).

PLEUROLICUS Cope. Type *P. sulcifrons* Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1907 A, 211, 214.  
 1909 C, 110.  
 1910 B, 72.  
 Osborn, H. F. 1910 B, 536.  
 Palmer, T. S. 1904 A, 550, 849.  
 Schlosser, M. 1899 D, 166.  
 Trouessart, E. L. 1904 A, 475.  
 Weber and Abel 1928 A, 277.  
 Winge, H. 1888 A, 109, 138.  
 1924 A, 9, 89, 90.  
 Zittel and Schlosser 1923 A, 511, 672.

**Pleurolicus diplophysus** Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.

**Pleurolicus leptophrys** Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185, 189, 190.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.

**Pleurolicus sulcifrons** Cope.

- Hay, O. P. 1902 A, 731.  
 Matthew, W. D. 1909 C, 107.  
 Merriam and Sinclair 1907 A, 185.  
 Trouessart, E. L. 1904 A, 475.  
 Oligocene (Upper); Oregon.

**Pleurolicus? sp. indet.**

- Merriam and Sinclair 1907 A, 188, 190. Oligocene  
 (John Day); Oregon.

THOMOMYS Wied. Type *T. rufescens* Wied.

- Hay, O. P. 1902 A, 730.  
 Allen, J. A. 1892 A.  
 Bailey, V. 1915 A, 410.  
 1915 B.  
 Baker, F. C. 1920 A, 209, 214, 396.  
 Beddard, F. E. 1902 A, 483.  
 Cockerell and Miller 1914 A, 371, figs. 108-110.  
 Cope, E. D. 1893 S, 560.  
 1895 G, 599.  
 Coues, E. 1883 A, 99.  
 Dall and Harris 1892 A, 284.  
 Elliot, D. G. 1901 A, 221.  
 Frech, F. 1906 A, 484.  
 Haug, E. 1911 A, 1886.  
 Höfer, H. 1911 A, 450.  
 Holliger, C. D. 1916 A, 447.  
 Lilljeborg, W. 1886 A, 32, 34.  
 Matthew, W. D. 1907 A, 175, 211.  
 1910 B, 72.  
 1915 K, 402.  
 1924 C, 74.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 238.  
 1924 C, 236.

- Osborn, H. F. 1905 I, 110.  
 1909 D, 85.  
 1910 B, 457, 460, 477, 536.  
 Scott, W. B. 1913 A, 164.  
 Seton, E. T. 1904 A, 301.  
 1909 A, 561.  
 Simpson, G. G. 1928 H, 3.  
 Trouessart, E. L. 1904 A, 471.  
 Wagner, A. 1841 A, 123.  
 Weber, M. 1904 A, 499.  
 Winge, H. 1888 A, 109, 138, 156.  
 1924 A, 9, 89, 90.

**Thomomys bottæ bottæ** (Eyedoux and Gervais).

- Eyedoux and Gervais* 1836, Mag. de Zool., vi, 23  
 [Oryctomys (Saccophorus)].  
 Miller, G. S. 1912 B, 239.  
 1924 C, 237.  
 Stock, C. 1925 A, 118.  
 Recent; Coast region of California: Pleisto-  
 cene (Upper San Pedro); California.

**Thomomys bottæ leucodon Merriam, C. H.**

Merriam, C. H. 1897, Proc. Biol. Soc. Wash., xi, 215 (T. leucodon).

Bailey, V. 1915 B, 47, pl. ii, fig. 11, pl. iii, fig. 5. Elliot, D. G. 1901 A, 223 (T. leucodon).

Hay, O. P. 1927 D, 214, 215 (T. leucodon).

Holliger, C. D. 1916 A, 447, pls. xxxviii-xxxix; text-figs 1-20 (T. bottæ).

Kellogg, L. 1912 A, 161, figs. 8-10 (T. leucodon).

Merriam and Stock 1925 A, 10 (T. leucodon).

Miller, G. S. 1912 B, 239 (T. leucodon).

1924 C, 237.

Miller, L. H. 1912 A, 70 (T. leucodon).

Sinclair, W. J. 1903 A, 711 ("Thomomys, near leucodon").

1904 A, 17 (T. leucodon).

Stock, C. 1918 A, 468, 469 (T. leucodon).

1925 A, 113.

Trouessart, E. L. 1897 A, 575 (G. bottæ); 1336 (G. leucodon).

Recent; southwestern Oregon and northern California: Pleistocene (Caves); California.

**Thomomys bottæ occipitalis Dice.**

Dice, L. R. 1925 A, 125.

Hay, O. P. 1927 D, 183 (T. b. occ.; T. beecheyi pallescens).

Kellogg, L. 1912 A, 167 (T. b. pallescens).

Pleistocene (La Brea); California.

**Thomomys bottæ pallescens Rhoads.**

Rhoads, S. N. 1895, Proc. Acad. Nat. Sci. Phila., 36.

Hay, O. P. 1927 D, 172 (T. bottæ); 190 (T. b. pallescens).

Kellogg, L. 1912 A, 167.

Miller, G. S. 1912 B, 235.

1924 C, 239.

Trouessart, E. L. 1897 A, 576.

Recent; southern California: Pleistocene (La Brea); California.

**Thomomys bulbivorus (Richardson).**

Hay, O. P. 1902 A, 730.

Bailey, V. 1915 B, 40, pl. ii, fig. 1; pl. iii, fig. 1.

Elliot, D. G. 1901 A, 222.

Hay, O. P. 1927 D, 242.

Miller, G. S. 1912 B, 242.

1924 C, 254.

Osborn, H. F. 1910 B, 460.

Recent; western Oregon: Pleistocene (Fossil Lake); Oregon.

**Thomomys fuscus Merriam.**

Merriam, C. H. 1891, N. A. Fauna, No. 5, 70 (T. clusius fuscus).

Hay, O. P. 1921 A, 613, pl. cxviii, figs. 9, 10.

1927 D, 259.

Merriam, C. H. 1901, Proc. Biol. Soc. Wash., xiv., 111 (T. fuscus).

Miller, G. S. 1912 B, 238.

1924 C, 253.

Recent; British Columbia, Idaho, Montana, Wyoming, Washington, Oregon: Pleistocene; Oregon.

**Thomomys microdon Sinclair.**

Sinclair, W. J. 1905 B, 146, pl. xix, figs. 1-3.

Hay, O. P. 1927 D, 214, 215.

Kellogg, L. 1912 A, 160, fig. 7.

Merriam and Stock 1925 A, 10.

Sinclair, W. J. 1903 A, 711 ("sp. nov.").

1904 A, 17 ("n. sp.").

Stock, C. 1925 A, 113.

Pleistocene (Caves); California.

**Thomomys monticola Allen.**

Allen, J. A. 1893, Bull. Amer. Mus. Nat. Hist., v, 48 (T. monticolus).

Bailey, V. 1915 B, 121-126, pls. ii, viii.

Elliot, D. G. 1901 A, 225.

Furlong, E. L. 1904 A, 54.

1906 A, 243.

Miller, G. S. 1912 B, 239.

1924 C, 252.

Miller, L. H. 1912 A, 70, 73.

Sinclair, W. J. 1904 A, 17.

Trouessart, E. L. 1897 A, 576.

Recent; west central and southwestern Oregon, in high mountains of northern half of California: Pleistocene (Potter Creek Cave, Samwel Cave); California.

**Thomomys orientalis Simpson.**

Simpson, G. G. 1928 H, 2, 6, fig. 1.

Pleistocene (Early); Florida.

**Thomomys scudderi Hay.**

Hay, O. P. 1921 A, 614, pl. cxx, figs. 1-4.

Pleistocene (Middle?); Washington.

**Thomomys talpoides (Richardson).**

Richardson, J. 1828, Zool. Jour., iii, 518 (Crice-tus).

Hay, O. P. 1902 A, 731 (T. talpoides); 730 (T. clusius).

Bailey, V. 1915 B, 96-106, pls. i, ii, vii (T. clusius a subspecies).

Coues, E. 1833 A, 100, fig. 48.

Elliot, D. G. 1901 A, 227 (T. talpoides); 229 (T. clusius).

Gilbert, G. K. 1890 A, 304, 394 (T. talpoides, T. clusius).

Hay, O. P. 1927 D, 274 (T. clusius).

Miller, G. S. 1912 B, 241 (T. talpoides); 236 (T. clusius).

1924 C, 247.

Osborn, H. F. 1910 B, 460 (T. clusius).

Seton, E. T. 1904 A, 302.

1909 A, 561, pl. xl; text-figs. 162-169, maps 33, 34.

Recent; eastern Colorado and southern South Dakota, north to plains of Saskatchewan and Manitoba: Pleistocene (Fossil Lake); Oregon.

**Thomomys sp. indet.**

Hay, O. P. 1914 A, 26.

1927 D, 190, 223, 243. Pleistocene; California.

1928 C, 425.

McCormack, E. C. 1920 A, 23 (T. bulbivorus, T. clusius?).

Matthew, W. D. 1902 F, 317, 320 (Th. indet.).

- Matthew, W. D. 1918 A, 227, 228. Pleistocene (Sheridan and Loup River); Nebraska.  
 1923 A, 12. Lower Pliocene (Upper Snake Creek); Nebraska.  
 1924 C, 66. Lower Pliocene (Upper Snake Creek); Nebraska.

## GEOMYS Rafinesque.

- Hay, O. P. 1902 A, 730.  
 Allen, J. A. 1892 A.  
 Beddard, F. E. 1902 A, 483.  
 Coues, E. 1883 A, 99, fig. 46.  
 Cuvier, G. 1825 A, v, 1, 36, pl. i (Saccomys).  
 Doran, A. H. G. 1878 A, 413, pl. lx.  
 Elliot, D. G. 1901 A, 215.  
 Frech, F. 1906 A, 464.  
 Giebel, C. G. 1883 A, pls. xxvii, xlv, lxxvii.  
 Heilprin, A. 1887 A, 365.  
 Höfer, H. 1911 A, 449.  
 Leunis and Ludwig 1883 A, 217.  
 Lilljeborg, W. 1866 A, 32, 34.  
 Lönnberg, E. 1910 A, 117.  
 Matthew, W. D. 1907 A, 211.  
 1909 C, 119.  
 1910 B, 72.  
 1915 K, 402.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 243.  
 1924 C, 254.  
 Osborn, H. F. 1909 D, 85, 90.  
 1910 B, 387, 460, 464, 536.  
 Palmer, T. S. 1904 A, 293, 848.  
 Rehs, J. 1914 A, 94.  
 Scott, W. B. 1913 A, 163.  
 Taschenberg, O. 1899 A, 4583.  
 Trouessart, E. L. 1904 A, 467.  
 Wagner, A. 1841 A, 123.  
 Waterhouse, G. R. 1839 D, 595, figs.  
 1841 B, 83.  
 Weber, M. 1904 A, 481, 499, fig. 368.  
 Weber and Abel 1928 A, 253, 277, fig. 167.  
 Weber and Burlet 1927 A, 141.  
 Winge, H. 1888 A, 109, 138, 156.  
 1924 A, 9, 89, 90.  
 Zittel and Schlosser 1911 A, 427.  
 1923 A, 511.

**Geomys bisulcatus Marsh.**

- Hay, O. P. 1902 A, 730.  
 Cook, H. J. 1912 D, 44 (This species?).  
 Mansuy, — 1923 A, 102 (G. cisuleatus).  
 Matthew, W. D. 1909 C, 116.  
 Matthew and Cook 1909 A, 382 (This species?).  
 Merriam, J. C. 1917 A, 436 (This species?).  
 Sinclair, W. J. 1915 A, 76 (This species?).  
 Miocene (Arikaree); Nebraska?: Pliocene?  
 (Snake Creek); Nebraska.

**Geomys bursarius (Shaw).**

- Hay, O. P. 1902 A, 730.  
 Baker, F. C. 1920 A, 460.  
 Elliot, D. G. 1901 A, 217.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1914 A, 38.  
 1920 B, 117.  
 1923 A, 339, 343.  
 1928 C, 429.

- Miller, L. H. 1912 A, 70. Pleistocene (Potter Creek Cave); California; 73, 81 (Samwel Cave); California, (Fossil Lake); Oregon.  
 Stock, C. 1925 A, 113. Pleistocene (Caves); California: 195. Pleistocene (Fossil Lake); Oregon.

Type *Mus tuza* Ord.

- Hayden, F. V. 1872 A, 10.  
 Hisaw, F. L. 1924 A, 93.  
 Höfer, H. 1911 A, 449.  
 Leidy, J. 1857 J, 100 (Pseudostoma).  
 Leighton, M. M. 1921 A, 513.  
 McAdams, W. 1884 B, 269 ("gophers").  
 Miller, G. S. 1912 B, 244.  
 1924 C, 255.  
 Whitney, J. D. 1862 A, 136 (Pseudostoma).  
 Recent; Mississippi valley from near Canadian boundary to Kansas, east of 99th meridian: Pleistocene; Nebraska, Illinois, Kansas.  
**Geomys floridanus (Audubon and Bachman).**  
*Audubon and Bachman* 1854, Quadr. N. Amer., iii, 242, pl. cl, fig. 1 (Pseudostoma).  
 Matthew, W. D. 1925 A, 97 (This species?).  
 Merriam, C. H. 1895 A, 115, 208, pls. 7, 10, 14 (G. tuza floridanus).  
 Miller, G. S. 1912 B, 243.  
 1924 C, 255.  
 Simpson, G. G. 1928 H, 2.  
 Pleistocene (Early); Florida.

**Geomys lutescens Merriam.**

- Merriam, C. H.* 1890, N. A. Fauna, iv, 51 (G. bursarius lutescens).  
 1895 A, 127, pl. ix, figs. 5, 7; pl. xiv, fig. 14.  
 Miller, G. S. 1912 B, 244.  
 1924 C, 256.  
 Trouessart, E. L. 1897 A, 571.  
 Recent; western Nebraska to Texas: Pleistocene; western Nebraska.

**Geomys minor Gidley.**

- Gidley, J. W.* 1922 B, 120, 123, pl. xxxiv, figs. 7, 8.  
 Hay, O. P. 1927 D, 136.  
 Pleistocene (San Pedro Valley); Arizona.

**Geomys parvidens B. Brown.**

- Brown, B.* 1908 A, 194, pl. xxi.  
 Hay, O. P. 1914 A, 32.  
 Pleistocene (Middle); Arkansas.

**Geomys persimilis Hay.**

- Hay, O. P.* 1927 D, 136.  
*Gidley, J. W.* 1922 B, 120, 123, pl. xxxiv, figs. 5, 8 (G. parvidens; not of B. Brown).  
 Pleistocene (San Pedro Valley); Arizona.

**Geomys texensis C. H. Merriam.**

- Merriam, C. H.* 1895 A, 137.  
 Hay, O. P. 1920 B, 140.  
 Miller, G. S. 1912 B, 245.  
 1924 C, 257.  
 Trouessart, E. L. 1897 A, 572.  
 Recent; Texas: Pleistocene; Texas.



**Geomys sp. indet.**

Freudenberg, W. 1921 A, 139. Pleistocene; Mexico.

1922 A, 4. Pleistocene; Mexico.

Gidley, J. W. 1927 E, 274 (Pleistocene; Florida).

Hay, O. P. 1927 D, 190, 243, 274.

Matthew, W. D. 1902 F, 320 ("sp.").

Matthew, W. D. 1909 C, 114. Miocene (Middle); Nebraska.

Miller, L. H. 1912 A, 81, Pleistocene (Fossil Lake); Oregon.

Osborn, H. F. 1910 B, 460. Pleistocene (Fossil Lake); Oregon.

Stock, C. 1925 A, 195. Pleistocene (Fossil Lake); Oregon.

**CRATOGOMYS Merriam. Type *Geomys merriami* Thomas.**

Merriam, C. H. 1895, N. A. Fauna No. 8, 150.

Miller, G. S. 1912 B, 246.

1924 C, 258.

**Cratogeomys bensoni** Gidley.

Gidley, J. W. 1922 B, 120, 123, pl. xxxiv, figs. 9-11.

Hay, O. P. 1927 D, 136.

Pleistocene (San Pedro Valley); Arizona.

**HETEROMYIDÆ Allen.**

Allen, J. A. 1893, Bull. Amer. Mus. Nat. Hist., v, 233.

Alston, E. R. 1876 A, 88 (Heteromyinæ).

Cockerell and Miller 1914 A, 370.

Elliot, D. G. 1901 A, 241 (Heteromyinæ).

Flower, W. H. 1883 D, 419 (Heteromyinæ).

Goldman, E. A. 1911 A, 7.

Gray, J. E. 1868, Proc. Zool. Soc. Lond., 201 (Heteromyina).

Gregory, W. K. 1914 G, 380.

Matthew, W. D. 1907 A, 211, 212, 214.

Matthew, W. D. 1909 C, 119.

1910 B, 71.

1915 A, 229.

Merriam, C. H. 1899 A, 1 ("pocket mice").

Osborn, H. F. 1909 D, 57.

1910 B, 168, 237, 536.

Osgood, W. H. 1900 A, 1 ("pocket mice").

Palmer, T. S. 1904 A, 745, 848.

Trouessart, E. L. 1904 A, 478 (Heteromyidæ); 481 (Heteromyinæ).

Winge, H. 1924 A, 9, 84, 89 (Saccomyini).

**HELISCOMYS Cope. Type *H. vetus* Cope.**

Hay, O. P. 1902 A, 729.

Matthew, W. D. 1907 A, 212.

1910 B, 71.

Miller and Gidley 1918 A, 434.

Osborn, H. F. 1910 B, 536.

Palmer, T. S. 1904 A, 315, 848.

Weber and Abel 1928 A, 277.

Winge, H. 1888 A, 156.

1924 A, 85, 89.

**Heliscomys parvus** (Troxell).

Troxell, E. T. 1923 C, 158, figs. 3-5 (Diplolophus).

Oligocene (White River); Colorado.

**Heliscomys vetus** Cope.

Hay, O. P. 1902 A, 729.

Matthew, W. D. 1901 B, 357.

Seeley, H. G. 1886 A, 515.

Trouessart, E. L. 1904 A, 475.

Oligocene (White River); Colorado.

**PERIDIOMYS Matthew. Type *P. rusticus* Matthew.**

Matthew, W. D. 1924 C, 74, 85.

**Peridiomys rusticus** Matthew.

Matthew, W. D. 1924 C, 66, 85, fig. 9.

Upper Miocene (Lower Snake Creek); Nebraska.

**PEROGNATHUS Wied-Neuwied. Type *P. fasciatus* Wied.**

Wied-Neuwied, M. A. P. 1839, Nov. Acta phys. med. Acad. Cæs.-Leop.-Carol., xix, pt. 1, 368.

Allen, J. A. 1904 B, 136.

Cockerell and Miller 1914 A, 370, figs. 101-103.

Coues, E. 1883 A, 97.

Elliot, D. G. 1901 A, 241.

Lilljeborg, W. 1866 A, 32, 33.

Matthew, W. D. 1910 B, 71.

1922 B, 977 ("pocket-mice").

Merriam, C. H. 1889 A, 5.

Miller, G. S. 1912 B, 260.

1924 C, 272.

Osgood, W. H. 1900 A, 13.

Seeley, H. G. 1886 A, 515.

Trouessart, E. L. 1904 A, 481.

Winge, H. 1888 A, 109, 138.

1924 A, 9, 86.

**Perognathus californicus californicus** Merriam.

Merriam, C. H. 1889 A, 26 (P. californicus); 27 (P. armatus).

Dice, L. R. 1925 A, 125.

Hay, O. P. 1927 D, 183 (P. californicus).

Miller, G. S. 1912 B, 271.

1924 C, 285.

Recent; region of San Francisco: Pleistocene (La Brea); California.

DIPDOMYS Gray. Type *D. philippii* Gray.

- Gray, J. E. 1841, Ann. Mag. Nat. Hist., vii, 521.  
 Beddard, F. E. 1902 A, 484.  
 Elliot, D. G. 1901 A, 231.  
 Matthew, W. D. 1910 B, 71.  
 Merriam, C. H. 1906 A, 246.  
 Miller, G. S. 1912 B, 276.  
 1924 C, 287.

- Palmer, T. S. 1904 A, 255.  
 Scharff, R. F. 1911 A, 201.  
 Winge, H. 1924 A, 9, 87.

**Dipodomys minor** Gidley.

- Gidley, J. W. 1922 B, 120, 123, pl. xxxiv, fig. 16.  
 Hay, O. P. 1927 D, 136.  
 Pleistocene (San Pedro Valley); Arizona.

PERODIPUS Fitzinger. Type *Dipodomys agilis* Gambel.

- Fitzinger, L. J. 1867, Sitz.-Ber. Akad. Wiss. Wien, lvi, 126.  
 Cockerell and Miller 1914 A, 370, figs. 104-107.  
 Miller, G. S. 1912 B, 272.  
 1924 C, 287 (Syn of *Dipodomys*).  
 Palmer, T. S. 1904 A, 525, 849.  
 Trouessart, E. L. 1904 A, 480.  
 Winge, H. 1924 A, 87.

**Perodipus agilis** (Gambel).

- Gambel, W. 1848, Proc. Acad. Nat. Sci., iv, 77 (Dipodomys).  
 Dice, L. R. 1925 A, 125.

- Hay, O. P. 1927 D, 183.  
 Kellogg, L. 1912 A, 167.  
 Miller, G. S. 1912 B, 273.  
 1924 C, 295.  
 Trouessart, E. L. 1897 A, 580 (Cricetodipus).  
 1904 A, 480.  
 Recent; Southern California: Pleistocene (La Brea); California.

**Perodipus** sp. indet.

- Hay, O. P. 1920 B, 140. Pleistocene; Texas.  
 1924 D, 247. Pleistocene; Texas.

DIPRIONOMYS. Type *D. parvus*.

- Kellogg, L. 1910 A, 433.

**Diprionomys magnus** Kellogg.

- Kellogg, L. 1910 A, 434, fig. 18.  
 Merriam, J. C. 1911 B, 211, 213, 214, 253, 255.  
 1917 A, 429.  
 Pliocene (Thousand Creek); Nevada.

**Diprionomys parvus** Kellogg.

- Kellogg, L. 1910 A, 433, fig. 17.  
 Merriam, J. C. 1911 B, 211, 213, 214, 253, 255.  
 1917 A, 429.  
 Pliocene (Thousand Creek); Nevada.

## ADJIDAUMIDÆ Miller and Gidley.

- Miller and Gidley 1918 A, 434.  
 Trouessart, E. L. 1904 A, 476 (Adjidauminæ).

- Winge, H. 1924 A, 9, 85, 89 (Gymnoptychini).

ADJIDAUMO Hay. Type *Gymnoptychus minutus* Cope.

- Hay, O. P. 1902 A, 720.  
 Douglass, E. 1909 B, 231, 285 (Gymnoptychus).  
 Haug, E. 1911 A, 1528 (Gymnoptychus).  
 Kraglievich, L. 1926 C, 47 (Gymnoptychus).  
 Matthew, W. D. 1901 B, 369 (Gymnoptychus).  
 1907 A, 211.  
 1909 C, 104, 110 (Gymnoptychus).  
 1910 B, 59, 71 [Gymnoptychus (=Adjidaumo)].  
 1915 K, 420.  
 Miller and Gidley 1918 A, 434.  
 Osborn, H. F. 1909 G, 146, fig. 106 (Gymnoptychus).  
 1910 B, 536 (Gymnoptychus).  
 Palmer, T. S. 1904 A, 80, 848 (Adjidaumo); 303, 849 (Gymnoptychus).  
 Schlosser, M. 1911 A, 166 (Gymnoptychus).  
 Seeley, H. G. 1886 A, 515 (Gymnoptychus).  
 Trouessart, E. L. 1904 A, 476 (Adjidaumo).  
 Weber, M. 1904 A, 511 (Gymnoptychus).  
 Weber and Abel 1928 A, 277 (Gymnoptychus).  
 Winge, H. 1888 A, 109, 138 (Gymnoptychus).  
 1924 A, 9, 85 (Gymnoptychus).  
 Zittel and Schlosser 1911 A, 429 (Gymnoptychus).  
 1923 A, 513 (Gymnoptychus).

**Adjidaumo minimus** (Matthew).

- Matthew, W. D. 1903 B, 216, fig. 11 (Gymnoptychus).  
 1909 C, 104 (Gymnoptychus).  
 Trouessart, E. L. 1904 A, 476 (Adjidaumo).  
 Lower Oligocene (White River); Montana.

**Adjidaumo minor** (Douglass).

- Douglass, E. 1903 A, 149 (Gymnoptychus).  
 Matthew, W. D. 1903 B, 215, fig. 10.  
 Trouessart, E. L. 1904 A, 476 (Adjidaumo).  
 Oligocene (White River); Montana.

**Adjidaumo minutus** (Cope).

- Hay, O. P. 1902 A, 720.  
 Matthew, W. D. 1901 B, 357 (Gymnoptychus).  
 1909 C, 104, 105 (Gymnoptychus).  
 Trouessart, E. L. 1904 A, 476 (Adjidaumo).  
 Oligocene (White River); Montana: Oligocene (Cedar Creek); Colorado.

**Adjidaumo trilophus** (Cope).

- Hay, O. P. 1902 A, 720.  
 Matthew, W. D. 1901 B, 357 (Gymnoptychus).  
 1903 B, 215 (Gymnoptychus liolophus).  
 1909 C, 105 (Gymnoptychus).  
 Trouessart, E. L. 1904 A, 476 (Adjidaumo).  
 Middle Oligocene (Cedar Creek); Colorado.

## EUTYPOMYIDÆ Miller and Gidley.

Miller and Gidley 1918 A, 435.

EUTYPOMYS Matthew. Type *E. thomsoni* Matthew.

Matthew, W. D. 1905 A, 21.

Haug, E. 1911 A, 1528.

Miller and Gidley 1918 A, 435.

Matthew, W. D. 1909 C, 110.

1910 B, 71.

Osborn, H. F. 1907 G, 147, figs. 110, 111.

1910 B, 221, 535.

Schlosser, M. 1911 A, 166.

1923 A, 511.

Taylor, W. P. 1916 A, 457.

Zittel and Schlosser 1911 A, 427.

1923 A, 427.

**Eutypomys parvus** Lambe.

Lambe, L. M. 1908 A, 11, 57, pl. vi, figs. 1, 2.

Oligocene (Cypress Hills); Saskatchewan.

**Eutypomys thomsoni** Matthew.

Matthew, W. D. 1905 A, 21, 22, figs. 1-3.

Cook, H. J. 1912 D, 36.

Lambe, L. M. 1908 A, 57.

Matthew, W. D. 1909 C, 105.

O'Harra, C. C. 1910 A, 87.

Oligocene (Middle); South Dakota: (Brule);  
Nebraska?: (Cypress Hills); Saskatchewan.**Eutypomys** sp.?Matthew, W. D. 1909 C, 103. Oligocene (Lower);  
Canada.

## CHALICOMYIDÆ. Miller and Gidley.

Miller and Gidley 1918 A, 435.

CHALICOMYS Kaup. Type *C. jaegeri* Kaup.

Unless otherwise indicated the authors here  
cited use the name *Steneofiber* for this genus.  
Kaup, J. 1832, Oken's Isis, 994, Taf. xxvi, figs.  
1-6 (Chalicomys).

Hay, O. P. 1902 A, 722.

Ameghino, F. 1906 A, 243, fig. 279.

Ardt, T. 1907 D, 255.

Bronn, H. G. 1848 B, 1199 (Steneotherium).

Cope, E. D. 1880 U, 156, 157.

Coues, E. 1883 A, 117.

Depéret, C. 1912 A, 708.

Depéret and Douxami 1902 D, 66.

Gervais, P. 1852 A, 20 (Chalicomys, Steneo-  
fiber).1859 A, 21, 22, pl. vii, fig. 10 (Chali-  
comys); pls. xlv, xlviii (Steneofiber).

Haug, E. 1911 A, 1528, 1705 (Steneofiber).

Heilprin, A. 1887 A, 364, 365.

Loomis, F. B. 1923 A, 222 (Steneofiber).

Matthew, W. D. 1901 B, 370.

1902 D, 300, fig. 12.

1907 A, 175, 177, 205.

1909 C, 110, 118.

1910 B, 71.

1912 B, 186.

1918 A, 198.

Matthew and Cook 1909 A, 380.

Miller and Gidley 1918 A, 435 (Chalicomys).

O'Harra, C. C. 1910 A, 88, 151.

Ortman, A. E. 1909 B, 177.

Osborn, H. F. 1907 F, 872.

1909 D, 136.

1910 B, 632.

1912 G, 246, 249.

Palmer, T. S. 1904 A, 644, 843.

Peterson, O. A. 1904 B, 344.

1905 B, 296.

Pictet, F. J. 1853 A, 253 (Chalicomys, Steneo-  
fiber).

Riggs, E. S. 1909 C, 196.

Romer and McCormack 1923 A, 60 (Palaeocas-  
tor).

Schlosser, M. 1902 I, 707.

1902 J, 231 (Steneofiber, Chalicomys).

1911 A, 166.

1924 A, 22 (Chalicomys); 27 (Steneo-  
fiber).

Schreuder, A. 1928 A, 374.

Taylor, W. P. 1915 A, 167.

1916 A, 457.

Weber, M. 1904 A, 512.

Winge, H. 1888 A, 109.

1924 A, 8, 80.

Woodward, A. S. 1898 B, 373.

Zittel and Schlosser 1911 A, 426.

1923 A, 510, 672 (Steneofiber).

**Chalicomys barbouri** (Peterson).Peterson, O. A. 1905 A, 166, 171, 173, pl. xvii,  
fig. 9; pl. xviii, figs. 13-20; text-figs. 4, 5  
(Steneofiber).

Abel, O. 1926 B, 385 (Steneofiber).

Cook, H. J. 1912 D, 40 (Steneofiber).

Matthew, W. D. 1907 A, 205, 207, 208 (Steneo-  
fiber).

1909 C, 112 (Steneofiber).

O'Harra, C. C. 1920 A, 155 (Steneofiber).

Ortman, A. E. 1909 B, 173, fig. 2 (Steneofiber).

Peterson, O. A. 1906 C, 35 (Steneofiber).

Lower Miocene (Harrison); Nebraska.

**Chalicomys brachyiceps** (Matthew).

Matthew, W. D. 1907 A, 172, 208 (Steneofiber).

1909 C, 112 (Steneofiber).

O'Harra, C. C. 1920 A, 156 (Steneofiber).

Lower Miocene (Harrison); South Dakota.

**Chalicomys complexus** (Douglass).

Douglass, E. 1901 B, 249 (Steneofiber).

Matthew, W. D. 1902 D, 304, fig. 10 (Steneo-  
fiber).

Matthew, W. D. 1909 C, 107 (Steneofiber).  
 Peterson, O. A. 1905 A, 177 (Steneofiber).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Upper Oligocene (White River); Montana.

### **Chalicomys fossor (Peterson).**

Peterson, O. A. 1905 A, 140, 171, 177, pl. xvii, figs. 1-4; pl. xviii, figs. 1-17, 21; pls. xix, xx; text-figs. 1, 2, 3, 6 (Steneofiber).  
 Abel, O. 1926 B, 385 (Steneofiber).  
 Cook, H. J. 1912 D, 40 (Steneofiber).  
 Matthew, W. D. 1907 A, 205 (Steneofiber).  
 1909 C, 112 (Steneofiber).  
 O'Harra, C. C. 1910 A, 86, 131, fig. 14 (Steneofiber).  
 1920 A, 89, 155, fig. 33 (Steneofiber).  
 Ortman, A. E. 1909 B, 179, fig. 3 (Steneofiber).  
 Peterson, O. A. 1908 C, 35 (Steneofiber).  
 Romer and McCormack 1928 A, 58 (Palaeocastor).  
 Lower Miocene (Harrison); Nebraska.

### **Chalicomys gradatus (Cope).**

Hay, O. P. 1902 A, 722 (Steneofiber).  
 Matthew, W. D. 1902 D, 302, fig. 7 (Steneofiber).  
 1904 C, 260 (Steneofiber).  
 1909 C, 107 (Steneofiber).  
 Merriam and Sinclair 1907 A, 185, 188, 189, 190 (Steneofiber).  
 Peterson, O. A. 1905 A, 173 (Steneofiber).  
 Romer and McCormack 1928 A, 58 (Palaeocastor).  
 Schlosser, M. 1924 A, 27 (Castor).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Upper Oligocene (John Day); Oregon.

### **Chalicomys hesperus (Douglass).**

Douglass, E. 1901 B, 243, 247 (Steneofiber).  
 Matthew, W. D. 1902 D, 304, fig. 9 (Steneofiber).  
 1909 A, 4 (Steneofiber).  
 1909 C, 107 (Steneofiber).  
 Peterson, O. A. 1905 A, 176 (Steneofiber).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Upper Oligocene (White River); Montana.

### **Chalicomys montanus (Scott).**

Hay, O. P. 1902 A, 722 (Steneofiber).  
 Douglass, E. 1903 A, 151 (Steneofiber).  
 Matthew, W. D. 1902 D, 303, fig. 8 (Steneofiber).  
 1909 C, 112 (Steneofiber).

Peterson, O. A. 1905 A, 175 (Steneofiber).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Lower Miocene (Harrison); Montana.

### **Chalicomys pansus (Cope).**

Hay, O. P. 1902 A, 722 (Steneofiber).  
 Gidley, J. W. 1904 A, 246 (Steneofiber).  
 Matthew, W. D. 1902 D, 260, 303 (Steneofiber).  
 1904 C, 257, figs. 9, 10 (Steneofiber).  
 1907 A, 172, 208 (Steneofiber).  
 1909 C, 112 (Steneofiber, This species?).  
 Merrill, G. P. 1907 A, 60, 61 (Steneofiber).  
 Peterson, O. A. 1905 A, 173 (Steneofiber).  
 Romer and McCormack 1928 A, 58 (Palaeocastor).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Lower Miocene (Harrison); New Mexico, South Dakota.

### **Chalicomys peninsulatus (Cope).**

Hay, O. P. 1902 A, 722 (Steneofiber).  
 Matthew, W. D. 1902 D, 302, fig. 6 (Steneofiber).  
 1904 C, 259, 260 (Steneofiber).  
 1909 C, 107 (Steneofiber).  
 Merriam and Sinclair 1907 A, 185, 188, 189, 190 (Steneofiber).  
 Peterson, O. A. 1905 A, 172 (Steneofiber).  
 Romer and McCormack 1928 A, 58 (Palaeocastor).  
 Schlosser, M. 1924 A, 27 (Castor).  
 Seeley, H. G. 1886 A, 515 (Castor).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Upper Oligocene (John Day); Oregon.

### **Chalicomys sciuroides (Matthew).**

Matthew, W. D. 1907 A, 172, 207 (Steneofiber).  
 1909 C, 112 (Steneofiber).  
 O'Harra, C. C. 1920 A, 156 (Steneofiber).  
 Lower Miocene (Harrison); South Dakota.

### **Chalicomys simplicidens (Matthew).**

Matthew, W. D. 1907 A, 172, 205, figs. 19, 20 (Steneofiber).  
 1909 C, 112 (Steneofiber).  
 O'Harra, C. C. 1920 A, 156 (Steneofiber).  
 Schlosser, M. 1924 A, 27 (Steneofiber).  
 Lower Miocene (Harrison); South Dakota.

### **Chalicomys sp. indet.**

Lambe, L. M. 1905 D, 363 A (Steneofiber); Canada.  
 Merriam and Sinclair 1907 A, 196 (Steneofiber).  
 Miocene (Mascall); Oregon.

## **DIPLOIDES Jäger. Type not mentioned.**

Jäger, G. F. 1835, Foss. Säuget. Württemb., 1ste Abth., 17-18.  
 Hay, O. P. 1902 A, 722 (Eucastor).  
 Ameghino, F. 1906 A, 243 (Eucastor).  
 Ardit, T. 1911 A, 214.  
 Haug, E. 1911 A, 1706 (Eucastor).  
 Matthew, W. D. 1901 B, 445 (Eucastor).  
 1902 D, 304 (Eucastor).  
 1904 C, 261 (Eucastor=Dipoides).  
 1907 A, 175, 205.  
 1909 C, 118 (Eucastor=Dipoides).

Matthew, W. D. 1910 B, 70 (Eucastor, Sigmodon as syns.).  
 1918 A, 199 (Eucastor).  
 1924 C, 74.  
 Matthew and Cook 1909 A, 380.  
 Merriam, J. C. 1911 B, 216.  
 1913 E, 383.  
 Miller and Gidley 1918 A, 435 (Eucastor).  
 Osborn, H. F. 1905 I, 106.  
 1909 D, 81.  
 1910 B, 356, 357, 535 (= ? Eucastor).

- Palmer, T. S. 1904 A, 239, 868 (Dipoides); 272, 843 (Eucastor).  
 Schlosser, M. 1902 J, 135, 231.  
 1903 I, 40, 178, 209, 219 (Dipoides); 178 (Eucastor).  
 1924 A, 27.  
 Taylor, W. P. 1916 A, 458.  
 Trouessart, E. L. 1904 A, 295.  
 Zittel and Schlosser 1923 A, 511, 679.

### **Dipoides curtus** Matthew and Cook.

- Matthew and Cook 1909 A, 381, fig. 9 (D. curtus); 364 (D. brevis; name only).  
 Cook, H. J. 1912 D, 44 (Name only).  
 Matthew, W. D. 1918 A, 186.  
 1924 C, 66.  
 Merriam, J. C. 1917 A, 436.  
 Sinclair, W. J. 1915 A, 76.  
 Lower Pliocene (Snake Creek); Nebraska.

### **Dipoides lecontei** (Merriam).

- Merriam, J. C. 1910, in Kellogg, L. 1910 A, 430, fig. 13 (Eucastor).  
 1911 B, 211, 214, 232, 253, 254 (Eucastor, This species?).  
 1913 E, 382, fig. 8.  
 1917 A, 426, 429.  
 Stock, C. 1921 B, 19 (Dipoides, Sigmogomphus).  
 Pliocene (Thousand Creek); Nevada: (Siستان); California.

### **Dipoides tortus** (Leidy).

- Hay, O. P. 1902 A, 722 (Eucastor).  
 Barbour, E. H. 1916 C, 525.

- Barbour and Cook 1917 A, 507.

1917 B, 180.

- Cook, H. J. 1912 D, 44.

Gidley, J. W. 1904 A, 245.

- Matthew, W. D. 1902 D, 305, fig. 1 (Eucastor).

1904 C, 261, figs. 11, 12.

1909 C, 116 (Eucastor=Dipoides).

1918 A, 186.

1924 C, 66.

- Matthew and Cook 1909 A, 381.

- Mernia, J. C. 1916 A, 177, figs. 11-13 (This species?).

1917 A, 436, 438.

- Merrill, G. P. 1907 A, 28 (Castor).

- O'Harra, C. C. 1920 A, 158 (Eucastor).

- Schlosser, M. 1924 A, 29.

- Sinclair, W. J. 1915 A, 76.

- Trouessart, E. L. 1904 A, 346 (Eucastor).

- Pliocene (Snake Creek and Valentine); Nebraska: (Cedar Mountain); California.

### **Dipoides?** sp. indet.

- Kellogg, L. 1910 A, 431, fig. 14. Pliocene (Thousand Creek); California.

- Merriam, J. C. 1911 B, 211, 213, 214, 253, 254 (This genus?); Pliocene (Thousand Creek); Nevada.

1913 E, 382, fig. 9. Miocene (Siestan); California.

1917 A, 429 (This genus?); Pliocene (Rattlesnake); Oregon; 429 Pliocene (Thousand Creek); Nevada.

- Stock, C. 1925 A, 18. Lower Pliocene (Rattlesnake); Oregon.

## PALEOCASTOR Leidy. Type *P. nebrascensis* Leidy.

- Leidy, J. 1869 A, 338, 406.  
 Hay, O. P. 1902 A, 722 (Steneofiber, part).  
 Matthew and Granger 1925 B, 7.  
 Miller and Gidley 1918 A, 435.  
 Romer and McCormack 1928 A, 58, 60.  
 Wallace, A. R. 1876 A, 1, 140.

### **Paleocastor magnus** Romer and McCormack.

- Romer and McCormack 1928 A, 58, fig. 1.  
 Lower Miocene (Lower Harrison); Wyoming.

### **Paleocastor nebrascensis** (Leidy).

- Hay, O. P. 1902 A, 722 (Steneofiber).  
 Cook, H. J. 1912 D, 38 (Steneofiber).  
 Matthew, W. D. 1902 D, 301, fig. 5 (Steneofiber).  
 1904 C, 258, 260 (Steneofiber).  
 1909 C, 107 (Steneofiber).  
 Miller and Gidley 1918 A, 435.  
 O'Harra, C. C. 1920 A, 153 (Steneofiber).  
 Peterson, O. A. 1905 A, 172 (Steneofiber).  
 Romer and McCormack 1928 A, 58.  
 Sinclair, W. J. 1924 A, 119 (Steneofiber).  
 Trouessart, E. L. 1904 A, 347 (Steneofiber).  
 Oligocene (Upper); South Dakota: (Brule); Nebraska?.

## CASTORIDÆ Gray.

- Gray, J. E. 1821 A, 302.  
 Hay, O. P. 1902 A, 721.  
 Ameghino, F. 1889 A, 894.  
 1906 A, 409 ("castoridæ").  
 Arldt, T. 1907 D, 643.  
 1912 A, 698, 742.  
 Beddard, F. E. 1902 A, 467.  
 Brandt and Woldrich 1887 A, 81 (Castorinae).  
 Carus, V. 1875 A, 99 (Castorina).  
 Chandler, A. C. 1914 B, 134.  
 Cockerell and Miller 1914 A, 370.  
 Coues, E. 1883 A, 118.  
 Depéret, C. 1906 A, 620 ("castoridæ").  
 1906 B, 1121 ("castoridæ").

- Depéret, C. 1907 B ("castoridæ").

1908 A, 303, 307.

1912 A, 708 ("castoridæ").

- Doran, A. H. G. 1878 A, 410.

Elliot, D. G. 1901 A, 114.

- Gidley, J. W. 1907 B, 635.

- Hay, O. P. 1912 D, 751.

1914 A, 451.

1923 A, 312.

- Höfer, H. 1911 A, 448 (Castoroidea).

- Hoernes, R. 1886 A, 691.

- Hogben, L. T. 1919 A, 73.

- Kraglievich, L. 1926 C, 47 (Castoroidea)

- Leche, W. 1887 A.

- Leunis and Ludwig 1883 A, 216.  
 Lilljeborg, W. 1866 A, 35.  
 Lobley, J. L. 1908 A, 200.  
 Martins, C. 1857 A, 68 ("castors").  
 1872 A, 308 ("castors").  
 Matthew, W. D. 1904 C, 264.  
 1905 A, 22.  
 1905 D, 52.  
 1909 C, 123.  
 1910 B, 66, 70, 71.  
 1928 B, 977 ("beavers").  
 Miller, G. S. 1912 A, 947.  
 1912 B, 341.  
 Miller and Gidley 1918 A, 435.  
 Osborn, H. F. 1909 D, 61, 64.  
 Pictet, F. J. 1853 A, 250 ("castorins").  
 Rehs, J. 1914 A, 94 (Castoroidea, Castoridae).  
 Reichenau, W. 1912 A, 208 (Castorinae).  
 Reynolds, S. H. 1897 A, 452, 454, 502, 520, 526  
 ("beavers").

- Schlosser, M. 1902 I, 708.  
 1902 J, 231, 256.  
 1903 I, 41.  
 Scott, W. B. 1916 A, 117 ("beavers").  
 Seton, E. T. 1909 A, 447.  
 Taylor, W. P. 1915 A, 167.  
 1916 A, 437, 438.  
 Terra, P. 1911 A, 301.  
 Trouessart, E. L. 1904 A, 345.  
 Wagner, A. 1841 A, 125 (Castorina).  
 Wallace, A. R. 1876 A, II, 234.  
 1894 A, 436.  
 Weber, M. 1904 A, 490, 498 (Castoroidea).  
 Weber and Abel 1928 A, 275.  
 Winge, H. 1924 A, 8, 84 (Castorini).  
 Zauyer, T. 1894 A, 340.  
 Zittel and Schlosser 1911 A, 426 (Castoroidea,  
 Castorinae).  
 1923 A, 510, 670 (Castoroidea, Castorinae).

#### AMBLYCASTOR Matthew. Type *A. fluminis* Matthew.

- Matthew, W. D. 1918 A, 197.  
 1924 C, 74.  
 Zittel and Schlosser 1923 A, 511.

#### Amblycastor fluminis Matthew.

- Matthew, W. D. 1918 A, 186, 197, figs. 7, 8.  
 1924 C, 66.  
 Matthew and Cook 1909 A, 381, fig. 10 (Hystri-  
 cops venustus?).  
 Upper Miocene (Lower Snake Creek); Ne-  
 braska.

#### EUHAPSIS Peterson. Type *E. platyceps* Peterson.

- Peterson, O. A. 1905 A, 179.  
 Matthew, W. D. 1909 C, 118.  
 1910 B, 71.  
 1918 A, 199.  
 O'Hara, C. C. 1910 A, 88, 130.  
 Osborn, H. F. 1909 D, 75.  
 1910 B, 535.  
 Winge, H. 1924 A, 8, 80, 94, 169 (Euapsis).  
 Zittel and Schlosser 1911 A, 427.  
 1923 A, 511.

#### Euhapsis gaulodon Matthew.

- Matthew, W. D. 1907 A, 172, 208, figs. 21-23.  
 1909 C, 112.  
 Schlosser, M. 1924 A, 29.  
 Lower Miocene (Rosebud); South Dakota.

#### Euhapsis platyceps Peterson.

- Peterson, O. A. 1905 A, 179, pl. xvii, figs. 5-8.  
 Cook, H. J. 1912 D, 39.  
 Matthew, W. D. 1907 A, 208.  
 1909 C, 112 (E. brachyceps).  
 Osborn, H. F. 1909 D, 73.  
 Peterson, O. A. 1906 C, 24.  
 Lower Miocene (Monroe Creek); Nebraska.

#### HYSTRICOPS Leidy. Type *H. venustus* Leidy.

- Leidy, J. 1858 E, 22 (Subgenus of Hystrix).  
 Hay, O. P. 1902 A, 733 (Erethizon, in part).  
 Allen, J. A. 1904 A, 384 (Hystrix).  
 Matthew, W. D. 1902 D, 305 (Hystrix).  
 1910 B, 71.  
 Matthew and Cook 1909 A, 380.  
 Osborn, H. F. 1910 B, 535.  
 Palmer, T. S. 1904 A, 345, 347.  
**Hystricops venustus** Leidy.  
 Hay, O. P. 1902 A, 733 (Erethizon).  
 Allen, J. A. 1904 A, 384 (Hystrix).  
 Cook, H. J. 1912 D, 44 (This species?).

- Matthew, W. D. 1902 D, 305 (Hystrix).  
 Merriam, J. C. 1917 A, 436 (This species?).  
 Merrill, G. P. 1907 A, 43.  
 Sinclair, W. J. 1915 A, 76 (This species?).  
 Pliocene? (Snake Creek); Nebraska.

#### Hystricops sp. indet.

- Dumble, E. T. 1915 A, 471. Miocene (Flem-  
 ing); Texas.  
 1920 A, 232. Miocene (Fleming); Texas.  
 Matthew, W. D. 1915 L, 471. Miocene (Flem-  
 ing); Texas.  
 1920 E, 232. Miocene (Fleming); Texas.

#### CASTOR Linnæus. Type *C. fiber* Linnæus.

- Hay, O. P. 1902 A, 721.  
 Abel, O. 1912 F, 173, 185.  
 Alezais, H. 1902 A, 583.  
 Allen, J. A. 1892 A.

- Ameghino, F. 1889 A, 1008.  
 Anderson, R. J. 1905 A, 326, fig. 18.  
 Anthony, R. 1912 A ("castors").  
 Arldt, T. 1907 D, 312.

- Ash, F. H. 1908 A, 79 ("beaver").  
 Bardeleben, K. 1885 B, 86.  
     1889 A, 107.  
 Beddard, F. E. 1902 A, 467.  
 Berthold, A. A. 1825 A, 913, 983, pl. viii, figs. 1, 11, 12.  
 Brandt and Woldrich 1887 A, 81.  
 Brauer, A. 1914 A, 282.  
 Bronn, H. G. 1848 A, 247.  
     1849 A, 715.  
 Broom, R. 1901 B, 739 ("beaver").  
 Cleland, J. 1883 B, 301 ("beaver").  
 Cockerell and Miller 1914 A, 370, figs. 98-100.  
 Cope, E. D. 1895 G, 596.  
 Cuvier, F. 1812 A, 286; pl. v, fig. 12 ("castors").  
     1825 A, 182, pl. lxii ("castor").  
 Cuvier, G. 1805 A.  
     1825 A, v, 1, 10, 37, 48, pls. i-iii.  
 Dahms, P. 1901 A, 249, 273.  
 Dall and Harris 1892 A, 284, 289.  
 Depéret, C. 1909 A, 141.  
 Diener, C. 1912 A, 218 ("biber").  
 Doran, A. H. G. 1878 A, 410, pl. lx.  
 Eggeling, H. 1904 A, 93.  
 Eimer, G. H. T. 1901 A, 256 ("bißer").  
 Eisler, P. 1895 A, 212.  
 Elliot, D. G. 1901 A, 115.  
 Erdl, M. 1843 A, 522, 529, pls. i, ii.  
 Fischer, J. B. 1829 A, 286.  
 Frech, F. 1906 A, 487.  
 Frech and Geinitz 1903 A, 36.  
 Gaupp, E. 1905 D, 1041.  
 Geikie, J. 1814 A, 319.  
 Geinitz, E. 1903 A.  
     1904 A.  
 Gervais, P. 1852 A, 20.  
     1853 B, 40.  
     1859 A, 18.  
 Giebel, C. G. 1855 A, 56, pl. xxiii, fig. 2.  
     1878 C, 854.  
     1883 A, pls. xxiii, xlvi, lviii, lxxi, lxxvii, lxxxiv, lxxxix.  
 Gottlieb, H. 1914 A, 214.  
 Gregory, W. K. 1920 A, 173, 242, fig. 127.  
 Gregory and Camp 1918 A, text-fig. 8.  
 Hagamann, G. 1907 A, 464.  
 Hasse and Schwarck 1870 A, 116.  
 Hay, O. P. 1912 D, 753.  
     1914 A, 452.  
 Heilmann, A. 1887 A, 360, 364, 365.  
 Heinicke, P. 1908 A, 355.  
 Höfer, H. 1911 A, pl. xx, fig. 15.  
 Hoernes, R. 1898 A, 691.  
 Hue, E. 1907 A, pls. xliii, lxxxiv, xcvi, cxii, cxvii, cxviii, cxlix, cxxxvi.  
 Hull, E. 1914 A, 616.  
 Humphry, G. M. 1970 B, 76 ("beaver").  
 Huxley, T. H. 1863 F, 530, 579, figs. 50-52.  
     1870 F, 542.  
 Kampfen, P. N. 1905 A, 554.  
 Kellogg, L. 1911 A, 401.  
 Köstlin, O. 1844 A.  
 Kükenthal, W. 1891 C, 373.  
 Leche, W. 1887 A.  
     1821 A, 70.  
 Leunis and Ludwig 1883 A, 216.  
 Linstow, O. 1908 A, 218.  
 Lönnberg, E. 1909 A, 1, figs. 1-5.  
 Lydekker, R. 1910 E, 352 ("beavers").  
 Major, C. J. F. 1899 A, 502.  
     1908 A, 630.  
 Martins, C. 1857 A, 82 ("castor").  
 Matschie, P. 1901 A, 315.  
     1907 A, 215.  
 Matthew, W. D. 1915 K, 402.  
 Matthew and Cook 1909 A, 380.  
 Meckel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 62.  
 Miller, G. S. 1912 A, 947.  
     1912 B, 341.  
     1924 C, 298.  
 Miller and Gidley 1918 A, 435.  
 Miram, E. 1841 A, 541 ("biber").  
 Montagu, I. 1924 A, 1081, pls. i-iii.  
 Nehring, A. 1880 A.  
 Newton, E. T. 1882 A, 78.  
     1891 A, 49.  
 Osborn, H. F. 1909 D, 83, 85.  
     1910 B, 609.  
     1916 B, 536.  
 Owen, R. 1845 B, pls. cv-cvii, fig. 2; pl. cix, fig. 2.  
     1845 E, 126.  
     1858 A, 22 ("beaver").  
     1868 A, 870.  
     1869 B, 49.  
 Palmer, T. S. 1904 A, 162, 842.  
 Pander and Alton 1823 B, 6, pl. ii ("biber").  
     1824 A, 3 ("biber").  
 Parsons, F. G. 1903 A, 317.  
 Retzius, A. 1837 A, 489.  
 Romer and McCormack 1928 A, 60.  
 Rudolf, G. de M. 1922 A, 144, fig. 16 ("beaver").  
 Scharff, R. W. 1907 A, 56.  
     1911 A, 80.  
 Schlosser, M. 1902 J, 135.  
     1903 I, 178.  
 Schreuder, A. 1928 A, 374, figs. 1, 2.  
 Schwalbe, G. 1904 A, 207.  
 Schwarz, E. 1924 A, 20 ("beavers").  
 Scott, W. B. 1913 A, 96, 153, 157.  
 Seton, E. T. 1909 A, 447.  
 Taschenberg, O. 1899 A, 4516.  
 Taylor, W. P. 1915 A, 167.  
     1916 A, 417, 458.  
 Thomas, O. 1916 A, 303 ("beaver").  
 Tornier, G. 1889 A, 174.  
     1891 A, 114, 119, 171.  
     1894 B, 103 ("biber").  
 Trouessart, E. L. 1904 A, 345.  
 Vicq-d'Azyr, F. 1792 A, 507.  
 Virchow, H. 1907 A, 51 ("biher").  
     1918 B, 156, figs. 1-7 ("biber").  
 Wagner, A. 1841 A, 126.  
 Wagner, H. 1843 A.  
 Wallace, A. R. 1876 A, 1, 140 ("beaver").  
 Waterhouse, G. R. 1839 C, 172.  
     1839 D, 595, 598, figs.  
     1842 A, 200, 203.  
 Weber, M. 1904 A, 498.  
 Weber and Abel 1928 A, 252, figs. 166, 169.  
 Weber and Burlet 1927 A, fig. 39.  
 Wilder, B. 1872 B, 321.  
 Winge, H. 1888 A.  
     1924 A, 8, 80, 84.  
 Woodward, A. S. 1898 D, 334.

Zittel and Schlosser 1911 A, 427.  
1923 A, 510, 680, fig. 633.

### **Castor accessor Hay.**

Hay, O. P. 1927 D, 266-268 (C. accessor); 75 (C. sp. indet.).

1923 A, 8 (C. "possibly n. sp.").

Lindgren and Drake 1904 A, 3 (C. "possibly n. sp.").

Lucas, F. A. 1900 H, 99 (C. "possibly n. sp.").  
1904 F, 3 (C. "possibly n. sp.").

Merriam, J. C. 1917 A, 432 (C. "possibly n. sp.").

Pleistocene (Idaho); Idaho.

### **Castor californicus Kellogg.**

Kellogg, L. 1911 A, 401, fig. 1.

Nomland, J. O. 1917 A, 217 ("fossil beaver").

Pliocene (Etchegon); California.

### **Castor canadensis Kuhl.**

Hay, O. P. 1902 A, 721.

Agassiz, L. 1859 B, 186 ("beaver").

Baird, S. F. 1857 A, 301.

Baker, F. C. 1920 A, 456.

Beddard, F. E. 1902 A, 468.

Brown, B. 1903 A, 195.

Brunner, J. 1904 A, 476, figs. 1-18.

Claypole, E. W. 1897 C, 53 ("beaver").

Coleman, A. P. 1904 A, 351 ("beaver").

1917 A, 359 ("beaver").

Collett, J. 1833 A, 73 ("beaver").

Cope, E. D. 1895 G, 596, 599 (C. fiber).

Coues, E. 1833 A, 118, fig. 62 (C. fiber).

Cummins, W. F. 1893 A, 184 ("beaver").

Cuvier, G. 1809 A, 48, pl. vii, figs. 6, 9, 10 ("Castor du Canada").

Dawson, J. W. 1863 F, 914 (C. fiber).

Dugmore, A. R. 1914 A, 1-225, figs.

Elliot, D. G. 1901 A, 116.

Fischer, J. B. 1829 A, 288.

Foots, J. S. 1916 A, 125, pl. xvi.

Frech, F. 1906 A, 484.

Frech and Geinitz 1908 A, 36 (C. fiber).

Gidley, J. W. 1920 B, 282 ("beavers." This species?).

Gilbert, G. K. 1890 A, 304, 394 (C. fiber).

Gilmore, C. W. 1908 A, 37.

Gordon, R. 1902 B, 1033 ("beaver").

Hahn, W. L. 1909 A, 487.

Hall, J. 1843 A, 367 ("beaver").

1846 B, 391 ("beavers").

1871 A, 100 ("beavers").

Haug, E. 1911 A, 1873 (C. fiber).

Hay, O. P. 1912 D, 753, pl. xxvii.

1914 A, 26, 32, 452, pl. lxx.

1920 B, 93, 105, 116.

1923 A, 481.

1924 D, 240, 296 (Castor); 373 ("beaver").

1927 D, 242 (C. fiber); 266 (C. canadensis).

1928 C, 425, 429.

Höfer, H. 1911 A, 448.

Holden, F. H. 1917 A, 76, pl. v, figs. 2, 3, 6, 7; pl. vi, figs. 14-18; pl. vii, figs. 22-24, pl. viii, figs. 25, 26, 35-37; pl. ix, figs. 43-45; pl. x, figs. 56-61; pl. xi, fig. 63; text-figs. C, F, I, L, O, R.

Lambe, L. M. 1904 C, 31, 39, 51.  
1912 A, 14.

Holmes, F. S. 1860 A, iv, vii ("beaver").

Kraglievich, L. 1926 C, 62.

Leidy, J. 1859 J, 181 ("beaver").

1889 H, 18 (C. fiber).

Leighton, M. M. 1921 A, 513.

Lincoln, O. 1908 A, 227, 330 (C. fiber).

Lobley, J. L. 1908 A, 196.

Lockwood, S. 1833 A, 365 ("beaver").

1883 B, 343 ("beaver").

McAdams, W. 1834 B, 289 ("beavers").

McCornack, E. C. 1920 A, 23 (C. fiber).

Major, C. J. F. 1908 B, 630, fig. 131.

Martin, Hand. T. 1912 A, 391 (C. fiber).

Martin, Hor. T. 1892 A, 1-238, figs.

Matschie, P. 1907 A, 215.

Matthew, W. D. 1904 C, 280.

Meek, F. B. 1855 A, 215 (C. fiber americana).

Mercoer, H. C. 1894 A, 95 ("beaver").

1897 A, 444 ("beaver").

Miller, G. S. 1912 B, 341.

1924 C, 298.

Osborn, H. F. 1899 G, 539 ("beavers").

1910 B, 458, 459 (C. fiber); 490 ("Castor").

Osborn and Anthony 1922 A, 226.

Owen, R. 1863 A, 870.

1869 B, 55, pl. iii, fig. 9.

Quackenbush, L. S. 1909 A, 111, 127, pl. xx; text-figs. 5-7.

Rehs, J. 1914 A, 94.

Reichenau, W. 1912 A, 210, figs. 2, 5, 6, 17, 19 (C. americanus).

Rhoads, S. N. 1903 A, 243.

Schmidt, E. 1872 A, 251 (C. fiber).

Seton, E. T. 1909 A, 447 pl. xxxvi; text-figs. 127-139, map 25.

Spencer, J. W. 1833 A, 308 (C. fiber).

Swallow, G. C. 1858 A, 35 (C. fiber americana).

Taschenberg, O. 1899 A, 4516.

Taylor, W. P. 1916 A, 417, 425, 432.

Thomas, A. O. 1912 A, 370 ("beaver").

Trouessart, E. L. 1904 A, 346.

Udden, J. A. 1899 A, 349 ("beaver").

Volk, E. 1911 A, 83 ("beaver").

Weber and Abel 1928 A, 275.

Weld, M. C. 1869 A, 433 ("beaver").

Wyman, J. 1850 D, 280 ("beaver").

Yates, L. G. 1904 A, 8 (C. fiber).

Recent; Newfoundland to Alaska, south to Mexican boundary, east to North Carolina: Pleistocene; New York, Pennsylvania, Maryland, South Carolina, Tennessee, Indiana, Illinois, Iowa, Texas.

### **Castor subauratus Taylor.**

Taylor, W. P. 1912 A, 167.

Hay, O. P. 1927 D, 214.

Kellogg, L. 1912 A, 155, figs. 1-4.

Stock, C. 1918 A, 469.

1925 A, 113.

Taylor, W. P. 1916 A, 428, 447, 461, figs. J-L.

Recent; northern half of California: Pleistocene, Shasta County, California.



**Castor sp. indet.**

- Hay, O. P. 1923 A, 350. Pleistocene; Maryland.  
1927 D, 303. Pleistocene; Oregon.  
Matthew, W. D. 1902 F, 320. Pleistocene; Oregon.

**SIGMOGOMPHIUS J. C. Merriam.**

- Hay, O. P. 1902 A, 722.  
Matthew, W. D. 1907 A, 205.  
Merriam, J. C. 1913 E, 383.  
Palmer, T. S. 1904 A, 631, 843.  
Schlosser, M. 1898 G, 136.  
1902 J, 135.  
1903 I, 178.

- Merriam, J. C. 1917 A, 433. Phocene (Etchegoin); California.  
Miller, L. H. 1912 A, 81. Pleistocene; Oregon.  
Stock, C. 1925 A, 195. Pleistocene (Christmas Lake); Oregon.

**Type *S. lecontei* J. C. Merriam.****Sigmogomphius lecontei J. C. Merriam.**

- Hay, O. P. 1902 A, 722.  
Kellogg, L. 1910 A, 430, fig. 13 (Eucastor).  
Lawson and Palache 1902 A, 390.  
Matthew, W. D. 1909 C, 116.  
Merriam, J. C. 1914 D, 14.  
Schlosser, M. 1898 G, 136.  
Trouessart, E. L. 1904 A, 347.  
Upper Miocene or Lower Pliocene; California.

**CASTOROIDIDÆ Allen.**

- Hay, O. P. 1902 A, 733.  
Ardt, T. 1907 D, 83, 247.  
1912 A, 744.  
Coues, E. 1883 A, 117.  
Hay, O. P. 1912 D, 755.  
1914 A, 455.

- Matthew, W. D. 1905 D, 53.  
1910 B, 70.  
Miller and Gidley 1918 A, 435.  
Taylor, W. P. 1916 A, 457.  
Weber, M. 1904 A, 512.

**CASTOROIDES Foster. Type *C. ohioensis* Foster.**

- Hay, O. P. 1902 A, 733.  
Ameghino, F. 1889 A, 976, 981.  
1912 B, 179.  
Aughey, S. 1876 A, 263 (*Castor ohioensis*).  
Baker, F. C. 1920 A, 456.  
Beddard, F. E. 1902 A, 506.  
Cope, E. D. 1880 U, 158.  
Dall and Harris 1892 A, 284.  
Diener, C. 1912 A, 216.  
Foster, J. W. 1857 A, 361.  
Gidley, J. W. 1912 C, 19.  
Gregory, W. K. 1910 A, 454, fig. 30.  
Hay, O. P. 1910 D, 372.  
1912 B, 8, fig. 4.  
1912 D, 755.  
1914 A, 455.  
1918 B, 10.  
1919 B, 379.  
1923 A, 481.  
1925 D, 242.  
Hellprin, A. 1887 A, 365.  
Hoernes, R. 1886 A, 691.  
Lucas, F. A. 1902 B, 256.  
Martin, H. T. 1912 A, 389.  
Matthew, W. D. 1910 B, 71.  
1912 B, 186.  
1915 K, 402.  
1918 A, 199.  
Osborn, H. F. 1905 I, 110.  
1909 D, 85.  
1910 B, 609.  
Palmer, T. S. 1904 A, 162, 843.  
Scharff, R. F. 1911 A, 153, 285, 286.  
Schlosser, M. 1902 I, 707.  
Schreuder, A. 1928 A, 377.  
Scott, W. B. 1913 A, 205.  
1916 A, 119 ("giant beaver").  
Wallace, A. R. 1876 A, II, 234.  
Weber, M. 1904 A, 512.  
Winge, H. 1924 A, 80, 84.

- Zittel and Schlosser 1911 A, 427.  
1923 A, 511, 680.

**Castoroides ohioensis Foster.**

- Hay, O. P. 1902 A, 733.  
Allen, G. M. 1926 A, 448.  
Baker, F. C. 1920 A, 456 (*C. ohioensis*, *C. kansensis*).  
1920 B, 63.  
Bannister, H. M. 1870 A, 113.  
Calvin, S. 1911 A, 215, pl. xxiii.  
Collett, J. 1876 A, 246.  
Cope, E. D. 1891 N, 71, fig. 41.  
1895 G, 597 ("Castoroides").  
Coues, E. 1883 A, 117.  
Dachnowski, A. 1912 A, 38, 39, 218.  
Emmons, E. 1860 A, 243, fig. 209.  
Foster, J. W. 1869 A, 238, 254.  
1873 A, 92.  
Gidley, J. W. 1911 A, 436.  
Hartnagel and Bishop 1921 A, 84, pls. xx, xxi.  
Hay, O. P. 1910 D, 373.  
1912 D, 755, pls. xxviii, xxix.  
1914 A, 26, 456, pls. lxxi, lxxii; text-fig. 138.  
1916 E, 54 ("giant beaver").  
1918 B, 22.  
1920 B, 116, 129.  
1923 A, 481.  
1924 D, 375 (*C. ohioensis*); 210, 269 (*C. kansensis*).  
1926 E, 391 ("giant-beaver").  
1927 C, 281 ("Castoroides").  
1927 D, 277, 278, 285.  
1928 C, 425, 428, 429 (This species?).  
Hildreth, S. P. 1837 A, 80, figs. 15-18 (No name).  
Howorth, H. H. 1905 A, 99 ("giant beaver").  
Leighton, M. M. 1921 A, 513.  
Linstow, O. 1908 A, 225.

McAdams, W. 1833 A, lxxx ("extinct beaver").  
 Martin, Hand. T. 1912 A, 389, pl. xxiv, fig. A;  
 pl. xxv, fig. A; pl. xxvi, fig. A (C. ohioensis);  
 pl. xxiv, fig. B; pl. xxv, fig. B; pl. xxvi, fig.  
 B (C. kansensis).  
 Martin, Hor. T. 1892 A, 20.  
 Matthew, W. D. 1915 K, 410 ("Castoroides").  
 Mercer, H. C. 1894 C ("giant chinchilla").  
 Newberry, J. S. 1873 F, 87 ("giant beaver").  
 Orton, E. 1870 A, 56 ("hog's tusk").  
 1873 A, 428.  
 Osborn, H. F. 1910 B, 439, 459.  
 1920 A, 244, fig. ("Castoroides").  
 Rhoads, S. N. 1903 A, 245.  
 Russell and Leverett 1908 A, 9.  
 Schmidt, E. 1872 A, 251 ("Castoroides").  
 Scott, W. B. 1913 A, 195 (fig. 113), 205.  
 Serres, M. 1852 A, 122 ("C. orioensis").  
 Smith, B. 1914 A, 463, fig. 1.  
 Thomas, A. O. 1921 A, 309.  
 Williamson, C. W. 1905 A, 338, figure.  
 Winchell, A. 1870 A, 504.  
 Winchell, N. H. 1880 A, 181, pl.  
 1888 A, 306.

Winchell, N. H. 1910 A, 418.  
 Wood, N. A. 1914 A, 759.  
 Worthen, A. H. 1880 A, 8.

Pleistocene; New York, Pennsylvania, Ohio,  
 Michigan, Indiana, Illinois, South Carolina,  
 Mississippi, Tennessee, Texas, Oklahoma, Kan-  
 sas, Iowa, Nebraska, Minnesota, South Dakota,  
 Oregon.

#### Castoroides sp. indet.

Hay, O. P. 1914 A, 26.  
 1924 D, 305. Pleistocene; Nebraska.  
 1927 D, 128, 190, 243. Pleistocene; Oregon.  
 McCornack, E. C. 1920 A, 23. Pleistocene (Fossil  
 Lake); Oregon.  
 Matthew, W. D. 1902 F, 317, 320.  
 1918 A, 227.  
 Matthew and Cook 1909 A, 380.  
 Miller, L. H. 1912 A, 81. Pleistocene (Fossil  
 Lake); Oregon.  
 Osborn, H. F. 1910 B, 457, 466, 475.  
 Stock, C. 1925 A, 195. Pleistocene (Fossil  
 Lake); Oregon.

#### Superfamily MUROIDÆ, new form.

Unless otherwise indicated the authors here  
 cited use for this superfamily the name Myo-  
 morpha.

Hay, O. P. 1902 A, 726  
 Ameghino, F. 1893 B, 444.  
 1893 D, 15.  
 1912 B, 170, 172.  
 Anonymous 1897 B, 368.  
 Arldt, T. 1907 D, 667.  
 Beddard, F. E. 1902 A, 469.  
 Bovero, A. 1905 A, 119  
 Cockerell, Miller and Prinz 1914 A, 349.  
 Dawson, A. B. 1925 A, 205, figs. 1, 2 ("rats").  
 Doran, A. H. G. 1878 A, 418.  
 Giebel, C. G. 1865 C, 430 ("muriformen").  
 Gill, T. 1872 B, 20 (Myoiden).  
 Gregory, W. K. 1910 A, 330.  
 1914 G, 380.  
 Hogben, L. T. 1919 A, 72.  
 Matthew, W. D. 1910 B, 64, 66, 69.  
 1914 H, 350.

Matthew, W. D. 1915 A, 233.  
 Miller and Gidley 1913 A, 435 (Myoidæ).  
 Rehs, J. 1914 A, 69, 92 (Myomorphi).  
 Schapiro, B. 1913 A, 209.  
 Schlosser, M. 1902 I, 708 (Myomorphi).  
 Seeley, H. G. 1886 A, 514.  
 Terra, P. 1911 A, 302 (Muridæ).  
 Thomas, L. J. 1926 A, 59-68, 11 figs. ("mouse").  
 Trouessart, E. L. 1904 A, 348.  
 Wagner, A. 1841 A, 123 (Murini).  
 Waterhouse, G. R. 1839 D, 92 (Murina).  
 1842 A, 200 (Muridæ).  
 Weber, M. 1904 A, 489.  
 Weber and Abel 1928 A, 280 (Myoiden).  
 Weber and Burlet 1927 A, xiv (Myoiden).  
 Winge, H. 1888 A, 155.  
 1924 A, 8, 30 (Muridæ).  
 Woodward, A. S. 1898 B, 379.  
 Zittel and Schlosser 1911 A, 429 (Myoiden).  
 1923 A, 513 (Myoiden).

#### MURIDÆ Gray.

Gray, J. E. 1821 A, 303.  
 Hay, O. P. 1902 A, 726.  
 Adams, L. A. 1919 A, 117, pl. x (Mus).  
 Addison and Appleton 1915 A, 43, figs. 1-29  
 ("rat").  
 Adloff, P. 1913 A, 238 ("ratte").  
 Ahrens, H. 1912 A, 513.  
 Anthony, R. 1912 A.  
 Arldt, T. 1907 D, 666.  
 Beddard, F. E. 1902 A, 471 (Muridæ, Murinæ).  
 Bonaparte, C. L. 1832 A, 288.  
 Brandt and Woldrich 1887 A, 66 (Murina).  
 Causch, D. E. 1904 A, 157 ("rats").  
 Chandler, A. C. 1914 B, 134.  
 Coues, E. 1875 D, 173.  
 Cuvier, F. 1812 A, 279, pl. xv, fig. 3 ("rats").  
 1825 A, 166 ("rats").  
 Cuvier, G. 1805 A ("rats").

Doran, A. H. G. 1878 A, 410.  
 Drüner, L. 1904 A, 258, figs. 1-16, 19 ("maus").  
 Elliot, D. G. 1901 A, 117.  
 Freund, P. 1892 A, 525.  
 Fuchs, H. 1905 B, 161 ("maus").  
 Gaupp, E. 1910 C (Mus).  
 Gegenbaur, C. 1864 C, 181 ("murinen").  
 1865 C, 550, fig. 3 (Mus).  
 Gervais, P. 1859 A, 38 ("muridés").  
 Giebel, C. G. 1883 A ("murnnen").  
 Hinton, M. A. C. 1923 A, 162.  
 Hoernes, R. 1886 A, 690.  
 Hrdlička, A. 1903 A, 381.  
 Jenkinson, F. W. 1911 A, 305, figs. 1-8 ("mouse").  
 Karpfen, P. N. 1905 A, 553.  
 Kravets, L. P. 1906 A, 50 (Mus).  
 Krukenberg, A. 1849 A, 413 ("ratte").  
 Krumbach, T. 1904 A, 279 ("muriden").

Leche, W. 1887 A.  
 Ledouble, A. F. 1906 A, 550 ("rats").  
 Leunis and Ludwig 1883 A, 219.  
 Lobley, J. L. 1908 A, 195, 200, 205.  
 Mahn, R. 1890 A, 654, pl. xxv (Mus).  
 Major, C. J. F. 1899 A, 473.  
 Matthew, W. D. 1909 C, 105, 107, 110, 116, 119.  
     1910 B, 72.  
     1913 B, 291.  
     1915 K, fig. 17 ("mice").  
 Meckel, J. F. 1825 A ("ratten").  
 Miller, G. S. 1912 A, 591.  
     1912 B, 126.  
 Miller and Gidley 1913 A, 438.  
 Nowikoff, M. M. 1909 A, 1 (Mus).  
 Osborn, H. F. 1909 D, 63, 66.  
     1910 B, 221, 230, 536.  
 Owen, R. 1866 B, 373.  
     1868 A, 299.  
 Paterson, A. M. 1901 A, 21 ("rat").  
     1902 A, 777 ("rat").  
 Pictet, F. J. 1853 A, 245 ("murins").

Pouchet and Chabry 1884 A, 171 ("iat").  
 Rehs, J. 1914 A, 69, 93.  
 Reichert, K. B. 1849 A, 447 ("maus").  
 Roetter, F. 1889 A, 456, pl. vii (Mus).  
 Schapiro, B. 1913 A, 276.  
 Schlosser, M. 1902 I, 708.  
 Tims, H. W. M. 1903 A, 143.  
 Tornier, G. 1891 A, 119 ("muriden").  
 Tourneux, F., and J. P. 1912 A, 72, fig. 7 ("rat").  
 Trouessart, E. L. 1878 A, 10.  
 Wagner, A. 1841 A, 123 (Murina).  
 Wallace, A. R. 1876 A, i, 147; ii, 229.  
     1894 A, 436.  
 Waterhouse, G. R. 1839 C, 173.  
 Weber, M. 1904 A, 502, 512 (Muridae); 513 (Murinae).  
 Weber and Abel 1928 A, 282.  
 Weiss, A. 1901 A, 500 ("ratte").  
 Woodward, A. S. 1898 E, 332 ("rats, mice").  
 At present no genera of North American fossil vertebrates are referred to this family.

### ISCHYROMYIDÆ Alston.

Alston, E. R. 1876 A, 67, 78.  
 Hay, O. P. 1902 A, 723.  
 Arldt, T. 1907 D, 660.  
     1912 A, 698.  
 Cockerell, Miller, and Prinz 1914 A, 350 ("ischyromids").  
 Cope, E. D. 1874 B, 477 (Protomyidæ).  
     1880 U, 156 (Protomyidæ).  
     1884 O, 37 (Protomyidæ).  
 Coues, E. 1883 A, 117.  
 Gregory, W. K. 1920 A, 24, 243.  
 Hilzheimer, M. 1913 A, 569 (Ischyromyinae).  
 Matthew, W. D. 1905 D, 53.  
     1909 C, 94, 97, 99, 101, 104, 105, 110.  
     1909 D, 300.  
     1910 B, 43, 44, 64, 69, 71.  
     1912 B, 186.  
     1914 B, 387.  
     1915 A, 231, 233.  
     1915 K, 474.

Matthew, W. D. 1918 H, 614.  
 Matthew and Granger 1925 B, 7.  
 Miller and Gidley 1913 A, 436.  
     1920 A, 73.  
 Osborn, H. F. 1909 D, 128.  
     1910 B, 619.  
 Palmer, T. S. 1904 A, 743, 849.  
 Scharf, R. F. 1911 A, 228.  
 Schlosser, M. 1902 I, 708 (Ischyromyinae).  
     1911 A, 166 ("ischyromyiden").  
 Scott, W. B. 1913 A, 280.  
 Taylor, W. P. 1915 A, 107.  
 Trouessart, E. L. 1904 A, 476 (Ischyromidæ, Ischyromyinae).  
 Troxell, E. L. 1922 A, 123.  
     1923 D, 395.  
 Weber and Abel 1928 A, 271, 296.  
 Winge, H. 1924 A, 7, 16 (Ischyromyini).  
 Zittel and Schlosser 1911 A, 425.  
     1923 A, 509, 518, 670 (Ischyromyinae).

### ISCHYROMYS Leidy. Type *I. typus* Leidy.

Hay, O. P. 1902 A, 725.  
 Douglass, E. 1905 A, 211.  
     1909 C, 231, 283, 285.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 365.  
 Kraglievich, L. 1926 C, 47.  
 Matthew, W. D. 1901 B, 369, 370.  
     1909 C, 110.  
     1910 B, 43, 61, 62, 71, 63 (Titanotheriomys, subg.).  
     1924 E, 748.  
 Matthew and Granger 1923 B, 4.  
 Osborn, H. F. 1909 D, 61.  
     1910 B, 534.  
 Palmer, T. S. 1904 A, 352, 850.  
 Schlosser, M. 1902 I, 707.  
 Scott, W. B. 1913 A, 254.  
 Seeley, H. G. 1886 A, 515.  
 Sinclair, W. J. 1924 A, 119.  
 Troxell, E. L. 1922 A, 123.

Troxell, E. L. 1923 D, 385, 390, 393, figs. 21, 22.  
 Wallace, A. R. 1876 A, i, 140.  
 Weber and Abel 1928 A, 296.  
 Winge, H. 1924 A, 15.  
 Zittel and Schlosser 1911 A, 425.  
     1923 A, 509, 518.

#### *Ischyromys chrysodon* (Cope).

Cope, E. D. 1873 T, 5 (Gymnoptychus).  
 Hay, O. P. 1902 A, 725 (*I. typus*, in part).  
 Miller and Gidley 1920 A, 74.  
     Oligocene (White River); region of Nebraska, South Dakota or Colorado.

#### *Ischyromys cristatus* (Cope).

Cope, E. D. 1873 S, 1 (Colotaxis).  
 Hay, O. P. 1902 A, 725 (*I. typus*, in part).  
 Matthew, W. D. 1909 C, 105.  
     1910 B, 62.  
     Middle Oligocene (Cedar Creek); Colorado.

**Ischyromys parvidens** Miller and Gidley.*Miller and Gidley* 1920 A, 73.

Oligocene (White River); South Dakota.

**Ischyromys pliacus** Troxell.*Troxell, E. L.* 1922 A, 124, fig. 1.

Oligocene (Lower Oreadon); Colorado.

**Ischyromys typus** Leidy.

Hay, O. P. 1902 A, 725.

Cook, H. J. 1912 D, 36.

Douglass, E. 1901 B, 242.

1903 A, 149.

Lambe, L. M. 1905 D, 368 A.

1908 A, 11, 56, pl. viii, fig. 18.

Mathew, W. D. 1901 B, 357.

1909 C, 105.

1910 B, 62, figs. 16-18.

*Miller and Gidley* 1920 A, 74.

O'Harra, C. C. 1910 A, 87, 127.

1920 A, 151.

Sinclair, W. J. 1924 A, 102.

Trouessart, E. L. 1904 A, 478.

Troxell, E. L. 1922 A, 123, fig. 6.

Zittel and Schlosser 1911 A, 425, fig. 590.

1923 A, 509, fig. 630.

Middle Oligocene (Brule); Nebraska: (White River); Montana: (Cypress Hills); Saskatchewan.

**Ischyromys typus lloydi** Troxell.*Troxell, E. L.* 1922 A, 125, figs. 4, 5, 7.

1923 D, 393, figs. 19, 20.

Oligocene (Lower Brule); Nebraska.

**Ischyromys typus nanus** Troxell.*Troxell, E. L.* 1922 A, 124, figs. 2, 3.

Oligocene (Lower Oreadon); Colorado.

**TITANOTHERIOMYS** Matthew. Type *Ischyromys veterior* Matthew.*Matthew, W. D.* 1910 B, 63 (As subgenus).*Miller and Gidley* 1920 A, 73, 74.**Titanotheriomys veterior** (Matthew).*Matthew, W. D.* 1903 B, 211 (Ischyromys).

Granger, W. 1910 A, 240 (Ischyromys).

*Matthew, W. D.* 1908 C, 104 (Ischyromys).

1910 B, 63 [L. (Titanotheriomys)].

*Miller and Gidley* 1920 A, 73, 74.

Troxell, E. L. 1922 A, 123.

Zittel and Schlosser 1911 A, 425 ("Titanotheriomys").

Lower Oligocene (White River); Montana, Wyoming.

**CRICETIDÆ** Rochebrune.*Rochebrune, A. T.* 1883.

Hay, O. P. 1902 A, 726 (Muridæ, part).

Brubacher, H. 1892 A, 3 (Cricetus).

Cockerell, Miller, and Printz 1914 A, 349 (Cricetinae).

Cockerell and Prinz 1914 A, 351 (Cricetinae).

Coues, E. 1853 A, 103 (Arvicolinæ); 113 (Cricetinae).

Denker, A. 1901 A, 661 (Cricetus).

Depéret, C. 1907 B ("cricetidés").

Gervais, P. 1852 A, 25 (Cricetus).

1859 A, 43 (Cricetes).

Hay, O. P. 1923 A, 312.

Mathew, W. D. 1914 H, 350 (Cricetinae).

Matthew and Granger 1923 B, 3.

*Miller, G. S.* 1912 B, 126 (Cricetinae).

1924 C, 300.

*Miller and Gidley* 1918 A, 436.

Palmer, T. S. 1904 A, 851.

Roger, O. 1896 A, 120.

Schwarz, E. 1924 A, 422 (Cricetus).

Taschenberg, O. 1899 A, 4534 (Cricetus).

Terra, P. 1911 A, 303.

Thomas, O. 1916 B, 139 (Muridæ).

Trouessart, E. L. 1904 A, 393 (Cricetinae).

Waterhouse, G. R. 1839 D, 274 (Muridæ, in part).

Weber and Abel 1928 A, 282 (Cricetinae).

Winge, H. 1924 A, 8, 55 (Cricetini).

**CRICETINÆ** Flower and Lydekker.*Flower and Lydekker* 1891 A, 463.

Hay, O. P. 1902 A, 726 (Cricetinae); 727 (Neotominae).

Ameghino, F. 1889 A, 1014 (Hesperomyidæ).

1912 B, 173 (Cricetinae); 174 (Neotominae).

Arlt, T. 1907 B, 450 (Hesperomyinae).

1907 D, 648 (Cricetidae).

1912 A, 742 (Neotominae, Sigmodontinae).

Beddard, F. E. 1902 A, 479 (Sigmodontinae); 480 (Neotominae).

Cockerell and Prinz 1914 A, 354 (Neotominae); 356 (Sigmodontinae).

Coues, E. 1875 D, 174 ("sigmodont series").

Depéret, C. 1912 A, 708 ("cricetidés").

Elliot, D. G. 1901 A, 154 (Neotominae).

Flower, W. H. 1883 D, 419.

Freund, P. 1892 A, 548 (Cricetus).

Goldman, E. A. 1910 A, 13 (Neotominae).

1918 A, 3.

Hinton, M. A. C. 1923 A, 166.

*Matthew, W. D.* 1915 A, 228.

Merriam, C. H. 1894 A, 225, 228 (Neotominae).

*Miller, G. S.* 1912 B, 126.

1924 C, 300.

Rahe, J. 1914 A, 69, 93 (Hesperomyidæ).

Schlosser, M. 1902 I, 708 (Cricetidae).

Thomas, O. 1896 A, 1019 (Sigmodontinae).

Trouessart, E. L. 1878 A, 10 (Hesperomyinae).

1897 A, 511 (Sigmodontinae); 540 (Neotominae).

1904 A, 397 (Sigmodontinae); 433 (Neotominae).

Weber, M. 1904 A, 502 (Cricetinae, Sigmodontinae).

Weber and Abel 1928 A, 283 (Cricetinae, Microtinae).

Winge, H. 1888 A, 125 (Cricetini).

Zittel and Schlosser 1911 A, 429 (Cricetinae); 430 (Hesperomyinae).

1923 A, 513, 518 (Cricetinae, Hesperomyinae).

PAREUMYS Peterson. Type *P. milleri* Peterson.

Peterson, O. A. 1919 A, 86.

**Pareumys milleri** Peterson.

Peterson, O. A. 1919 A, 66, fig. 7.  
Upper Eocene (Uinta); Utah.

EUMYS Leidy. Type *E. elegans* Leidy.

Hay, O. P. 1902 A, 726.  
Ameghino, F. 1912 B, 172.  
Depéret, C. 1912 A, 708.  
Douglass, E. 1909 C, 231, 285.  
Haug, E. 1911 A, 1528.  
Matthew, W. D. 1901 B, 369.  
1909 C, 110.  
1910 B, 68, 72.  
Matthew and Granger 1924 A, 6.  
Miller, G. S. 1927 A, 19.  
Osborn, H. F. 1910 B, 221, 536.  
Palmer, T. S. 1904 A, 276, 852.  
Peterson, O. A. 1905 A, 174.  
Schlosser, M. 1911 A, 166.  
Sinclair, W. J. 1924 A, 119.  
Wallace, A. R. 1876 A, I, 140.  
Weber, M. 1904 A, 512.  
Winge, H. 1838 A, 109, 156.  
1924 A, 30, 54.

Zittel and Schlosser 1911 A, 430.  
1923 A, 514.

**Eumys elegans** Leidy.

Hay, O. P. 1902 A, 726.  
Cook, H. J. 1912 D, 36.  
Matthew, W. D. 1901 B, 357.  
1909 C, 105.  
O'Harra, C. C. 1910 A, 88, 127.  
1920 A, 151.  
Seeley, H. G. 1886 A, 515.  
Sinclair, W. J. 1924 A, 102.  
Oligocene (Brule); region of South Dakota,  
Nebraska, Colorado?

**Eumys minor** Douglass.

Douglass, E. 1901 B, 242, 252.  
Trouessart, E. L. 1904 A, 397.  
Oligocene (White River); Montana.

ONYCHOMYS Baird. Type *Hypudæus leucogaster* Wiedman.

Baird, S. F. 1857 A, 458.  
Miller, G. S. 1912 B, 126.  
1924 C, 300.  
Palmer, T. S. 1904 A, 476.

**Onychomys bensoni** Gidley.

Gidley, J. W. 1922 B, 120, 125 pl. xxxv, fig. 3.  
Hay, O. P. 1927 D, 136.  
Pleistocene (San Pedro Valley); Arizona.

**Onychomys pedroensis** Gidley.

Gidley, J. W. 1922 B, 120, 125, pl. xxxv, fig. 1.  
Hay, O. P. 1927 D, 136.  
Pleistocene (San Pedro Valley); Arizona.

**Onychomys torridus ramona** (Rhoads).

Rhoads, S. N. 1893, Amer. Naturalist, xxvii, 833  
(O. ramona).  
Dice, L. R. 1925 A, 123.  
Hay, O. P. 1927 D, 133.  
Merriam, C. H. 1904, Proc. Biol. Soc. Wash.,  
xvii, 124 (O. t. ramona).  
Miller, G. S. 1912 B, 123 (O. ramona).  
1924 C, 305.  
Recent; southern California and Lower California: Pleistocene (La Brea); California.

REITHRODONTOMYS Giglioli. Type *Mus lecontei* Audubon and Bachman.

Giglioli, E. H. 1873, Recherche int. Dist. Geog.  
Gen. Roma, 160.  
Allen, J. A. 1892 A.  
Ameghino, F. 1899 A, 1024 (Reithrodon).  
1912 B, 179.  
Baird, S. F. 1857 A, 447 (Reithrodon, preoccu-  
pied).  
Elliot, D. G. 1901 A, 148.  
Howell, A. H. 1914 A, 1-81, pls. i-vii, text-figs.  
1-6.  
Lilljeborg, W. 1866 A, 17 (Reithrodon).  
Matthew, W. D. 1910 B, 72.  
1915 K, 402.  
Merriam, C. H. 1892 A, 61.  
Miller, G. S. 1912 B, 129.  
1924 C, 306.  
Osborn, H. F. 1909 D, 90.  
Palmer, T. S. 1904 A, 602, 853 (Reithrodon,  
Reithrodontomys).  
Scott, W. B. 1913 A, 182 (Reithrodon).  
Trouessart, E. L. 1904 A, 424.  
Weber, M. 1904 A, 502.

**Reithrodontomys megalotis longicauda** (Baird).

Baird, S. F. 1857 A, 451 (Reithrodon longicauda).  
Dice, L. R. 1925 A, 123 (R. m. longicaudus).  
Grinnell, T. 1913, Proc. Calif. Acad. Sci. (4),  
iii, 303.  
Hay, O. P. 1927 D, 133.  
Miller, G. S. 1912 B, 133 (R. l. longicauda).  
1924 C, 308 (R. m. longicaudus).  
Recent; Oregon to Lower California: Pleisto-  
cene (La Brea); California.

**Reithrodontomys simplicidens** B. Brown.

Brown, B. 1908 A, 196, pl. xxi.  
Hay, O. P. 1924 D, 251.  
Pleistocene (Middle); Arkansas.

**ELIGMODONTIA** Cuvier. Type *E. typus* Cuvier.

Cuvier, F. 1837, Ann. Sci. Nat. (2), vii, 169.  
 Thomas, O. 1916 B, 140.

**Eligmodontia arizonæ** Gidley.

Gidley, J. W. 1922 B, 120, 124, pl. xxxiv, fig. 15.  
 Hay, O. P. 1927 D, 136.  
 Pleistocene (San Pedro Valley); Arizona.

**PEROMYSCUS** Gloger. Type *P. arboreus* Gloger.

Gloger, C. W. L. 1841, Hand- u Hilfsbuch Naturgesch., xxx, 95.  
 Hay, O. P. 1902 A, 726.  
 Ameghino, F. 1889 A, 1014 (Hesperomys).  
 1912 B, 172.  
 Arldt, T. 1907 D, 113 (Hesperomys).  
 Cockerell and Prinz 1914 A, 356, figs. 25-27.  
 Coues, E. 1875 D, 176 (Hesperomys).  
 1883 A, 107, 110 (Hesperomys).  
 Elliot, D. G. 1901 A, 123.  
 Frech and Geinitz 1903 A, 39 (Hesperomys).  
 Gaupp, E. 1913 A, 126 (Hesperomys).  
 Giebel, C. G. 1855 A, 50, pl. xxi, fig. 7.  
 1888 A, pls. xxviii, xcii (Hesperomys).  
 Haug, E. 1911 A, 1706, 1886 (Hesperomys).  
 Heilprin, A. 1887 A, 355, 365 (Hesperomys).  
 Kraglievich, L. 1926 C, 47 (Hesperomys).  
 Leche, W. 1887 A (Hesperomys).  
 Lilljeborg, W. 1866 A, 17 (Hesperomys).  
 Lull, R. S. 1922 C, 603.  
 Matthew, W. D. 1909 C, 110, 119 (Peromyscus);  
 118 (Hesperomys).  
 1910 B, 72.  
 1915 K, 402.  
 Miller, G. S. 1912 B, 138.  
 1924 C, 318.  
 1927 A, 19 (Hesperomys).  
 Osborn, H. F. 1909 D, 90.  
 1910 B, 470, 537 (Hesperomys).  
 1915 B, 207.  
 1915 D, 284.  
 1921 D, 6.  
 1926 C, 340.  
 Osgood, W. H. 1909 A.  
 Palmer, T. S. 1904 A, 525, 853.  
 Rehs, J. 1914 A, 69, 93 (Hesperomys).  
 Schlosser, M. 1902 I, 738 (Hesperomys).  
 1924 A, 48 (Hesperomys).  
 Seton, E. S. 1909 A, 490, text-figs. 144-146,  
 map 27.  
 Thomas, O. 1895 A, 190, 192.  
 Trouessart, E. L. 1904 A, 399.  
 Van den Broeck, A. J. P. 1912 A, 783 (Hesperomys).  
 Wallace, A. R. 1876 A, 1, 140, 145, 147 (Hesperomys).  
 Weber, M. 1904 A, 502 (Hesperomys).  
 Weber and Abel 1928 A, 283.  
 Winge, H. 1888 A, 11, 109, 124, 156 (Hesperomys).  
 1924 A, 8, 34, 35, 56 (Hesperomys).  
 Zittel and Schlosser 1911 A, 430 (Hesperomys).  
 1923 A, 514, 672, fig. 638 (Peromyscus, Hesperomys).

**Peromyscus antiquus** Kellogg.

Kellogg, L. 1910 A, 422, fig. 16.  
 Merriam, J. C. 1911 B, 211, 213, 214, 253, 255.  
 1917 A, 429.  
 Pliocene (Thousand Creek); Nevada.

**Peromyscus boylii** (Baird).

Baird, S. F. 1855, Proc. Acad. Nat. Sci. Phila.,  
 vii, 335 (Hesperomys).  
 1857 A, 471, pl. viii, fig. 3 (Hesperomys).  
 Hay, O. P. 1927 D, 223.  
 Miller, G. S. 1912 B, 157.  
 1924 C, 338.  
 Osgood, W. H. 1909 A, 142, pl. iv, fig. 1; pl. vii,  
 fig. 9 (P. boylei).  
 Stock, C. 1918 A, 468 (P. boylei).  
 1925 A, 113 (P. boylei).  
 Recent; Mt. Shasta to Guatemala: Pleistocene; California.

**Peromyscus brachygnathus** Gidley.

Gidley, J. W. 1922 B, 120, 124, pl. xxxiv, fig. 12.  
 Hay, O. P. 1927 D, 136.  
 Pleistocene (San Pedro Valley); Arizona.

**Peromyscus imperfectus** Dice.

Dice, L. R. 1925 A, 123, figs. 1, 2.  
 Hay, O. P. 1927 D, 183.  
 Pleistocene (La Brea); California.

**Peromyscus leucopus** (Rafinesque).

Hay, O. P. 1902 A, 726.  
 Coues, E. 1875 D, 178 (Hesperomys).  
 1883 A, 110, fig. 55 (Hesperomys).  
 Elliot, D. G. 1901 A, 124, fig. 30 (P. americanus).  
 Gidley, J. W. 1913 B, 96.  
 Hay, O. P. 1923 A, 493.  
 Lull, R. S. 1917 B, 373.  
 Mercer, H. C. 1894 A, 98 ("white-footed mouse").  
 Miller, G. S. 1912 B, 153.  
 1924 C, 324.  
 Osgood, W. H. 1909 A, 113, pl. vi, fig. 4, text-  
 fig. 2.  
 Rhoads, S. N. 1903 A, 243.  
 Recent; Nova Scotia to Montana, south to  
 Florida and Yucatan: Pleistocene; Maryland,  
 Virginia, Pennsylvania.

**Peromyscus loxodon** (Cope).

Cope, E. D. 1874 U, 150 (Hesperomys).  
 Hay, O. P. 1902 A, 727.  
 Matthew, W. D. 1909 C, 116 (Hesperomys, Peromyscus).  
 Merrill, G. P. 1907 A, 37 (Eumys, Hesperomys).  
 Upper Miocene (Arikaree); New Mexico.

**Peromyscus maniculatus gambelii** (Baird).

Baird, S. F. 1857 A, 464 (Hesperomys gambelii).  
 Hay, O. P. 1927 D, 183, 190, 214.  
 Kellogg, L. 1912 A, 158 (P. m. gambeli); 166  
 (P. gambeli?).  
 Miller, G. S. 1912 B, 146.  
 Osborn, H. F. 1926 C, 340 (P. m. gambeli).  
 Osgood, W. H. 1909 A, 67 (P. m. gambeli).

Stock, C. 1918 A, 469 (*P. m. gambeli*).  
1925 A, 113 (*P. m. gambeli*).

Recent; Lower California to central Washington: Pleistocene (La Brea, Samwel Cave); California.

***Peromyscus maniculatus gracilis* (LeConte).**

LeConte, J. L. 1855, Proc. Acad. Nat. Sci. Phila., vii, 442 (*Hesperomys gracilis*).

Miller, G. S. 1893, Proc. Biol. Soc. Wash., viii, 55 (*Sitomys americanus canadensis*).  
1924 C, 323.

Osgood, W. H. 1909 A, 42.

Peterson, O. A. 1926 A, 276 (*P. canadensis*).

Recent; Minnesota to Michigan and New England: Pleistocene; Pennsylvania.

***Peromyscus minimus* Gidley.**

Gidley, J. W. 1922 B, 120, 124, pl. xxxiv, fig. 13.  
Pleistocene (San Pedro Valley); Arizona.

***Peromyscus nematodon* (Cope).**

Hay, O. P. 1902 A, 727.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185, 188, 190.

Sceley, H. G. 1886 A, 515 (*Hesperomys*).  
Upper Oligocene (John Day); Oregon.

***Peromyscus parvus* Sinclair.**

Sinclair, W. J. 1905 A, 126, pl. xiv, figs. 4-5.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185, 188, 190.  
Upper Oligocene (John Day); Oregon.

***Peromyscus* sp. indet.**

Brown, B. 1908 A, 195. Pleistocene; Arkansas.

Gidley, J. W. 1922 B, 120, 124, pl. xxxiv, fig. 14.  
Pleistocene (San Pedro Valley); Arizona.

Hay, O. P. 1914 A, 32.

1920 B, 140. Pleistocene; Texas.

1924 D, 247, 251. Pleistocene; Arkansas, Texas.

1927 D, 186. Pleistocene; Arizona.

Kellogg, L. 1910 A, 433. Pleistocene; Nevada.

Merriam, J. C. 1911 B, 253, 255 (This genus?).  
Pliocene (Thousand Creek); Nevada.

Merriam and Sinclair 1907 A, 196. Upper Miocene (Mascall); Oregon.

Rhoads, S. N. 1903 A, 243. Pleistocene (Port Kennedy); Pleistocene or Recent (Durham Cave); Pennsylvania.

**ORYZOMYS Baird. Type *Mus palustris* Harlan.**

Baird, S. F. 1857 A, 458.

Cockerell and Prinz 1914 A, 356, figs. 28, 29.

Coues, E. 1875 D, 183 [*Hesperomys* (*Oryzomys*)].

Elliot, D. G. 1901 A, 146.

Goldman, A. E. 1918 A, 1-43, pls. i-vi.

Kampfen, P. N. 1905 A, 556.

Merriam, C. H. 1901 B, 273.

Miller, G. S. 1912 B, 171.

1924 C, 352.

Palmer, T. S. 1904 A, 485, 853.

Trouessart, E. L. 1904 A, 415.

***Oryzomys palustris natator* Chapman.**

Chapman, F. M. 1893, Bull. Amer. Mus. Nat. Hist., v, 44.

Elliot, D. G. 1901 A, 147.

Goldman, A. E. 1918 A, 24.

Hay, O. P. 1917 E, 45 (*O. natator*?).

1923 A, 382 (*O. palustris*).

Merriam, C. H. 1901 B, 277 (*O. natator natator*).

Miller, G. S. 1912 B, 171 (*O. natator natator*).

1924 C, 352.

Simpson, G. G. 1923 H, 2 (*O. palustris*).

Trouessart, E. L. 1904 A, 415.

Recent; Florida: Pleistocene; Florida.

**PAUROMYS Troxell. Type *P. perditus* Troxell.**

Troxell, E. T. 1923 B, 155.

1923 D, 395.

***Pauromys perditus* Troxell.**

Troxell, E. T. 1923 B, 155, fig. 1.

Middle Eocene (Bridger); Wyoming.

**SIGMODON Say and Ord. Type *S. hispidus* Say and Ord.**

Say and Ord 1825, Jour. Acad. Nat. Sci., Phila., iv, 352.

Ameghino, F. 1912 B, 179.

Cockerell and Prinz 1914 A, 357, figs. 36-39.

Coues, E. 1875 D, 175.

1883 A, 111.

Elliot, D. G. 1901 A, 143.

Lilljeborg, W. 1886 A, 18.

Merriam, C. H. 1892 A, 61.

Miller, G. S. 1912 B, 181.

1924 C, 369.

1927 A, 17.

Palmer, T. S. 1904 A, 630, 853.

Schlosser, M. 1924 A, 42.

Schwarz, E. 1924 A, 422.

Scott, W. B. 1913 A, 163.

Trouessart, E. L. 1904 A, 412.

Wagner, A. 1841 A, 125.

Weber and Abel 1928 A, 288.

Winge, H. 1888 A, 11, 109, 124.

1924 A, 8, 34, 36, 56, 125.

***Sigmodon curtisi* Gidley.**

Gidley, J. W. 1922 B, 120, 125, pl. xxxv, fig. 2.

Hay, O. P. 1927 D, 136.

Pleistocene (San Pedro Valley); Arizona.

***Sigmodon hispidus* Say and Ord.**

Say and Ord 1825, Jour. Acad. Nat. Sci., Phila., iv, 354, pl. xxii, figs. 5-8.

Baker, F. C. 1920 A, 373.

Bangs, O. 1898 A, 190.

Coues, E. 1875 D, 176.

1883 A, 112, fig. 57.

- Elliot, D. G. 1901 A, 144, fig. 31.  
 Hay, O. P. 1917 E, 45.  
     1923 A, 382.  
 Miller, G. S. 1912 B, 181.  
     1924 C, 369.  
 Sellards, E. H. 1916 C, 151, 158, pl. xxix, fig. 4 (S. sp.).  
     1916 D, 616 (S. sp.).  
     1916 E, 16, 17 (S. sp.).  
 Simpson, G. G. 1928 H, 2.  
 Trouessart, E. L. 1904 A, 412.  
     Recent; Florida to North Carolina and Louisiana: Pleistocene; Florida.

**Sigmodon medius** Gidley.

- Gidley, J. W. 1922 B, 120, 126, pl. xxxv, figs. 6, 7.  
 Hay, O. P. 1927 D, 136.  
     Pleistocene (San Pedro Valley); Arizona.

**Sigmodon minor** Gidley.

- Gidley, J. W. 1922 B, 120, 125, pl. xxv, figs. 4, 5.  
 Hay, O. P. 1927 D, 136.  
     Pleistocene (San Pedro Valley); Arizona.

**Sigmodon** sp. indet.

- Hay, O. P. 1923 A, 382. Pleistocene (Early); Florida.

**NEOTOMA** Say and Ord. Type *N. floridana* Say and Ord.

- Hay, O. P. 1902 A, 727.  
 Adams, C. C. 1905 A, 64 ("woodrats").  
 Allen, J. A. 1892 A.  
     1894 A, 233, pl. iv.  
 Ameghino, F. 1912 B, 179.  
 Brauer, A. 1914 A, 282.  
 Cockerell and Prinz 1914 A, 354, figs. 6-15.  
 Coues, E. 1875 D, 174.  
     1883 A, 111.  
 Elliot, D. G. 1901 A, 154.  
 Goldman, E. A. 1910 A, 13.  
 Howell, A. B. 1926 A, 6 (*Neotoma*, *Teonoma*, *Homodontomys*).  
 Hrdlička, A. 1903 A, 381.  
 Kampfen, P. N. 1905 A, 570.  
 Ledouble, A. F. 1906 A, 550.  
 Lilljeborg, W. 1886 A, 18.  
 Matthew, W. D. 1910 B, 72.  
     1915 K, 403.  
 Merriam, C. H. 1892 A, 61.  
     1894 B, 117.  
 Miller, G. S. 1912 B, 188.  
     1924 C, 376.  
     1927 A, 18.  
 Osborn, H. F. 1909 D, 90.  
     1910 B, 447 (*Teonoma*).  
 Palmer, T. S. 1904 A, 456, 859.  
 Rehs, J. 1914 A, 93.  
 Schlosser, M. 1924 A, 43.  
 Scott, W. B. 1913 A, 153, 164.  
 Sinclair, W. J. 1905 B, 148 (*Teonoma*).  
 Trouessart, E. L. 1904 A, 439.  
 Wagner, A. 1841 A, 125.  
 Wallace, A. R. 1876 A, 11, 230.  
 Winge, H. 1888 A, 109, 124, 156.  
     1924 A, 8, 34, 36, 56, 125.  
 Zittel and Schlosser 1923 A, 514.

**Neotoma cinerea cinerea** (Ord).

- Ord, G. 1815, Guthrie's Geogr. 2d ed., 11, 292 (Mus).  
 Baird, S. F. 1857 A, 499.  
 Hay, O. P. 1921 A, 628.  
     1923 A, 9.  
     1927 D, 129 (*N. cinerea*).  
 Howell, A. B. 1926 A, 9 [*Neotoma* (*Teonoma*)].  
 Miller, G. S. 1912 B, 201.  
     1924 C, 390.  
     Recent; Rocky Mountain region, British Columbia to southern California: Pleistocene (Nebraskan); Arizona.

**Neotoma cinerea occidentalis** Baird.

- Baird, S. F. 1855, Proc. Acad. Nat. Sci. Phila., 1855, 335 (*N. occidentalis*).  
     1857 A, 487, 496, pl. ix, fig. 2; pl. xxi, fig. 4; pl. liii, fig. 3 (*N. occidentalis*).  
 Furlong, E. L. 1904 A, 55 (*N. fuscipes*).  
     1906 A, 245 (*N. fuscipes*).  
     1925 A, 144, 152 (*N. near occidentalis*).  
 Hay, O. P. 1927 D, 214, 215.  
 Kellogg, L. 1912 A, 158.  
 Merriam and Stock 1925 A, 10.  
 Miller, G. S. 1912 B, 202.  
     1924 C, 391.  
 Miller, L. H. 1912 A, 70, 73 (*N. fuscipes*).  
 Sinclair, W. J. 1903 A, 711 (*N. fuscipes*).  
     1904 A, 17 (*N. fuscipes*).  
 Stock, C. 1925 A, 113.  
 Trouessart, E. L. 1897 A, 544 [*N. (Teonoma)*].  
     1904 A, 442 [*N. (Teonoma)*].  
     Recent; British Columbia to Idaho and Nevada: Pleistocene (caves Shasta Co.); California.

**Neotoma floridana** Say and Ord.

- Hay, O. P. 1902 A, 727.  
 Baker, F. C. 1920 A, 373 (*Neotoma*); 464 (*Neofiber*).  
 Bangs, O. 1898 A, 183.  
 Carus and Engelmann 1861 A, 1878.  
 Coues, E. 1875 D, 174.  
     1883 A, 111, fig. 58.  
 Elliot, D. G. 1901 A, 157, fig. 34.  
 Goldman, E. A. 1910 A, 21, pl. i, fig. 1; pl. vii, fig. 4.  
 Hay, O. P. 1917 E, 45.  
     1923 A, 491.  
 Merriam, C. H. 1894 B, 118.  
 Miller, G. S. 1912 B, 188.  
     1924 C, 376.  
 Waterhouse, G. R. 1839 D, 277.  
     Recent; eastern half of United States: Pleistocene?; Tennessee, Pennsylvania.

**Neotoma fossilis** Gidley.

- Gidley, J. W. 1922 B, 120, 126, pl. xxxv, figs. 8-10.  
 Hay, O. P. 1927 D, 136.  
     Pleistocene (San Pedro Valley); Arizona.



**Neotoma fuscipes Baird.**

Baird, S. F. 1857 A, 495, pl. liii, fig. 1; pl. liv.

Elliot, D. G. 1901 A, 158.

Goldman, E. A. 1910 A, 87, pl. vii, fig. 1.

Hay, O. P. 1927 D, 223.

Howell, A. B. 1926 A, 11 (Homodontomys).

Merriam, C. H. 1894 B, 118, 124.

Miller, G. S. 1912 B, 199.

1924 C, 389.

Stock, C. 1918 A, 468, 486.

1925 A, 113.

Recent; northern Oregon to Lower California:

Pleistocene (Hawver Cave); California.

**Neotoma magister Baird.**

Hay, O. P. 1902 A, 727.

Baker, F. C. 1920 A, 315.

Coues, E. 1875 D, 174.

Goldman, E. A. 1910 A, 82.

Hay, O. P. 1920 B, 106.

1923 A, 491.

Mercer, H. C. 1894 A, 98 ("wood rat").

1897 A, 42, figs. 2, 17.

Rhoads, S. N. 1903 A, 243.

Trouessart, E. L. 1904 A, 439.

Pleistocene (Late); caves about Carlisle,  
Pennsylvania, Maryland.

**Neotoma ozarkensis B. Brown.**

Brown, B. 1908 A, 196, pl.

Hay, O. P. 1914 A, 82.

1924 D, 251.

Pleistocene (Middle); Arkansas.

**Neotoma pennsylvanica Stone.**

Stone, W. 1893, Proc. Acad. Nat. Sci. Phila., 16.

Goldman, E. A. 1910 A, 83, 84, pl. 1, figs. 6, 6a;  
text-fig. 12.

Hay, O. P. 1920 B, 93.

1923 A, 311, 395.

Leidy, J. 1889 H, 19 (N. floridana).

Merriam, C. H. 1894 A, 244.

Miller, G. S. 1912 B, 139.

1924 C, 388.

Peterson, O. A. 1926 A, 277.

Trouessart, E. L. 1904 A, 439.

Recent; Pennsylvania: Pleistocene; Pennsylv-  
ania, Tennessee, Kentucky?, Missouri?

**Neotoma spelæa (Sinclair).**

Sinclair, W. J. 1905 B, 148, pl. xix, figs. 4-7  
(Teonoma).

Goldman, E. A. 1910 A, 95 (Syn. ? of N. cinerea).

Kellogg, L. 1912 A, 158 (Syn. of N. cinerea occi-  
dentalis).

Sinclair, W. J. 1903 A, 711 (Teonoma sp. nov.).

1904 A, 17 (Teonoma n. sp.).

Pleistocene; California.

**Neotoma sp. indet.**

Dice, L. R. 1925 A, 124. Pleistocene (La Brea);  
California.

Freudenberg, W. 1921 A, 139. Pleistocene; Mex-  
ico.

1922 A, 4. Pleistocene; Mexico.

Gidley, J. W. 1913 B, 96. Pleistocene (Middle);  
Maryland.

1920 B, 282 ("wood rats"). Pleistocene  
(Middle); Maryland.

Hay, O. P. 1923 A, 350. Pleistocene (Middle);  
Maryland.

1927 D, 171, 172, 183. Pleistocene; Cali-  
fornia.

Matthew, W. D. 1925 A, 97. Pleistocene (Early);  
Florida.

Miller, L. H. 1912 A, 73.

Peterson, O. A. 1926 A, 277. Pleistocene; Penn-  
sylvania.

Sellards, E. H. 1916 C, 150, 153 ("Neotoma").  
Pleistocene; Florida.

1916 E, 17. Pleistocene; Florida.

Stock, C. 1925 A, 118. Pleistocene (Upper San  
Pedro); California.

**MICROTINÆ Miller.**

Miller, G. S. 1896 A, 8.

Hay, O. P. 1902 A, 728.

Ardt, T. 1907 D, 640 (Arvicolidæ).

1912 A, 742.

Bailey, V. 1900 A, 5 ("voles").

Beddard, F. E. 1902 A, 477.

Brandt and Woldrich 1887 A, 76 (Arvicolinæ).

Carus, J. V. 1875 A, 107 (Arvicolina).

Cockerell, Müller, and Prinz 1914 A, 349 (Arvi-  
colidæ).

Cockerell and Printz 1914 A, 351, 352 (Arvicoli-  
dæ, Microtinæ).

Dubois, G. 1920 A, 90 ("arvicolidés").

Elliot, D. G. 1901 A, 167.

Gebel, C. G. 1883 A ("arvicolinæ").

Gray, J. E. 1821 A, 303 (Arvicolidæ).

Gregory, W. K. 1914 G, 380 (Arvicolidæ).

Hinton, M. A. C. 1923 A, 163.

Hoernes, R. 1886 A, 690 (Arvicolidæ).

Leunis and Ludwig 1883 A, 222 (Arvicolidæ).

Lilljeborg, M. 1866 A, 10, 22 (Arvicolini).

Matthew, W. D. 1914 H, 350 ("arvicolines").

Miller, G. S. 1912 A, 610.

Miller and Gidley 1918 A, 437.

Pictet, F. J. 1853 A, 248 ("campagnols").

Rehs, J. 1914 A, 93 (Arvicolidæ).

Schlosser, M. 1899 M, 361 ("arvicoliden").

1902 I, 708 (Arvicolidæ).

Trouessart, E. L. 1904 A, 442.

Wagner, A. 1841 A, 125 (Arvicolidæ).

1841 B, 83 (Arvicolidæ).

Waterhouse, G. R. 1839 C, 174 (Arvicolidæ).

1839 D, 91, 593 (Arvicolidæ).

1841 B, 83 (Arvicolidæ).

Weber, M. 1904 A, 502.

Winge, H. 1888 A, 156 (Arvicolinæ).

Zittel and Schlosser 1911 A, 430 (Arvicolinæ).

**MICROTUS Schrank. Type *M. arvalis* (Pall).**

Hay, O. P. 1902 A, 728.

Abel, O. 1908 F, (235).

Allen, J. A. 1892 A (Arvicola).

1903 A.

Ameghino, F. 1889 A, 1006 (Arvicola).  
 Arldt, T. 1907 D, 313.  
 Bailey, V. 1900 A, 5.  
 Beddard, F. E. 1902 A, 477.  
 Brandt and Woldrich 1887 A, 71 (Arvicola).  
 Chardin, P. T. 1928 A, 58 (Arvicola).  
 Cockerell and Prinz 1914 A, 352, figs. 3-5.  
 Cope, E. D. 1880 U, 158 (Arvicola).  
 1895 G, 596 (Arvicola).  
 Coues, E. 1875 D, 187 (Arvicola).  
 1883 A, 104 (Arvicola).  
 Dall and Harris 1892 A, 284 (Arvicola).  
 Depéret, C. 1912 A, 709 (Arvicola).  
 Doran, A. H. G. 1878 A, 411, pl. lx (Arvicola).  
 Eggeling, H. 1904 A, 93, figs. 28, 29 (Arvicola).  
 Elliot, D. G. 1901 A, 178.  
 Fawcett, E. 1917 A, 309.  
 Frech, F. 1906 A, 483.  
 1907 A, 314 ("microtus").  
 Frech and Geinitz 1903 A, 36 (Arvicola).  
 Frey, H. 1911 A, 405, fig. 14 (Arvicola).  
 Gaupp, E. 1912 B, 235 (Arvicola).  
 Gervais, P. 1852 A, 25 (Arvicola).  
 1859 A, 38 (Arvicola).  
 Haug, E. 1911 A, 1886.  
 Heilprin, A. 1887 A, 356, 365 (Arvicola).  
 Höfer, H. 1911 A, 458.  
 Hue, E. 1907 A, pl. xlv (Arvicola).  
 Kampfen, P. N. 1905 A, 557.  
 Kellogg, R. 1922 B, 245.  
 Leche, W. 1887 A (Arvicola).  
 Leunis and Ludwig 1883 A, 223 (Arvicola).  
 Lilljeborg, W. 1866 A, 19 (Arvicola).  
 Lull, R. S. 1922 C, 603.  
 Mahn, R. 1890 A, 664, pl. xxv (Arvicola).  
 Matthew, W. D. 1902 F, 320.  
 1910 B, 72.  
 1915 K, 403.  
 Merriam, C. H. 1892 A, 62 (Arvicola).  
 Miller, G. S. 1896 B, 44.  
 1912 A, 658.  
 1912 B, 213.  
 1924 C, 404.  
 Nehring, A. 1880 A (Arvicola).  
 1901 C, 465.  
 Newton, E. T. 1882 A, 81 (Arvicola).  
 1891 A, 52.  
 Oehngren, S. 1919 A, 180 (Arvicola).  
 Osborn, H. F. 1905 I, 110 (Arvicola).  
 1909 D, 85 (Arvicola).  
 1910 B, 407 (Arvicola); 457, 470, 477, 537 (Microtus).  
 1916 B, 535 (Arvicola).  
 Owen, R. 1845 B, 408, pls. cv, cviii (Arvicola).  
 1868 A, 862, figs. 237 (Arvicola).  
 Palmer, T. S. 1904 A, 424, 586.  
 Paulli, S. 1900 B, 515 (Arvicola).  
 Pictet, F. J. 1853 A, 243 (Arvicola).  
 Scharff, R. F. 1911 A, 28, 64, 182, 223.  
 Schlosser, M. 1902 H, 141.  
 Scott, W. B. 1913 A, 153, 218.  
 Seton, E. T. 1909 A, 515.  
 Taschenberg, O. 1899 A, 4623.  
 Tims, H. W. M. 1903 A, 142 (Arvicola).  
 Trouessart, E. L. 1904 A, 448.  
 Vicq-d'Azyr, F. 1792 A, 377 ("rat-d'eau").  
 Wallace, A. R. 1876 A, i, 490; ii, 230, 231 (Arvicola).

Waterhouse, G. R. 1839 C, 172 (Arvicola).  
 1842 A, 200 (Arvicola).

Weber, M. 1904 A, 503.  
 Weber and Abel 1928 A, 284, fig. 169.  
 Winge, H. 1888 A, 109, 124, 156 (Arvicola).  
 1924 A, 8, 34, 38, 44, 56, 119, 139 (Arvicola).  
 Zittel and Schlosser 1911 A, 431.  
 1923 A, 514, 518.

### **Microtus californicus (Peale).**

Peale, T. R. 1848, U. S. Expl. Exp., viii, Mamm. and Ornith., 46 (Arvicola).  
 Bailey, V. 1900 A, 15, 34-37, pl. iv, fig. 7; pl. v, fig. 7; text-fig. 3.  
 Elliot, D. G. 1901 A, 186. \*  
 Furlong, E. L. 1925 A, 139 (This species?).  
 Hay, O. P. 1927 D, 309.  
 Kellogg, L. 1912 A, 160.  
 Kellogg, R. 1918 A, 1-42.  
 1922 B, 252, figs. c, d  
 1922 C, 275.  
 Merriam and Stock 1925 A, 10.  
 Miller, G. S. 1912 B, 213.  
 1924 C, 409.  
 Miller, L. H. 1912 A, 70.  
 Sinclair, W. J. 1903 A, 711 ("Arvicola sp.").  
 1904 A, 17.  
 Stock, C. 1925 A, 113, 118.  
 Trouessart, E. L. 1897 A, 563.  
 1904 A, 453.

Recent; California, north to Umpqua River, Oregon on coast: Pleistocene (Caves); California.

### **Microtus californicus neglectus Dice.**

Dice, L. R. 1925 A, 124.  
 Hay, O. P. 1927 D, 184.  
 Kellogg, L. 1912 A, 166 (M. californicus).  
 Pleistocene (La Brea); California.

### **Microtus chrotorrhinus Miller.**

Miller, G. S. 1894, Proc. Boston Soc. Nat. Hist., xxvi, 190.  
 Bailey, V. 1900 A, 15, 58, pl. iv, fig. 5; pl. vi, fig. 5.  
 Elliot, D. G. 1901 A, 183.  
 Gidley, J. W. 1913 B, 96 (This species?).  
 Hay, O. P. 1923 A, 850.  
 Miller, G. S. 1912 B, 224.  
 1924 C, 418.  
 Trouessart, E. L. 1897 A, 563.  
 1904 A, 455.

Recent; New Brunswick, Quebec, Labrador, northern New York and New Hampshire: Pleistocene (Middle); Maryland.

### **Microtus didelta (Cope).**

Hay, O. P. 1902 A, 728.  
 Baker, F. C. 1920 A, 208, 214, 396.  
 Hay, O. P. 1923 A, 312 (M. dideltus).  
 Rhoads, S. N. 1903 A, 245 (M. dideltus).  
 Pleistocene (Early); Pennsylvania.

### **Microtus diluvianus Cope.**

Hay, O. P. 1902 A, 728.  
 Baker, F. C. 1920 A, 208, 214, 396.  
 Hay, O. P. 1923 A, 312.  
 Rhoads, S. N. 1903 A, 244.

Schlosser, M. 1899 M, 361.

Trouessart, E. L. 1904 A, 451.

Pleistocene (Early); Pennsylvania.

**Microtus involutus Cope.**

Hay, O. P. 1902 A, 728.

Baker, F. C. 1920 A, 208, 214, 396.

Hay, O. P. 1923 A, 312.

Rhoads, S. N. 1903 A, 245.

Pleistocene (Early); Pennsylvania.

**Microtus montanus (Peale).**

Peale, T. R. 1848, U. S. Explor. Exp., vii, Mamm. Ornith., 44 (Arvicola).

Bailey, V. 1900 A, 27, fig. 2.

Baird, S. F. 1857 A, 528 (A. montana); 530 (A. longirostris).

Coues, E. 1877 B, 156 (Arvicola riparia, in part).

Howell, A. B. 1924 A, 977, pl. i, figs. 1-25.

Kellogg, R. 1922 B, 245, 23 figs.

Miller, G. S. 1912 B, 216.

1924 C, 408.

Trouessart, E. L. 1897 A, 5631.

1904 A, 452.

Recent; northern California to Utah. North to central and eastern Oregon: Pleistocene (Fossil Lake); Oregon.

**Microtus mordax (Merriam).**

Merriam, C. H. 1891, N. A. Fauna No. 5, 61 [Arvicola (Mynomes)].

Allen, J. A. 1899, Bull. Amer. Mus. Nat. Hist., xii, 7 (M. vellerosus, M. cautus).

Kellogg, R. 1922 C, 275, pl. viii, 29 text-figs.

Miller, G. S. 1912 B, 221.

1924 C, 415.

Stock, C. 1918 A, 487.

Recent; mountains from British Columbia and Idaho to southern California: Pleistocene (Hawver Cave); California.

**Microtus ochrogaster (Wagner).**

Wagner, J. A. 1842, Schreber's Säugethiere, Suppl. iii, 592 (Hypudæus).

Bailey, V. 1900 A, 73, pl. iii, fig. 4 (M. austerus).

Brown, B. 1908 A, 198; pl. xxi (M. austerus).

Hay, O. P. 1914 A, 32.

1924 D, 251.

Miller, G. S. 1912 B, 225.

1924 C, 419.

Trouessart, E. L. 1897 A, 554 (M. austerus).

1904 A, 457.

Recent; southern Wisconsin to southern Missouri and Oklahoma west to eastern Nebraska: Pleistocene (Middle); Arkansas.

**Microtus pennsylvanicus (Ord).**

Ord, G. 1815, Guthrie's Geogr. 2d Amer. ed. 2, 292 (Mus).

Hay, O. P. 1902 A, 729.

Bailey, V. 1900 A, 14, 16-18, pl. i; pl. ii, fig. 1; pl. iii, fig. 1; text-fig. 1.

Baker, F. C. 1920 A, 354, 359, 396.

Elliot, D. G. 1901 A, 179, fig. 38.

Hay, O. P. 1920 B, 93, 106.

1923 A, 490.

Mercer, H. C. 1894 A, 98 ("meadow-mouse").

Miller, G. S. 1912 B, 213.

1924 C, 405.

Peterson, O. A. 1926 A, 277.

Rhoads, S. N. 1903 A, 244.

Scharff, R. F. 1911 A, 27.

Seton, E. T. 1909 A, 515, pl. xxxix; text-figs. 148-152, map 29.

Trouessart, E. L. 1904 A, 451.

Recent; Nova Scotia south to North Carolina, westward to South Dakota and Louisiana: Pleistocene (Middle); Pennsylvania, Tennessee, Nebraska.

**Microtus richardsoni (DeKay).**

DeKay, J. E. 1842, Zool. of New York, Mamm., 91 (Arvicola).

Bailey, V. 1900 A, 60-62, pl. ii, fig. 3.

Elliot, D. G. 1901 A, 200.

Matthew, W. D. 1902 F, 317 (Arvicola amphihus. This species?).

Miller, G. S. 1912 B, 224.

1924 C, 418.

Trouessart, E. L. 1897 A, 565.

1904 A, 460.

Recent; Alberta to Wyoming west to Washington and Oregon?: Pleistocene (Sheridan); Grayson, Nebraska.

**Microtus speothen Cope.**

Hay, O. P. 1902 A, 729.

Baker, F. C. 1920 A, 208, 214, 396.

Hay, O. P. 1923 A, 312.

Rhoads, S. N. 1903 A, 244.

Schlosser, M. 1899 M, 361.

Pleistocene; Pennsylvania.

**Microtus sp. indet.**

Hay, O. P. 1902 A, 729.

Cooke, C. W. 1926 A, 445. Pleistocene; Florida.

Furlong, E. L. 1904 A, 55.

1906 A, 245. Pleistocene (Samwel Cave); California.

Gidley, J. W. 1920 B, 282 ("field mice"). Pleistocene (Middle); Maryland.

Hay, O. P. 1914 A, 38.

1923 A, 343. Pleistocene (Late); Wisconsin.

1924 D, 305. Pleistocene; Nebraska.

1927 D, 242, 243 (Arvicola); 309 (Microtus).

Pleistocene (Early); Oregon.

1928 C, 425.

McCornack, E. C. 1920 A, 23. Pleistocene (Fossil Lake); Oregon.

Matthew, W. D. 1902 F, 320 ("sp. div.").

1918 A, 227. Pleistocene (Sheridan); Nebraska.

Miller, L. H. 1912 A, 73. Pleistocene (Samwel Cave); California; 81 (Arvicola sp.). Pleistocene (Fossil Lake); Oregon.

Stock, C. 1918 A, 487. Pleistocene (La Brea); California.

1925 A, 113. Pleistocene (Cave); California: (Fossil Lake); Oregon.

SYNAPTOMYS Baird. Type *S. cooperi* Baird.

- Baird, S. F. 1857 A, 558.  
 Allen, J. A. 1892 A.  
 Coues, E. 1875 D, 192.  
     1877 B, 228.  
     1883 A, 106.  
 Elliot, D. G. 1901 A, 203.  
 Merriam, C. H. 1892 A, 61.  
     1896 C, 55, 57.  
 Miller, G. S. 1896 A, 8, 9, 16, 32.  
     1912 B, 204.  
     1924 C, 393.  
 Palmer, T. S. 1904 A, 656, 857.  
 Scharff, R. F. 1911 A, 28.  
 Scott, W. B. 1913 A, 153.  
 Seton, E. T. 1909 A, 558.  
 Simpson, G. G. 1928 H, 3.  
 Trouessart, E. L. 1904 A, 461.

**Synaptomys australis** Simpson.

- Simpson, G. G. 1928 H, 2, 7, fig. 2.  
 Pleistocene (Early); Florida.

**Synaptomys borealis** (Richardson).

- Richardson, J. 1828, Zool. Jour., III, 517 (Arvicola).  
 Gidley, J. W. 1913 B, 96 [S (Myctomys) cf. borealis].  
 Hay, O. P. 1923 A, 350 (This species?).  
 Miller, G. S. 1912 B, 205.  
     1924 C, 395.  
 Seton, E. T. 1909 A, 558, map 32.  
     Recent; Mackenzie, Canada: Pleistocene (Middle); Maryland?

**Synaptomys cooperi annexus** Peterson.

- Peterson, O. A. 1926 A, 277, fig. 4.  
 Pleistocene; Pennsylvania.

**Synaptomys** sp. indet.

- Gidley, J. W. 1913 B, 96. Pleistocene (Middle); Maryland.  
 Hay, O. P. 1923 A, 350. Pleistocene (Middle); Maryland.

DICROSTONYX Gloger. Type *Mus hudsonius*? Pallas.

- Gloger, C. W. L. 1841, Hand- u. Hilfsbuch Naturgesch, 97.  
 Allen, G. M. 1919 A, 509.  
 Allen, J. A. 1903 A, 483.  
 Brandt and Woldrich 1887 A, 76 (Myodes).  
 Coues, E. 1875 D, 195 (Cuniculus).  
     1883 A, 164 (Cuniculus).  
 Dubois, G. 1919 A, 69 (Myodes).  
     1920 A, 95.  
 Elliot, D. G. 1901 A, 209.  
 Frech, F. 1906 A, 483.  
     1907 A, 314 ("dicrotomys").  
 Hinton, M. A. C. 1923 A, 164.  
 Hoernes, R. 1886 A, 690 (Myodes).  
 Leche, W. 1887 A (Myodes).  
 Miller, G. S. 1896 A, 38.  
     1912 B, 207.  
     1924 C, 397.  
 Scharff, R. F. 1911 A, 11, 60.  
 Stejneger, L. 1928 A, 158.  
 Thomas, O. 1895 A, 190, 192.  
 Trouessart, E. L. 1904 A, 463.  
 Vie-d'Azyr, F. 1792 A, 368 ("à collier").  
 Weber and Abel 1928 A, 241, 284, fig. 154.

- Winge, H. 1888 A, 109, 124 (Myodes).  
     1924 A, 8, 34, 44, 56, 140.

**Dicrostonyx grønlandicus** (Traill).

- Traill, T. S. 1823, Scoresby's Jour. Voy. Whale-fishery, 416 (Mus).  
 Allen, G. M. 1919 A, 533, pl. I, figs. 3, 10.  
 Coues, E. 1875 D, 196 (Cuniculus hudsonius).  
 Elliot, D. G. 1901 A, 209 (D. hudsonius).  
 Fielden, H. W. 1877 A, 488 (Myodes torquatus).  
 Fielden and DeRance 1878 A, 566 (Myodes torquatus).  
 Fischer, J. B. 1829 A, 299 (Mus hudsonius).  
 Miller, G. S. 1896 A, 40, figs. 13-15 (D. torquatus).  
     1912 B, 207 (D. hudsonius grønlandicus).  
     1924 C, 398.  
 Scharff, R. F. 1911 A, 11 (D. hudsonius).  
 Stejneger, L. 1928 A, 159.  
 Trouessart, E. L. 1904 A, 464 (Syn. of D. hudsonius).  
     Recent; Greenland to Grinnell Land and Baffin Land: Late Pleistocene or Early Recent; northern Greenland or Grinnell Land, or both.

EVOTOMYS Coues. Type *Mus rutilus* Pallas.

- Coues, E. 1875 D (1874), 186.  
 Bailey, V. 1897 A, 113.  
 Miller, G. S. 1896 A, 48.  
     1912 A, 623, figs.  
     1924 C, 401.  
**Evotomys gapperi** (Vigors).  
 Vigors, N. A. 1830, Zool. Jour., v, 204 (Arvicola).

- Bailey, V. 1897 A, 117, 122.  
 Merriam, C. H. 1891, N. A. Fauna, XII, 119.  
 Miller, G. S. 1924 C, 402 (E. gapperi gapperi).  
 Peterson, O. A. 1926 A, 272.  
     Recent; From New Jersey to the Rocky Mountains in Canada: Pleistocene; Pennsylvania.

SYCIUM Cope. Type *S. cloacinum* Cope.

- Hay, O. P. 1902 A, 728.  
 Palmer, T. S. 1904 A, 653, 857.  
 Schlosser, M. 1902 H, 140.

**Sycium cloacinum** Cope.

- Hay, O. P. 1902 A, 728 (Sycium, Anaptogonia).  
     1923 A, 312.  
 Rhoads, S. N. 1903 A, 244.  
     Pleistocene (Early); Pennsylvania.

ANAPTOGONIA Cope. Type *A. hiatidens* Cope.

- Hay, O. P. 1902 A, 728.  
 Palmer, T. S. 1904 A, 100, 355.  
 Schlosser, M. 1899 M, 361.  
 1902 H, 140.  
 Trouessart, E. L. 1904 A, 447.

**Anaptogonia hiatidens** Cope.

- Hay, O. P. 1902 A, 728.  
 Baker, F. C. 1920 A, 208, 214, 396.  
 Hay, O. P. 1923 A, 312.  
 Rhoads, S. N. 1903 A, 244.  
 Schlosser, M. 1899 M, 361.  
 Trouessart, E. L. 1904 A, 447.  
 Pleistocene (Early); Pennsylvania.

PITYMYS McMurtrie. Type *Psammomys pinetorum* LeConte.

- McMurtrie, H. 1831, Cuvier's Annu. Kingd., 1, App., 434.  
 Bailey, V. 1900 A, 62 (As subgenus).  
 Coues, E. 1875 D, 191.  
 Hay, O. P. 1902 A, 728 (Microtus, in part).  
 Miller, G. S. 1896 A, 58.  
 1912 B, 228.  
 1924 C, 423.  
 Scharff, R. F. 1911 A, 223.  
 Schlosser, M. 1899 M, 362.

**Pitymys pinetorum** (Le Conte).

- Le Conte, J. L. 1830, Ann. Lyc. Nat. Hist. New York, 11, 133 (Psammomys).  
 Hay, O. P. 1902 A, 729 (Microtus).  
 Bailey, V. 1900 A, 63, fig. 11 (Microtus).  
 Coues, E. 1875 D, 191 [Arvicola (Pitymys)].  
 Elliot, D. G. 1901 A, 198 (Microtus).  
 Miller, G. S. 1912 B, 228.  
 1924 C, 423.  
 Recent; Georgia to New York, southern Indiana and Mississippi River: Pleistocene?; Pennsylvania.

NEOFIBER True. Type *N. alleni* True.

- True, F. W. 1884 A, 34.  
 Bailey, V. 1900 A, 73 (Subg. of Microtus).  
 Elliot, D. G. 1901 A, 202 (Subg. of Microtus).  
 Frech, F. 1906 A, 483.  
 Miller, G. S. 1896 A, 9, 17, 19, 69.  
 1912 B, 229.  
 1924 C, 424.  
 Palmer, T. S. 1904 A, 453, 356.  
 True, F. W. 1884 B, 170.

**Neofiber alleni** True.

- True, F. W. 1884 A, 34.  
 Bailey, V. 1900 A, 79, fig. 17 (Microtus).  
 Baker, F. C. 1920 A, 373.  
 Bangs, O. 1898 A, 182 (Microtus).  
 Elliot, D. G. 1901 A, 203, fig. 44 [Microtus (Neofiber)].  
 Harper, F. 1920 A, 65.  
 Hay, O. P. 1917 E, 45.  
 1923 A, 382.

- Miller, G. S. 1896 A, 70, pl. ii, fig. 9; text-fig. 36.  
 1912 B, 229.  
 1924 C, 424.  
 Sellards, E. H. 1916 C, 139, 150, 158; pl. xxix, fig. 7.  
 1916 D, 616.  
 1916 E, 16, 17.  
 Simpson, G. G. 1928 H, 2.  
 Trouessart, E. L. 1904 A, 460.  
 True, F. W. 1884 B, 170.  
 Recent; Florida: Pleistocene (Early, Middle?); Florida.

**Neofiber** sp. indet.

- Gidley, J. W. 1922 B, 120, 127, pl. xxxv, fig. 14  
 Pleistocene (San Pedro Valley); Arizona.  
 1927 E, 274. Pleistocene; Florida.  
 Hay, O. P. 1927 D, 136, 274. Pleistocene; Arizona, Florida.

ONDATRA Link. Type *Castor sibiricus* (Linnæus).

- Link, 1759, Beiträge Naturgesch., 1 pt. 2, 76.  
 Hay, O. P. 1902 A, 729 (Fiber).  
 Allen, J. A. 1892 A (Fiber).  
 Beddard, F. E. 1902 A, 47 (Fiber).  
 Carus, V. 1875 A, 107 (Fiber).  
 Coues, E. 1875 D, 196 (Fiber).  
 Cuvier, F. 1812 A, 293, pl. xv, fig. 19 ("ondatra").  
 1825 A, 157, pl. liii ("ondatra").  
 Cuvier, G. 1809 A, 53.  
 1825 A, v, 1, 13, 63, pl. i.  
 Elliot, D. G. 1901 A, 211 (Fiber).  
 Frech, F. 1906 A, 483 (Fiber).  
 Giebel, C. S. 1855 A, 51 (Fiber).  
 1833 A, 155.  
 Grant, M. 1904 B, 195 (Fiber).  
 Heilprin, A. 1887 A, 357 (Fiber).  
 Holland, W. J. 1912 B, 750 (Fiber).

- Hollister, H. 1911 A, 14 (Fiber).  
 1911 C, 13 (Fiber).  
 Holmes, F. S. 1870 A, 17 ("muskrat").  
 Kampfen, P. N. 1905 A, 554 (Fiber).  
 Küstlin, O. 1844 A.  
 Kükenthal, W. 1891 C, 373, 384 (Fiber).  
 Leche, W. 1887 A (Fiber).  
 Le Damany, P. 1906 B, 164.  
 Leunis and Ludwig 1883 A, 225 (Fiber).  
 Lobley, J. L. 1903 A, 196 (Fiber).  
 Matthew, W. D. 1910 B, 72 (Fiber).  
 1915 K, 403 (Fiber).  
 Meekel, J. F. 1825 A.  
 Merriam, C. H. 1892 A, 61 (Fiber).  
 Miller, G. S. 1896 B, 71 (Fiber).  
 1912 B, 230.  
 1924 C, 425.  
 Osborn, H. F. 1905 I, 110 (Fiber).

- Osborn, H. F. 1909 D, 85, 90 (Fiber).  
1910 B, 615 (Fiber).
- Palmer, T. S. 1904 A, 285, 855 (Fiber); 475, 856 (Ondatra).
- Pander and Alton 1824 A, 3, pl. vii (Fiber).
- Scharff, R. F. 1911 A, 64, 182 (Fiber).
- Scott, W. B. 1913 A, 153 (Fiber).
- Taschenberg, O. 1899 A, 4581 (Fiber).
- Thomas, O. 1916 A, 303.
- Trouessart, E. L. 1904 A, 461 (Fiber).
- Vicq-d'Azyr, F. 1792 A, 520 ("ondatra").
- Wagner, A. 1841 A, 125 (Fiber).
- Waterhouse, G. R. 1839 D, 593.  
1842 A, 200.
- Weber, M. 1904 A, 503 (Fiber).
- Weber and Burlet 1927 A, 251, fig. 190.
- Wilder, W. B. 1872 B, 321 (Fiber).
- Winge, H. 1888 A, 109, 124, 156 (Fiber).  
1924 A, 8, 34, 43, 58 (Fiber).
- Ondatra annectens** (Brown).  
*Brown, B.* 1908 A, 197, pl. xxi (Fiber).  
*Hay, O. P.* 1914 A, 32 (Fiber).  
1924 D, 251.
- Hollister, H.* 1911 A, 33, pl. vi, fig. 3 (Fiber).  
*Scharff, R. F.* 1911 A, 64 (Fiber).  
Pleistocene (Middle); Arkansas.
- Ondatra nebrascensis** (Hollister).  
*Hollister, H.* 1911 A, 32, pl. vi, fig. 5 (Fiber).  
*Haug, E.* 1911 A, 1886 (Fiber zibethicus).  
*Hay, O. P.* 1924 D, 305.  
1928 C, 425.
- Matthew, W. D.* 1902 F, 317, 320 (Fiber zibethicus).  
1918 A, 227.  
Pleistocene (Sheridan); Nebraska.
- Ondatra oregona** (Hollister).  
*Hollister, H.* 1911 A, 33, pl. vi, fig. 4 (Fiber).  
*Hay, O. P.* 1927 D, 190 (Ondatra); 243 (Fiber zibethicus).
- McCornack, E. C.* 1920 A, 23 (Fiber sp.).  
*Miller, L. H.* 1912 A, 81 (Fiber zibethicus).  
*Stock, C.* 1925 A, 195 (Fiber zibethicus).  
Pleistocene (Fossil Lake); Oregon.
- Ondatra zibethica** (Linnæus).  
Unless otherwise indicated the writers, as quoted, use the generic name *Fiber*.  
*Hay, O. P.* 1902 A, 729.
- Abel, O.* 1912 F, 173.
- Agassiz, L.* 1859 B, 186 ("muskrat").
- Baker, F. C.* 1920 A, 459.
- Beddard, F. E.* 1902 A, 478.
- Cockerell and Prinz* 1914 A, 352, figs. 1, 2.
- Doran, A. H. G.* 1878 A, 411, pl. ix.
- Eimer, G. H. J.* 1901 A, 36.
- Elliot, D. G.* 1901 A, 212, fig. 49.
- Fischer, J. B.* 1829 A, 289 (Lemmus).
- Giebel, C. G.* 1883 A, pl. xxiii (Ondatra).
- Hay, O. P.* 1914 A, 26.  
1920 B, 105 (Ondatra).  
1923 A, 492 (Ondatra).
- Hollister, H.* 1911 A, 16, pls. i-vi (F. zibethicus, with 11 subspecies).  
1911 C, 13 (Ondatra).
- Holmes, F. S.* 1859 A, 184 ("muskrat").  
1860 A, iv, vii ("muskrat").
- Krumbach, T.* 1904 A, 280.
- Leidy, J.* 1859 J, 18 ("muskrat").  
1889 H, 5.
- Lönnberg, E.* 1910 A, 51.
- Martin, H. T.* 1892 A, 33, figs.
- Matschie, P.* 1896 A, 252 ("bisamratten").
- Meckel, J. F.* 1825 A (Mus).
- Mercer, H. C.* 1894 A, 98 ("muskrat").  
1896 A, 71, figs. 37, 38 (Fiber).
- Miller, G. S.* 1912 B, 230 (Ondatra).  
1924 C, 425.
- Osborn, H. F.* 1910 B, 457, 459.
- Osborn and Anthony* 1922 A, 226.
- Owen, R.* 1866 B, 375, fig. 241.
- Rehs, J.* 1914 A, 63.
- Rhoads, S. N.* 1903 A, 245.
- Scharff, R. F.* 1911 A, 64.
- Sudder, N. P.* 1885 A, lxiv ("muskrat").
- Seton, E. T.* 1909 A, 538, text-figs. 155-160, map 31.
- Trouessart, E. L.* 1904 A, 461.
- Waterhouse, G. R.* 1839 D, 594, figs.  
Recent; greater part of North America: Pleistocene; Pennsylvania, Maryland, South Carolina.
- Ondatra sp. indet.**  
*Cooke, C. W.* 1926 A, 445 ("muskrat"). Pleistocene; Florida.  
*Hay, O. P.* 1923 A, 321. Late Wisconsin or Recent; Pennsylvania.

POAMYS Matthew. Type *P. rivicola* Matthew.*Matthew, W. D.* 1924 C, 74, 86.

## Poamys rivicola Matthew.

*Matthew, W. D.* 1924 C, 66, 86, fig. 10.

Upper Miocene (Lower Snake Creek); Nebraska.

## Superfamily DIPODOIDÆ Miller and Gidley.

*Miller and Gidley* 1918 A, 439.*Matthew and Granger* 1923 B, 3.*Wagner, A.* 1841 A, 119 (Macropoda).*Weber and Abel* 1923 A, 268 (Haplodontidea); 269, 278 (Dipodoidæ).*Weber and Burlet* 1927 A, xiv (Haplodontoidæ).*Winge, H.* 1924 A, 7, 14, 22 (Haplodontidæ, Dipodidæ).

## PARAMYIDÆ Miller and Gidley.

Miller and Gidley 1918 A, 439.

Hay, O. P. 1902 A, 723 (Ischromyidæ, part).

Haeckel, E. 1895 A, 502 (Paramyida).

Matthew, W. D. 1921 D, 214.

## "PARAMYS Leidy.

Based on three species, *P. delicatus*, *delicatior*, *delicatissimus*.

Hay, O. P. 1902 A, 723.

Ameghino, F. 1903 A, 139.

1906 A, 408.

Arlt, T. 1907 D, 78.

Chardin, P. T. 1920 A, 1161.

1922 A, 54, 77, 80, 93, pl. iv, text-fig. 37.

1924 A, 13.

1927 A, 22.

Cope, E. D. 1880 U, 154 (Plesiarctomys).

Depéret, C. 1908 A, 112 (Plesiarctomys).

Dollo and Chardin 1924 A, 13, 15.

Giebel, C. C. 1855 A, 46 (Plesiarctomys).

Granger, W. 1909 A, 22.

Gregory, W. K. 1910 A, 326.

1920 A, 173, 242, fig. 125.

1921 A, 69, 77, pl. xxvii.

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 364 (Plesiarctomys).

Kraglievich, L. 1926 C, 47.

Loomis, F. B. 1905 C, 296.

1907 A, 123.

1922 A, 62.

Matthew, W. D. 1907 A, 212 (Sciuravus).

1909 C, 101 (Paramys, Pseudotomus, Sciuravus).

1909 D, 308 (Paramys, Sciuravus).

1910 B, 43, 45, 71 (Paramys); 45, 55 (Pseudotomus, type *P. hians*; 50 (Leptomus, type *P. grangeri*).

1914 H, 351.

1915 A, 231 (Paramys, Sciuravus).

1915 K, 421, 466.

1917 A, 574.

1918 H, 614.

1920 A, 169.

1921 H, 510.

1924 E, 743.

1928 B, 964, 976.

Matthew and Granger 1923 B, 4.

Miller and Gidley 1918 A, 440.

Osborn, H. F. 1909 D, 132 (Paramys); 57 (Pseudotomus).

1910 B, 123, 134, 165, 168, 534 (Paramys);

118, 149, 534 (Plesiarctomys).

1912 G, 236, fig. 3.

Palmer, T. S. 1904 A, 514, 850 (Paramys); 547, 866 (Plesiarctomys).

Schlosser, M. 1902 I, 707, 738.

Scott, W. B. 1913 A, 270, 280.

Taylor, W. P. 1915 A, 167.

1916 A, 457.

Trouessart, E. L. 1904 A, 476.

Troxell, E. L. 1923 D, 384, 393, 396.

Weber, M. 1904 A, 509, 511 (Paramys); 511 (Plesiarctomys).

Weber and Abel 1928 A, xxi, 293, 295 (Paramys, Plesiarctomys).

Winge, H. 1924 A, 15, 81.

Wortman, J. L. 1903 A, xv, 431; xvi, 367, fig. 1921 A, 135.

Zittel and Schlosser 1911 A, 425.

1923 A, 509, 518, 665-668.

## Paramys atwateri Loomis.

Loomis, F. B. 1907 A, 127, fig. 3.

1907 B, 357.

Matthew, W. D. 1909 C, 94.

1910 B, 50, 51, 58.

1918 H, 618.

Lower Eocene (Wasatch); Wyoming.

## Paramys buccatus (Cope).

Hay, O. P. 1902 A, 723.

Loomis, F. B. 1907 A, 130 (To Sciuravus?).

Matthew, W. D. 1909 C, 94 (Sciuravus?).

1910 B, 50, 51, 58.

1918 H, 617.

Merrill, G. P. 1907 A, 54 (Plesiarctomys).

Reeside, J. B. 1924 A, 46 (Sciuravus. This genus?).

Trouessart, E. L. 1904 A, 477.

Lower Eocene (Wasatch); New Mexico: (Wind River); Wyoming.

## Paramys copei Loomis.

Loomis, F. B. 1907 A, 125, 128.

1907 A, 124, fig. 1 (P. primævus); 128, fig. 4 (P. bicuspis).

1907 B, 357 (P. bicuspis, P. primævus).

Matthew, W. D. 1909 C, 94 (P. copei, P. bicuspis, P. primævus).

1910 B, 50, 51, 58 (P. copei, P. primævus, P. bicuspis).

1918 H, 615.

1920 A, 169.

Lower Eocene (Wasatch, Wind River); Wyoming: (Wasatch); New Mexico.

## Paramys delicatior Leidy.

Hay, O. P. 1902 A, 723.

Matthew, W. D. 1909 C, 97.

1910 B, 50, 53, 58.

Merrill, G. P. 1907 A, 55 (Plesiarctomys).

Scott, W. B. 1913 A, 271, fig. 140.

Trouessart, E. L. 1904 A, 476.

Middle Eocene (Bridger); Wyoming.

## Paramys delicatus Leidy.

Hay, O. P. 1902 A, 723.

Abel, O. 1914 A, 119, fig. 85.

Gidley, J. W. 1919 C, 61, 62.

Matthew, W. D. 1909 C, 97.

1910 B, 45, 50, 52, 56, 58, figs. 1-3, 6.

1920 A, 169.

Trouessart, E. L. 1904 A, 476.

Weber and Abel 1928 A, 296, fig. 185.

Zittel and Schlosser 1923 A, 509, fig. 681.

Middle Eocene (Bridger, Washakie?); Wyoming.

**Paramys excavatus** Loomis.*Loomis, F. B.* 1907 A, 129, fig. 6.*Matthew, W. D.* 1909 C, 94.

1910 B, 50, 52, 58.

1918 H, 616.

Lower Eocene (Wind River); Wyoming.

**Paramys grangeri** Matthew.*Matthew, W. D.* 1910 B, 50, 57, 58, figs. 10, 11, 12 [*P. (Leptomys)*].

Eocene (Upper Uinta); Utah.

**Paramys hians** (Cope).*Cope, E. D.* 1872 OO, 2 (*Pseudotomys*).*Hay, O. P.* 1902 A, 723.*Matthew, W. D.* 1909 C, 97 (*Pseudotomys*).

1910 B, 50, 55, 58.

*Trouessart, E. L.* 1904 A, 477.

Middle Eocene (Bridger); Wyoming.

**Paramys leptodus** Cope.*Hay, O. P.* 1902 A, 724.*Matthew, W. D.* 1909 C, 97.

1910 B, 50, 56, 58.

*Trouessart, E. L.* 1904 A, 477.

Middle Eocene (Washakie); Wyoming.

**Paramys major** Loomis.*Loomis, F. B.* 1907 A, 128, fig. 5.*Matthew, W. D.* 1909 C, 94.

1910 B, 50, 51, 58.

1918 H, 615.

Lower Eocene (Wind River); Wyoming.

**Paramys major quadratus** Loomis.*Loomis, F. B.* 1907 A, 126, fig. 2 (*P. quadratus*).1907 B, 357 (*P. quadratus*).*Matthew, W. D.* 1909 C, 94 (*P. quadratus*).1910 B, 50, 51, 58 (*P. quadratus*).1918 H, 614 (*P. m. quadratus*).

Lower Eocene (Wasatch); Wyoming.

**Paramys medius** Peterson.*Peterson, O. A.* 1919 A, 61, pl. xxxiv, figs 15-22.

Upper Eocene (Uinta); Utah.

**Paramys murinus** Matthew.*Matthew, W. D.* 1918 H, 617, fig. 37.

Lower Eocene (Wasatch); Wyoming.

**Paramys sciuroides** (Scott and Osborn).*Hay, O. P.* 1902 A, 724.*Ameghino, F.* 1903 A, 139, fig. 61 (*Plesiarcotomys*).*Matthew, W. D.* 1909 C, 99.

1910 B, 50, 56, 58.

*Trouessart, E. L.* 1904 A, 477.

Upper Eocene (Uinta); Utah.

**Paramys superbus** Osborn, Scott and Speir.*Hay, O. P.* 1902 A, 724.*Matthew, W. D.* 1909 C, 97 (*Pseudotomys*).

1910 B, 50.

*Trouessart, E. L.* 1904 A, 477.

Middle Eocene (Bridger); Wyoming.

**Paramys uintensis** Osborn.*Hay, O. P.* 1902 A, 724.*Matthew, W. D.* 1909 C, 99.

1910 B, 50, 58.

*Trouessart, E. L.* 1904 A, 477.

Upper Eocene (Uinta); Utah.

**Paramys sp. indet.***Hay, O. P.* 1902 A, 724.*Matthew, W. D.* 1909 C, 97, 99 (*Paramys, Pseudotomys*). Middle Eocene (Bridger); Wyoming, Colorado.*Sinclair and Granger* 1911 A, 108. Middle Eocene (Bridger); Wyoming, Colorado.**REITHROPARAMYS** Matthew. Type *Paramys delicatissimus* Leidy.*Matthew, W. D.* 1920 A, 168.**Reithroparamys delicatissimus** (Leidy).*Hay, O. P.* 1902 A, 723 (*Paramys*).*Cope, E. D.* 1891 N, 71, figs. 42, 43 (*Plesiarcotomys*).*Matthew, W. D.* 1909 C, 97 (*Paramys*).1910 B, 50, 54, 58 (*Paramys*).

1920 A, 168.

*Merrill, G. P.* 1907 A, 55 (*Plesiarcotomys*).*Trouessart, E. L.* 1904 A, 476 (*Paramys*).

Middle Eocene (Bridger); Wyoming.

**ISCHYROTOMUS** Matthew. Type *Paramys petersoni* Matthew.*Matthew, W. D.* 1910 B, 50.*Gidley, J. W.* 1919 C, 63.*Peterson, O. A.* 1919 A, 63.**Ischyrotomus compressidens** (Peterson).*Peterson, O. A.* 1919 A, 60, fig. 3 (*Paramys*).*Gidley, J. W.* 1919 C, 63.

Upper Eocene (Uinta); Utah.

**Ischyrotomus gidleyi** Peterson.*Peterson, O. A.* 1919 A, 63, fig. 4.

Upper Eocene (Uinta); Utah.

**Ischyrotomus petersoni** (Matthew).*Matthew, W. D.* 1910 B, 50, 56, figs. 8-11 [*Paramys (Ischyrotomus)*].*Peterson, O. A.* 1919 A, 61.

Upper Eocene (Uinta); Utah.

**Ischyrotomus robustus** (Marsh).*Hay, O. P.* 1902 A, 724 (*Paramys*).*Gidley, J. W.* 1919 C, 61-63 (*Paramys*).*Matthew, W. D.* 1909 C, 97 (*Pseudotomys*).

1910 B, 50, 54, 58, figs. 4, 5, 7.

*Peterson, O. A.* 1919 A, 62, 63 (*Paramys*).*Trouessart, E. L.* 1904 A, 477 (*Paramys*).

Middle Eocene (Bridger); Wyoming.



**Mysops Leidy. Type *M. minimus* Leidy.**

- Hay, O. P. 1902 A, 725.  
 Matthew, W. D. 1907 A, 212.  
     1910 B, 60, 71.  
     1918 H, 614, 618.  
     1923 B, 977.  
 Miller and Gidley 1918 A, 440.  
 Palmer, T. S. 1904 A, 444, 850.  
 Troxell, E. L. 1923 D, 384, 385, 391.  
 Wallace, A. R. 1876 A, 1, 140.  
 Wortman, J. L. 1903 A, xvi, 367.

**Mysops fraternus Leidy.**

- Hay, O. P. 1902 A, 725.  
 Trouessart, E. L. 1904 A, 478.

- Troxell, E. L. 1923 D, 384 (Syn.? of *Tillomys parvus*).  
 Middle Eocene (Bridger); Wyoming.

**Mysops kalicola Matthew.**

- Matthew, W. D. 1918 H, 618, fig. 38.  
 Lower Eocene (Wind River); Wyoming.

**Mysops minimus Leidy.**

- Hay, O. P. 1902 A, 725.  
 Matthew, W. D. 1909 C, 97 (*Sciuravus*).  
     1909 D, 300.  
     1918 H, 619.  
 Trouessart, E. L. 1904 A, 478.  
 Troxell, E. L. 1923 D, 384, 387.  
 Middle Eocene (Bridger); Wyoming.

**PROSCIURUS Matthew. Type *P. vetustus* Matthew.**

- Matthew, W. D. 1903 B, 213 (New subgenus).  
 Gidley, J. W. 1919 C, 65.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 110.  
     1910 B, 63, 71.  
 Matthew and Granger 1924 A, 6.  
 Miller and Gidley 1918 A, 440.  
 Osborn, H. F. 1910 B, 221, 534.  
 Peterson, O. A. 1919 A, 64, fig. 6.  
 Troxell, E. L. 1923 D, 396.  
 Zittel and Schlosser 1911 A, 426.  
     1923 A, 510, 672.

**Prosciurus balluvianus (Cope).**

- Hay, O. P. 1902 A, 719 (*Sciurus*).  
 Matthew, W. D. 1903 B, 214 (*Sciurus*).  
     1909 C, 107 (*Prosciurus*).  
     1910 B, 63 (*Sciurus*).  
 Merriam and Sinclair 1907 A, 185 (*Sciurus*).  
 Trouessart, E. L. 1904 A, 318 [*Sciurus (Parasciurus)*].  
 Upper Oligocene (John Day); Oregon.

**Prosciurus jeffersoni Douglass.**

- Douglass, E. 1901 B, 242, 252 (*Sciurus*).  
     1903 A, 149 (*Sciurus*).  
 Matthew, W. B. 1909 C, 103 (*Prosciurus*).  
 Trouessart, E. L. 1904 A, 318 [*Sciurus (Parasciurus)*].  
 Oligocene (Lower); Montana.

**Prosciurus relictus (Cope).**

- Hay, O. P. 1902 A, 719 (*Sciurus*).  
 Matthew, W. D. 1903 B, 214 (*Sciurus*).  
     1909 C, 105.  
     1910 B, 63.  
 Trouessart, E. L. 1904 A, 318 [*Sciurus (Parasciurus)*].  
 Middle Oligocene (Cedar Creek); Colorado.

**Prosciurus? robustus Peterson.**

- Peterson, O. A. 1919 A, 65.  
 Upper Eocene (Uinta); Utah.

**Prosciurus vetustus Matthew.**

- Matthew, W. D. 1903 B, 213, fig. 9 [*Sciurus (Prosciurus)*].  
     1909 C, 103.  
     1910 B, 63.  
 Oligocene (Lower); Montana.

**Prosciurus vortmani (Cope).**

- Hay, O. P. 1902 A, 719 (*Sciurus*).  
 Matthew, W. D. 1903 B, 214 (*Sciurus*).  
     1909 C, 107.  
     1910 B, 63.  
 Merriam and Sinclair 1907 A, 185.  
 Trouessart, E. L. 1904 A, 318 [*Sciurus (Parasciurus) vortmanni*].  
 Upper Oligocene (John Day); Oregon.

**TILLOMYS Marsh. Type *T. senex* Marsh.**

- Hay, O. P. 1902 A, 724 (*Tillomys*, *Taxymys*).  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1907 A, 212 (*Tillomys*, *Taxymys*).  
     1909 C, 101 (*Tillomys*, *Taxymys*).  
     1910 B, 60 (*Tillomys*, *Taxymys*).  
 Matthew and Granger 1925 B, 5.  
 Palmer, T. S. 1904 A, 680, 850 (*Tillomys*); 666, 850 (*Taxymys*).  
 Troxell, E. L. 1923 D, 384, 387.

**Tillomys lucaris (Marsh).**

- Hay, O. P. 1902 A, 724 (*Taxymys*).  
 Matthew, W. D. 1909 C, 97 (*Taxymys*).  
 Trouessart, E. L. 1904 A, 477 (*Taxymys*).

- Troxell, E. L. 1923 D, 384, 388, figs. 9-12, 18.  
 Middle Eocene (Bridger); Wyoming.

**Tillomys parvidens (Marsh).**

- Hay, O. P. 1902 A, 724 (*Paramys*).  
 Matthew, W. D. 1903 C, 97 (*Sciuravus*).  
 Trouessart, E. L. 1904 A, 477 (*Paramys*).  
 Troxell, E. L. 1923 D, 384 ("*S.*" *parvidens*); to *Tillomys*.  
 Middle Eocene (Bridger); Wyoming.

**Tillomys parvus Marsh.**

- Hay, O. P. 1902 A, 724.  
 Matthew, W. D. 1909 C, 97.  
 Trouessart, E. L. 1904 A, 477.

Troxell, E. L. 1923 D, 390, figs. 12, 16, 17.  
Middle Eocene (Bridger); Wyoming.

**Tillomys parvus plicatus** Troxell.

Troxell, E. L. 1923 D, 384, figs. 14, 15.  
Middle Eocene (Bridger); Wyoming.

**Tillomys senex** Marsh.

Hay, O. P. 1902 A, 724.  
Matthew, W. D. 1909 C, 97.  
Trouessart, E. L. 1904 A, 477.  
Troxell, E. L. 1923 D, 384, 388, figs. 7, 8.  
Middle Eocene (Bridger); Wyoming.

**ALLOMYIDÆ** Marsh.

Marsh, O. C. 1877 D, 253.

Hay, O. P. 1902 A, 718 (Pteromyinae).

Matthew, W. D. 1924 C, 84. ?

Miller and Gidley 1918 A, 440.

Palmer, T. S. 1904 A, 864.

Winge, H. 1924 A, 7, 16 (Allomyini).

**ALLOMYS** Marsh. Type *A. nitens* Marsh.

Hay, O. P. 1902 A, 718.

Matthew, W. D. 1904 C, 263, 264, fig. 13  
(Meniscomys).

1909 C, 107 (Allomys); 110 (Meniscomys).

1910 B, 71.

1924 C, 81.

Miller and Gidley 1918 A, 440.

Osborn, H. F. 1909 D, 66.

Palmer, T. S. 1904 A, 89, 864.

Weber, M. 1904 A, 512.

Weber and Abel 1928 A, 298.

Winge, H. 1924 A, 14.

**Allomys cavatus** (Cope).

Hay, O. P. 1902 A, 718.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185, 188, 189, 190.

Taylor, W. P. 1918 A, 451, fig. G.

Oligocene (Upper); Oregon.

**Allomys multiplicatus** (Cope).

Hay, O. P. 1902 A, 719.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185 (A. nitens  
multiplicatus).

Oligocene (Upper); Oregon.

**Allomys nitens** Marsh.

Hay, O. P. 1902 A, 719.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 1, 188, 189.

Oligocene (Upper); Oregon.

**HAPLOMYS** Miller and Gidley. Type *Meniscomys liolophus* Cope.

Miller and Gidley 1918 A, 440.

**Haplomys liolophus** (Cope).

Hay, O. P. 1902 A, 719 (Allomys).

Matthew, W. D. 1909 C, 107 (Allomys).

Merriam and Sinclair 1907 A, 185, 188, 190  
(Allomys).

Miller and Gidley 1918 A, 440.

Taylor, W. P. 1918 A, 451, fig. F. (Allomys).

Upper Oligocene (John Day); Oregon.

**MENISCOMYS** Cope. Type *M. hippodus* Cope.

Hay, O. P. 1902 A, 718 (Allomys, in part).

Furlong, E. L. 1910 A, 401.

Haug, E. 1911 A, 1705.

Matthew, W. D. 1910 B, 69.

1924 C, 84.

Merriam, J. C. 1916 A, 179.

Miller, G. S. 1927 A, 15.

Miller and Gidley 1918 A, 440.

Osborn, H. F. 1909 D, 68, 75.

1912 G, 246.

Palmer, T. S. 1904 A, 409, 866.

Schlosser, M. 1924 A, 80.

Seeley, H. G. 1886 A, 515.

Weber and Abel 1928 A, 297.

Winge, H. 1924 A, 14, 101 (Syn. of Allomys).

Zittel and Schlosser 1911 A, 425.

1923 A, 508, 672.

**Meniscomys hippodus** Cope.

Hay, O. P. 1902 A, 718 (Allomys).

Cossmann, M. 1900 A, 54 (Protogaulus).

Furlong, E. L. 1910 A, 401 (Meniscomys).

Matthew, W. D. 1901 B, 379 (Meniscomys).

1904 C, 263 (Meniscomys).

1909 C, 107 (Allomys).

Merriam and Sinclair 1907 A, 185, 188, 189  
(Allomys).

Seeley, H. G. 1886 A, 515 (Meniscomys).

Sinclair, W. J. 1903 C, 143 (Allomys).

Trouessart, E. L. 1904 A, 296 (Protogaulus).

Oligocene (Upper); Oregon.

**Meniscomys** sp. indet.

Cook, H. J. 1912 D, 42. Miocene (Upper Har-  
rison); Nebraska.

Matthew, W. D. 1904 C, 263. Lower Miocene  
(Rosebud); South Dakota.

1907 A, 172. Lower Miocene (Rosebud);  
South Dakota.

1909 C, 112. Miocene (Lower); Nebraska,  
South Dakota.

**APLODONTIDÆ** Thomas.

Arlt, T. 1907 D, 247, 321 (Haplodontidæ).

Beddard, F. E. 1902 A, 469 (Haplodontidæ).

Chandler, A. C. 1914 B, 134.

Coues, E. 1883 A, 121 (Haplodontidæ).

Elliot, D. G. 1901 A, 111 (Haplodontidæ).

Flower and Lydekker 1891 A, 457 (Haplodon-  
tidæ).

Furlong, E. L. 1910 A, 403.

Gill, T. 1872 B, 22 (Haplodontoides).

Grant, M. 1904 B, 205 (Haplodontidæ).

Hofer, H. 1911 A, 445 (Haplodontoides).  
 Hogben, L. T. 1919 A, 72 (Haplodontidæ).  
 Lilljeborg, W. 1866 A, 41 (Haplodontidæ).  
 Lobley, J. L. 1908 A, 200 (Haplodontidæ).  
 Matthew, W. D. 1904 C, 263, 264, fig. 13 (Haplodontidæ).  
     1909 C, 107, 110, 119.  
     1910 B, 65, 69, 71 (Aplodontiidae); 229, 248, 534 (Haplodontidæ); 69 (Aplodontoides).  
 Miller, G. S. 1912 B, 291.  
 Miller and Gidley 1918 A, 440.  
 Osborn, H. F. 1909 D, 64, 66, 68 (Haplodontidæ).  
 Scott, W. B. 1913 A, 249.

Taylor, W. P. 1917 A, 272.  
     1918 A, 450.  
 Trouessart, E. L. 1904 A, 348 (Aplodontidæ).  
 Weber, M. 1904 A, 490, 496 (Haplodontoides).  
 Weber and Abel 1928 A, 267, 272 (Haplodontidæ).  
 Winge, H. 1888 A, 115 (Haplodontidæ).  
     1924 A, 7, 16 (Haplodontum).  
 Zittel, K. A. 1893 B, 521 (Haplodontidæ).  
 Zittel and Schlosser 1911 A, 425 (Aplodontoides, Aplodontinæ).  
     1923 A, 509 (Aplodontoides, Aplodontinæ).

#### LIODONTIA Miller and Gidley. Type *Aplodontia alexandriæ* Furlong.

Miller and Gidley 1918 A, 440.  
*Liodontia alexandriæ* (Furlong).  
 Furlong, E. L. 1910 A, 398, figs. 1-5 (Aplodontia).  
 Kellogg, L. 1910 A, 429 (Aplodontia).  
 Merriam, J. C. 1911 B, 205, 211, 213-215, 253, 254 (Aplodontia).

Merriam, J. C. 1916 A, 178 (Aplodontia).  
     1917 A, 429 (Aplodontia).  
 Miller and Gidley 1918 A, 440.  
 Taylor, W. P. 1917 A, 272 (Aplodontia).  
     Miocene (Virgin Valley); Nevada: Pliocene (Thousand Creek); Nevada.

#### APLODONTIA Richardson. Type *A. leporina* Richardson.

Richardson, J. 1829, Zool. Jour., iv, 334.  
 Allen, J. A. 1892 A.  
 Anthony, H. E. 1916 A, 53.  
 Beddard, F. C. 1902 A, 469 (Haplodon).  
 Camp, C. L. 1918 A, 517, 6 figs.  
 Cockerell, T. D. A. 1916 C, 531, figs. 1-3.  
 Coues, E. 1883 A, 118 (Haplodon).  
 Elliot, D. G. 1901 A, 112 (Haplodontia).  
 Flower and Lydekker 1891 A, 457 (Haplodon).  
 Foote, J. S. 1916 A, 148, pl. xx (Haplodontia).  
 Furlong, E. L. 1907 A, 394.  
 Gidley, J. W. 1907 B, 629, pl. lx, fig. 2.  
 Grant, M. 1904 B, 195 (Haplodon).  
 Kampfen, P. N. 1905 A, 555.  
 Lilljeborg, W. 1866 A, 42 (Haplodon).  
 Matthew, W. D. 1910 B, 47, 65, 71.  
     1915 A, 229.  
 Matthew and Granger 1923 B, 1 (Haplodontia).  
 Merriam, C. H. 1886 A, 312.  
     1892 A, 61.  
 Merriam, J. C. 1911 B, 206, 215.  
     1916 A, 178.  
 Miller, G. S. 1912 B, 291.  
     1924 C, 429.  
     1927 A, 13.  
 Miller and Gidley 1918 A, 440.  
 Osborn, H. F. 1910 B, 357, 477, 534 (Haplodontia).  
 Palmer, T. S. 1904 A, 112, 842.  
 Peterson, O. A. 1905 A, 142.  
 Scharff, R. F. 1911 A, 228.  
 Schlosser, M. 1924 A, 30.  
 Scott, W. B. 1913 A, 153, 233, 676.  
 Seeley, H. G. 1886 A, 515 (Haplodontia).  
 Taylor, W. P. 1916 A, 470, 478.  
     1917 A, 272.  
     1918 A, 484.  
 Trouessart, E. L. 1904 A, 348.  
 Wagner, A. 1841 A, 123 (Haplodon).  
 Waterhouse, G. R. 1839 C, 174.  
     1842 A, 201, 203.  
 Weber, M. 1904 A, 496.

Weber and Abel 1928 A, 272.  
 Winge, H. 1888 A, 115 (Haplodon).  
     1924 A, 16, 104 (Haplodon).  
 Zittel and Schlosser 1911 A, 425 (Haplodon).  
     1923 A, 509.  
*Aplodontia rufa californica* (Peters).  
 Peters, W. 1864, Mon. preuss. Akad. Wiss. Berlin, 177-180 (Haplodon leporinus californicus).  
 Coues, E. 1883 A, 121, figs. 63-65 (A. rufa).  
 Elliot, D. G. 1901 A, 112 (Haplodontia rufa californica).  
 Furlong, E. L. 1904 A, 54, 55 (A. rufa, A. major).  
     1906 A, 243, 245 (A. rufa, A. major?).  
     1910 A, 400 (A. rufa).  
 Hay, O. P. 1927 D, 214, 215 (A. californica fossilis).  
 Kellogg, L. 1912 A, 156, fig. 5 (A. major fossilis).  
 Merriam, C. H. 1886 A, 316, pls. xix, xx (A. major).  
 Merriam and Stock 1925 A, 10 (A. californica fossilis).  
 Miller, G. S. 1924 C, 431.  
 Miller, L. H. 1912 A, 70, 73 (A. rufa, A. major, n. subsp.).  
 Sinclair, W. J. 1903 A, 711 (A. major?).  
     1904 A, 17 (A. major, n. subsp.).  
     1905 B, 147 (A. major).  
 Stock, C. 1918 A, 468, 469 (A. californica).  
 Taylor, W. P. 1918 A, 473, pl. xxvi, fig. 5; pl. xxvii, figs. 8, 10; pl. xxix.  
     Recent; Sierra Nevada Mountains; California: Quaternary (caves); California.

#### *Aplodontia* sp. indet.

Hay, O. P. 1927 D, 63, 222, 223. Pleistocene; California.  
 Stock, C. 1925 A, 113 (This genus?). Pleistocene (Cave); California.

## CYLINDRODONTIDÆ Miller and Gidley.

Miller and Gidley 1918 A, 440.

CYLINDRODON Douglass. Type *C. fontis* Douglass.

Douglass, E. 1901 B, 251.

1905 A, 211.

Matthew, W. D. 1909 C, 110.

1910 B, 64, 71.

1915 K, 420.

Miller and Gidley 1918 A, 440.

Osborn, H. F. 1910 B, 534.

Palmer, T. S. 1904 A, 208, 842.

Schlosser, M. 1911 A, 166.

Zittel and Schlosser 1911 A, 428.

1923 A, 512.

**Cylindrodon fontis** Douglass.

Douglass, E. 1901 B, 242, 251, pl. ix, figs. 9, 9a.

1903 A, 149.

Granger, W. 1910 B, 240.

Lambe, L. M. 1908 A, 11, 56, pl. viii, figs. 19, 20.

Matthew, W. D. 1903 B, 212, text-figs. 7, 8.

1909 C, 103.

1910 A, 33.

Trouessart, E. L. 1904 A, 285.

Oligocene (Lower); Montana: (White River); Wyoming?: (Cypress Hills); Saskatchewan.

## MYLAGAULIDÆ Cope.

Hay, O. P. 1902 A, 721.

Arlt, T. 1912 A, 698.

Cossmann, M. 1900 A, 54.

Douglass, E. 1903 A, 186.

Gidley, J. W. 1907 B, 623.

Matthew, W. D. 1901 B, 377.

1902 D, 294.

1904 C, 264.

1905 D, 52.

1909 C, 114, 116, 119.

1910 B, 69, 71.

1924 C, 75, 81, 84.

Miller and Gidley 1918 A, 441.

Osborn, H. F. 1905 I, 107.

1909 D, 131.

1910 B, 624.

Palmer, T. S. 1904 A, 755, 842.

Scott, W. B. 1913 A, 222, 233.

Trouessart, E. L. 1904 A, 296.

Weber, M. 1904 A, 512.

Weber and Abel 1928 A, 297.

Winge, H. 1924 A, 7, 15, 16 (Mylagaulini).

Zittel and Schlosser 1911 A, 427 (Mylagaulinæ).

1923 A, 511 (Mylagaulinæ).

MESOGAULUS Riggs. Type *M. ballensis* Riggs.

Hay, O. P. 1902 A, 721.

Cossmann, M. 1900 A, 54.

Haug, E. 1911 A, 1705.

Matthew, W. D. 1901 B, 374.

1909 C, 119.

1910 B, 71.

1924 C, 76.

Osborn, H. F. 1910 B, 535.

Palmer, T. S. 1904 A, 414, 843.

Winge, H. 1924 A, 15.

**Mesogaulus ballensis** Riggs.

Hay, O. P. 1902 A, 721.

Matthew, W. D. 1901 B, 377, 378 (= Mylogaulus monodon).

1902 D, 298 (Mylogaulus).

1909 C, 114.

1924 C, 81.

Matthew and Cook 1909 A, 380.

Miocene (Deep River); Montana.

MYLAGAULUS Cope. Type *M. sesquipetalis* Cope.

Hay, O. P. 1902 A, 721.

Cope, E. D. 1880 U, 152.

Cossmann, M. 1900 A, 54.

Douglass, E. 1903 A, 186.

1907 B, 98.

1909 A, 477.

Furlong, E. L. 1910 A, 403 (Mylagaulodon).

Haug, E. 1911 A, 1706.

Matthew, W. D. 1901 B, 374.

1902 D, 291, fig. 2.

1904 C, 264, fig. 13 (Mylagaulus, Mylagaulodon).

1907 A, 175, 210.

1909 C, 119 (Mylagaulus); 110 (Mylagaulodon).

1910 B, 71 (Mylagaulus); 69, 71 (Mylagaulodon).

1912 B, 186.

1918 A, 199.

1924 C, 74, 75, 81 (Mylagaulodon a syn.)

Merriam, J. C. 1911 B, 207, 216.

Miller and Gidley 1918 A, 441.

Osborn, H. F. 1907 G, 147, figs. 107, 108.

Osborn, H. F. 1909 D, 68, 88 (Mylagaulodon); 78, 81 (Mylagaulus).

1910 B, 297, 352, 535 (Mylagaulus); 534 (Mylagaulodon).

Palmer, T. S. 1904 A, 437, 843 (Mylagaulus, Mylagaulodon).

Schlosser, M. 1902 J, 135.

Sinclair, W. J. 1903 C, 143 (Mylagaulus); 143 (Mylagaulodon; type *M. angulatus*).

Trouessart, E. L. 1904 A, 296.

Weber, M. 1904 A, 512.

Weber and Abel 1928 A, 297.

Winge, H. 1924 A, 15, 16.

**Mylagaulus angulatus** (Sinclair).

Sinclair, W. J. 1903 C, 143, fig. 1 (Mylagaulodon).

Matthew, W. D. 1909 C, 107 (Mylagaulodon).

Merriam and Sinclair 1903 A, 96 (Mylagaulodon).

1907 A, 185, 191, 192 (Mylagaulodon).

Upper Oligocene (John Day); Oregon.

**Mylogaulus laevis** Matthew.

- Matthew, W. D. 1902 D, 298.  
 Douglass, E. 1903 A, 188.  
 Matthew, W. D. 1901 B, 377 (M. monodon).  
 1909 C, 114.  
 1924 C, 66, 75, 78, figs. 2-4.  
 Trouessart, E. L. 1904 A, 296.  
 Upper Miocene (Pawnee Creek); Colorado:  
 (Lower Sheep Creek); Nebraska.

**Mylogaulus monodon** Cope.

- Hay, O. P. 1902 A, 721.  
 Barbour and Cook 1917 B, 180.  
 Cook, H. J. 1912 D, 44 (This species?).  
 Cope and Matthew 1915 A, pl. cxix c, figs. 10, 11.  
 Gidley, J. W. 1904 A, 245.  
 Kellogg, L. 1910 A, 429, figs. 9-10b.  
 Matthew, W. D. 1901 B, 358, 377, text-figs. 3-6.  
 1902 D, 297.  
 1904 C, 265.  
 1909 C, 116.  
 1913 A, 186 (This species?).  
 1924 C, 66, 75.  
 Matthew and Cook 1909 A, 379, fig. 8.  
 Merriam, J. C. 1911 B, 205, 211, 214, 215, 253,  
 254.  
 1917 A, 429, 438 (M. monodon); 436 (This  
 species?).  
 Sinclair, W. J. 1915 A, 76 (This species?).  
 Pleistocene (Valentine); Nebraska: Pliocene  
 (Snake Creek); Nebraska: Miocene (Virgin  
 Valley and Thousand Creek); Nevada: Upper  
 Miocene (Arikaree, Republican River); South  
 Dakota, Kansas.

**Mylogaulus novellus** Matthew.

- Matthew, W. D. 1924 C, 66, 84.  
 Middle Miocene (Sheep Creek); Nebraska.

**Mylogaulus paniensis** Matthew.

- Matthew, W. D. 1902 D, 299, fig. 4.  
 Douglass, E. 1903 A, 153, 172, 191, figs. 14, 29  
 (This species?).  
 Matthew, W. D. 1909 C, 114, 116.

Matthew, W. D. 1924 C, 66, 81.

Matthew and Cook 1909 A, 380.

Trouessart, E. L. 1904 A, 296.

Upper Miocene (Pawnee Creek); Colorado,  
 Montana: (Lower Snake Creek); Nebraska,  
 Montana?.

**Mylogaulus pristinus** Douglass.

- Douglass, E. 1903 A, 154, 186, 187, fig. 26 (This  
 genus?).  
 Kellogg, L. 1910 A, 429, figs. 11-12b.  
 Matthew, W. D. 1909 C, 116.  
 Merriam, J. C. 1911 B, 205, 214, 253, 254.  
 Trouessart, E. L. 1904 A, 296.  
 Miocene (Virgin Valley); Nevada, Montana

**Mylogaulus proximus** Douglass.

- Douglass, E. 1903 A, 154, 189, fig. 27.  
 Matthew, W. D. 1909 C, 116.  
 Trouessart, E. L. 1904 A, 296.  
 Miocene (Madison Valley); Montana.

**Mylogaulus sesquipedalis** Cope.

- Hay, O. P. 1902 A, 721.  
 Cope and Matthew 1915 A, pl. cxix c, fig. 12.  
 Matthew, W. D. 1901 B, 377.  
 1902 D, 297.  
 1909 C, 116.  
 1924 C, 66, 75, 76.  
 Merriam, J. C. 1917 A, 438.  
 Trouessart, E. L. 1904 A, 296.  
 Lower Pliocene (Upper Snake Creek); Ne-  
 braska: (Republican River); Kansas.

**Mylogaulus vetus** Matthew.

- Matthew, W. D. 1924 C, 66, 82, figs. 5-8.  
 Middle Miocene (Sheep Creek); Nebraska.

**Mylogaulus** sp. indet.

- Douglass, E. 1903 A, 190, fig. 28. Miocene;  
 Montana.  
 Matthew, W. D. 1923 A, 12. Lower Pliocene  
 (Upper Snake Creek); Nebraska.  
 Merriam and Sinclair 1907 A, 196 (In supposed  
 Mascal). .

**CERATOGAULUS** Matthew. Type *C. rhinoceros* Matthew.

- Matthew, W. D. 1902 D, 291, fig. 3.  
 Abel, O. 1908 D, (214).  
 1912 F, 576.  
 Gidley, J. W. 1907 B, 627.  
 Matthew, W. D. 1905 D, 52, fig. 25.  
 1909 C, 119.  
 1910 B, 71.  
 1924 C, 76.  
 Miller and Gidley 1918 A, 441.  
 Osborn, H. F. 1905 H, 222.  
 1905 I, 107.  
 1909 D, 78.  
 1910 B, 297, 535.  
 Palmer, T. S. 1904 A, 170, 842.  
 Weber, M. 1904 A, 512.  
 Weber and Abel 1923 A, 297.  
 Winge, H. 1924 A, 16, 17.

**Ceratogaulus rhinoceros** Matthew.

- Matthew, W. D. 1902 D, 219, 299, fig. 1.  
 Abel, O. 1912 F, 575, fig. 446.  
 1913 B, 729, fig. 39.  
 1914 A, 120, fig. 86.  
 Douglass, E. 1903 A, 186.  
 Matthew, W. D. 1909 C, 114.  
 1924 C, 66, 76.  
 Trouessart, E. L. 1904 A, 296.  
 Weber, M. 1904 A, 512, fig. 384.  
 Weber and Abel 1923 A, 297, fig. 186.  
 Miocene (Pawnee Creek); Colorado: (Lower  
 Snake Creek); Nebraska.

**Ceratogaulus** sp. indet.

- Gidley, J. W. 1918 C, 180. Late Tertiary (Flax-  
 ville); Montana.  
 Hay, O. P. 1924 D, 169. Pliocene?; Montana.

**EPIGAULUS** Gidley. Type *E. hatcheri* Gidley.

Gidley, J. W. 1907 B, 628.

Abel, O. 1908 D (214).

1912 F, 576.

Matthew, W. D. 1909 C, 119.

1910 B, 71.

1924 C, 76.

Miller and Gidley 1918 A, 441.

Osborn, H. F. 1909 D, 81.

1910 B, 291, 352, 535, fig. 144.

Scott, W. B. 1913 A, 223.

Winge, H. 1924 A, 16.

**Epigaulus hatcheri** Gidley.Gidley, J. W. 1907 B, 628, pls. lviii-lx, fig. 1;  
pls. lxi-lxv; text-fig. 1.

Abel, O. 1912 F, 578, fig. 448.

1914 A, 118, figs. 83, 84.

1920 A, 430, fig. 653.

1925 A, 19, fig. 16.

Gilmore, C. W. 1921 F, 66 ("Epigaelus").

Matthew, W. D. 1909 C, 116.

1924 C, 75.

Merriam, J. C. 1917 A, 438.

Scott, W. B. 1913 A, 223, fig. 123.

Miocene (Republican River); Kansas.

**Epigaulus** sp. indet.Barbour and Cook 1917 B, 180. Pliocene  
(Valentine); Nebraska.**SCIURAVIDÆ** Miller and Gidley.

Miller and Gidley 1918 A, 442.

**SCIURAVUS** Marsh. Type *S. nitidus* Marsh.

Marsh, O. C. 1871 E, 122.

Hay, O. P. 1902 A, 723 (Paramys, in part); 725  
(Colonomys).

Haug, E. 1911 A, 1528 (Sciuravus, Colonomys).

Loomis, F. B. 1907 A, 123.

Matthew, W. D. 1907 A, 212 (Colonomys).

1909 C, 101 (Colonomys).

1910 B, 59, 71 (Sciuravus); 80 (Colonomys).

1928 B, 977.

Osborn, H. F. 1909 D, 135.

1910 B, 128, 134, 534.

1912 G, 236, fig. 3.

Palmer, T. S. 1904 A, 625, 850 (Sciuravus); 196,  
849 (Colonomys).

Schlosser, M. 1924 A, 27.

Scott, W. B. 1913 A, 280.

Taylor, W. P. 1915 A, 167.

Troxell, E. L. 1923 D, 384, figs. 3-5, 21, 22.

Wallace, A. R. 1876 A, I, 140.

Weber and Abel 1928 A, 296.

Winge, H. 1924 A, 15, 81.

Wortman, J. L. 1903 C, xvi, 363.

Zittel and Schlosser 1911 A, 425.

1923 A, 509, 687.

**Sciuravus altidens** Peterson.

Peterson, O. A. 1918 A, 64, fig. 5.

Upper Eocene (Uinta); Utah.

**Sciuravus depressus** Loomis.

Loomis, F. B. 1907 A, 130, fig. 7.

Matthew, W. D. 1909 C, 94.

Troxell, E. L. 1923 D, 384, 385 (This genus?).

Middle Eocene (Wind River); Wyoming.

**Sciuravus nitidus** Marsh.Hay, O. P. 1902 A, 724 (Paramys); 725 (Co-  
lonomys celer).

Loomis, F. B. 1907 A, 125.

Matthew, W. D. 1909 C, 97 (Sciuravus; Co-  
lonomys celer).

1909 D, 300 (Colonomys celer).

1910 B, 59, figs. 13-15.

Peterson, O. A. 1918 A, 64.

Trouessart, E. L. 1904 A, 477 (Paramys; Co-  
lonomys celer).

Troxell, E. L. 1923 D, 384, figs. 1, 6.

Middle Eocene (Bridger); Wyoming.

**Sciuravus undans** Marsh.

Hay, O. P. 1902 A, 724 (Paramys).

Trouessart, E. L. 1904 A, 477 (Paramys).

Troxell, E. L. 1923 D, 384, 385, fig. 2.

Middle Eocene (Bridger); Wyoming.

**Sciuravus** sp. indet.Matthew, W. D. 1909 C, 97. Eocene (Uinta);  
Wyoming, Utah.**ZAPODIDÆ** Coues.

Coues, E. 1876 A, 253.

Chandler, A. C. 1914 B, 134.

Cockerell and Miller 1914 A, 372.

Coues, E. 1883 A, 94.

Elliot, D. G. 1901 A, 256.

Gill, T. N. 1885 B, 18.

Gregory, W. K. 1914 G, 380.

Hay, O. P. 1923 A, 312.

Lyon, M. W. 1901 A, 666.

Miller, G. S. 1912 B, 286.

Miller and Gidley 1918 A, 732.

Palmer, T. S. 1904 A, 776, 868.

Trouessart, E. L. 1904 A, 490 (Zapodina).

**ZAPODINÆ** Flower and Lydekker.

Flower and Lydekker 1891 A, 480.

Hay, O. P. 1902 A, 732.

Arlt, T. 1912 A, 742.

Lyon, M. W. 1901 A, 666.

Miller, G. S. 1924 C, 432.

Miller and Gidley 1918 A, 443.

Winge, H. 1888 A, 156 (Jaculina).

Zittel and Schlosser 1911 A, 429.

1923 A, 513.

ZAPUS Coues. Type *Dipus hudsonius* Zimmerman.

- Hay, O. P. 1902 A, 732.  
 Allen, J. A. 1892 A.  
     1904 B, 136.  
 Beddard, F. E. 1902 A, 486.  
 Cockerell and Miller 1914 A, 372, figs. 111, 112.  
 Elliot, D. G. 1901 A, 257.  
 Kampfen, P. N. 1905 A, 565 (*Meriones*).  
 Leunis and Ludwig 1883 A, 218 (*Jaculus*).  
 Lilljeborg, W. 1866 A, 30 (*Jaculus*).  
 Lyon, M. W. 1901 A, 659, pls. xxv, fig. 1, xxvi, fig. 1, xxvii, fig. 1.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 280.  
     1924 C, 432.  
 Miller and Gidley 1918 A, 443.  
 Osborn, H. F. 1910 B, 470, 538.  
 Palmer, T. S. 1904 A, 713, 868.  
 Scharff, R. F. 1911 A, 29.  
 Seton, E. T. 1909 A, 587.  
 Taschenberg, O. 1899 A, 4707.  
 Trouessart, E. L. 1904 A, 490.  
 Wagner, A. 1841 A, 119 (*Jaculus*).  
 Weber, M. 1904 A, 501.  
 Weber and Abel 1928 A, 280.  
 Winge, H. 1888 A, 119 (*Jaculus*).  
     1924 A, 23 (*Jaculus*).

**Zapus hudsonius** (Zimmerman).

- Hay, O. P. 1902 A, 732.  
 Baker, F. C. 1920 A, 208, 214, 397 (*Z. hudsonius*).  
 Coues, E. 1883 A, 94, fig. 40.  
 Cuvier, G. 1825 A, v, 1, 34, pl. i (*Dipus americanus*).  
 Elliot, D. G. 1901 A, 257, fig. 59.  
 Fischer, J. B. 1829 A, 339 (*Dipus*).  
 Frech, F. 1906 A, 484.  
 Giebel, C. G. 1865 B, 272 (*Jaculus labradorius*).  
     1883 A, pl. xxiii (*Jaculus labradorius*).  
 Hay, O. P. 1923 A, 312.  
 Miller, G. S. 1912 B, 280.  
     1924 C, 432.  
 Pander and Alton 1824 A, 2.  
 Peterson, O. A. 1926 A, 278.  
 Rehs, J. 1914 A, 93.  
 Rhoads, S. N. 1903 A, 245.  
 Scharff, R. F. 1911 A, 27, 29.  
 Seton, E. T. 1909 A, 587, text-fig. 172, map 35.  
 Trouessart, E. L. 1904 A, 490.  
 Waterhouse, G. R. 1839 D, 188 (*Meriones canadensis*).  
     Recent; greater part of North America:  
     Pleistocene (Early); Pennsylvania.

NAPÆOZAPUS Preble. Type *Zapus insignis* Miller.

- Preble, E. A. 1899, N. A. Fauna, No. 15, 33.  
 Elliot, D. G. 1901 A, 263, fig. 60 (Subgenus of *Zapus*).  
 Miller, G. S. 1912 B, 288.  
     1924 C, 432.  
 Miller and Gidley 1918 A, 443.  
 Palmer, T. S. 1904 A, 448, 868.

- Trouessart, E. L. 1904 A, 491.  
 Winge, H. 1924 A, 23 (*Jaculus*).

**Napæozapus** sp. indet.

- Gidley, J. W. 1913 B, 96. Pleistocene (Middle); Maryland.  
 Hay, O. P. 1923 A, 350. Pleistocene (Middle); Maryland.

## DIPODIDÆ Waterhouse.

- Hay, O. P. 1902 A, 732.  
 Beddard, F. E. 1902 A, 484.  
 Carus, V. 1875 A, 100 (*Dipodida*).  
 Dobson, G. E. 1883 B, 640.  
 Doran, A. H. G. 1878 A, 414.  
 Giebel, C. G. 1888 A.  
 Hogben, L. T. 1919 A, 78.  
 Krumbach, T. 1904 A, 289 ("dipodiden").  
 Leche, W. 1887 A.  
 Lilljeborg, W. 1866 A, 28.  
 Lyon, M. W. 1901 A, 661.  
 Matthew, W. D. 1909 C, 107.  
     1910 B, 72.

- Matthew and Granger 1923 B, 1.  
 Miller and Gidley 1918 A, 443.  
 Rehs, J. 1914 A, 93.  
 Schapiro, B. 1913 A, 219 ("dipodiden").  
 Schlosser, M. 1899 D, 166 ("dipodiden").  
     1924 A, 34.  
 Seton, E. T. 1909 A, 587.  
 Tornier, G. 1894 B, 104 ("dipodiden").  
 Weber and Abel 1928 A, 279.  
 Winge, H. 1924 A, 27 (*Dipodini*).  
 Zittel and Schlosser 1911 A, 429 (*Dipodoidea*).  
     1923 A, 513 (*Dipodoidea*).

## PROTOPTYCHINÆ.

- Miller and Gidley 1918 A, 443.

- Zittel and Schlosser 1911 A, 427.  
     1923 A, 511.

PROTOPTYCHUS Scott. Type *P. hatcheri* Scott.

- Hay, O. P. 1902 A, 730.  
 Matthew, W. D. 1907 A, 211.  
     1909 C, 101.  
     1910 B, 68, 72.  
     1928 B, 977.  
 Miller and Gidley 1918 A, 443.  
 Osborn, H. F. 1909 D, 87.  
     1910 B, 168, 536, 538.

- Palmer, T. S. 1904 A, 584, 849.  
 Schlosser, M. 1899 D, 166.  
     1902 I, 707.  
     1911 A, 166.  
 Weber, M. 1904 A, 511.  
 Weber and Abel 1928 A, 277.  
 Zittel and Schlosser 1911 A, 427.  
     1923 A, 518, 669.

**Protoptychus hatcheri** Scott.

Hay, O. P. 1902 A, 730.

Matthew, W. D. 1909 C, 99.

Schlosser, M. 1899 D, 166.

Trouessart, E. L. 1904 A, 475.

Upper Eocene (Uinta); Utah.

**PACICULUS** Cope. Type *P. insolitus* Cope.

Hay, O. P. 1902 A, 727.

Ameghino, F. 1912 B, 172.

Matthew, W. D. 1909 C, 110.

1910 B, 72.

Palmer, T. S. 1904 A, 496, 853.

Schlosser, M. 1899 D, 166.

Seeley, H. G. 1886 A, 515.

Zittel and Schlosser 1911 A, 430.

1923 A, 514, 672.

**Paciculus insolitus** Cope.

Hay, O. P. 1902 A, 727.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185.

Upper Oligocene (John Day); Oregon.

**Paciculus lockingtonianus** Cope.

Hay, O. P. 1902 A, 727.

Matthew, W. D. 1909 C, 107.

Merriam and Sinclair 1907 A, 185.

Upper Oligocene (John Day); Oregon.

**Suborder HYSTRICIFORMES**, new name.

Unless otherwise indicated the authors, as cited, use for this suborder the name Hystricomorpha.

Hay, O. P. 1902 A, 732.

Ameghino, F. 1889 A, 1016.

1893 B, 444.

1906 A, 240, 409.

1912 B, 172.

Anderson, R. J. 1909 A, 744 (Hystricoidea).

Andrews, C. W. 1916 D, 548 ("hystricomorphs").

Arlt, T. 1907 A, 238 ("hystricomorphen").

1907 C, 676.

1907 D, 660.

Beddard, F. E. 1902 A, 487.

Branca, W. 1907 A, 10.

Cope, E. D. 1891 N, 70, 90.

Coues, E. 1883 A, 81.

Doran, A. H. G. 1878 A, 418.

Gregory, W. K. 1910 A, 326, 330.

1914 G, 330.

Kampfen, P. N. 1905 A, 554.

Lesbre, F. X. 1907 A, 1 (Hystrix).

Matthew, W. D. 1910 B, 64, 69, 72.

1912 B, 186.

1914 H, 380 ("hystricomorphs").

1915 A, 230, fig. 15.

Osborn, H. F. 1909 D, 88, 89.

1910 B, 538.

Pocock, R. I. 1916 G, 548.

Rehs, J. 1914 A, 69, 92 (Hystricomorphi).

Reynolds, S. H. 1897 A, 477, 488.

Schapiro, B. 1913 A, 277.

Scharff, R. F. 1907 A, 229.

1911 A, 371, 399, 402.

Schlosser, M. 1902 I, 708, 738.

Scott, W. B. 1905 B, 495.

1913 A, 245, 262.

1916 A, 116.

1928 B, 254.

Seeley, H. G. 1886 A, 514.

Sinclair, W. J. 1905 D, 384, 495.

Stromer, E. 1926 A, 136.

Thacker, A. G. 1922 A, 600, 603.

Trouessart, E. L. 1904 A, 496.

Wagner, A. 1841 A, 127 (Hystricina).

Waterhouse, G. R. 1839 D, 92 (Hystricina).

1842 A, 345 (Hystricina).

Weber, M. 1904 A, 439.

Weber and Abel 1928 A, 267, 288.

Winge, H. 1888 A, 156.

Zittel and Schlosser 1911 A, 424.

1923 A, 508.

**Superfamily HYSTRICOIDÆ** Miller and Gidley.

Müller and Gidley 1918 A, 444.

Gill, T. 1872 B, 22 (Hystricoidea).

Kraglievich, L. 1926 C, 47 (Hystricoidea).

Miller, G. S. 1924 C, 436.

Weber, M. 1904 A, 491, 505 (Hystricoidea).

Weber and Abel 1928 A, 248, 269, 288, 298 (Hystricoidea).

Weber and Burlet 1927 A, xiv (Hystricoidea).

Winge, H. 1924 A, 8, 57, 75 (Hystricoidea).

Wortman, J. L. 1920 A, 33.

Zittel and Schlosser 1911 A, 431 (Hystricoidea).

1923 A, 515 (Hystricoidea).

**ERETHIZONTIDÆ** Thomas.

Hay, O. P. 1902 A, 732 (Erethizontidae, Erethizontinae).

Ameghino, F. 1903 A, 119 (Coenidae).

1906 A, 241, 421 (Erethizontidae, Coenidae).

Chandler, A. C. 1914 B, 134.

Elliot, D. G. 1901 A, 264.

Grant, M. 1904 B, 205.

Hay, O. P. 1923 A, 812.

Höfer, H. 1911 A, 463.

Hogben, L. T. 1919 A, 73.

Matthew, W. D. 1910 B, 72.

1913 B, 291.

1915 A, 230, fig. 4.

1915 K, fig. 17 ("porcupines").

Miller, G. S. 1912 B, 289.

1920 B, 190.

Miller and Gidley 1918 A, 441, 445.

Rehs, J. 1914 A, 92.

Scharff, R. F. 1911 A, 71 (Coenidae).

Schlosser, M. 1902 I, 708.



Schlosser, M. 1911 A, 151, 182 ("erethizontiden").  
 Scott, W. B. 1905 B, 493 (Erethizontidae, Erethizontinae).  
 Seton, E. T. 1909 A, 605.  
 Sinclair, W. J. 1905 D, 413, 493.  
 Trouessart, E. L. 1904 A, 512 (Candidae).

Weber, M. 1904 A, 505.  
 Weber and Abel 1928 A, 269, 289.  
 Zittel and Schlosser 1911 A, 431 (Erethizontinae).  
 1923 A, 515, 518 (Erethizontinae).  
 Zurkirch, J. 1910 A, 138.

### ERETHIZON F. Cuvier. Type *Hystrix dorsata* Linnæus.

Cuvier, F. 1822 B, 426.  
 Hay, O. P. 1902 A, 733.  
 Allen, J. A. 1892 A.  
 1904 A, 384.  
 Ameghino, F. 1912 B, 179.  
 Beddard, F. E. 1902 A, 498.  
 Cope, E. D. 1880 U, 158.  
 Coues, E. 1883 A, 87, 88, fig. 38.  
 Cuvier, F. 1825 A, 178 ("éréthizon").  
 Elliot, D. G. 1901 A, 264.  
 Foote, J. S. 1916 A, 148, pl. xx.  
 Frech, F. 1907 A, 315.  
 Frech and Geinitz 1908 A, 33.  
 Gadow, H. 1916 A, 545.  
 Grant, M. 1904 B, 195.  
 Heilprin, A. 1887 A, 262.  
 Hofer, H. 1911 A, 463.  
 Hogben, L. T. 1919 A, 77.  
 Holland, W. J. 1912 B, 750 (Erythizon).  
 Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 226.  
 Lilljeborg, W. 1886 A, 53.  
 Matthew, W. D. 1910 B, 72.  
 1915 A, 231.  
 1915 K, 402, 466.  
 1918 A, 198.  
 Merriam, C. H. 1892 A, 61.  
 Miller, G. S. 1912 B, 289.  
 1924 C, 436.  
 Nopcea, F. 1923 C, 471.  
 1923 H, 91, 176.  
 Osborn, H. F. 1909 D, 87, 88, 90.  
 1910 B, 614.  
 Palmer, T. S. 1904 A, 269, 847.  
 Pocock, R. I. 1916 G, 548.  
 Scharff, R. F. 1895 A, 467.  
 1909 A, 529.  
 1911 A, 70, 403.  
 Schlosser, M. 1902 I, 738.  
 1911 A, 162.  
 Scott, W. B. 1905 B, 493.  
 1913 A, 680.  
 1916 A, 115 ("porcupine").  
 1928 B, 254.  
 Seton, E. T. 1909 A, 605.  
 Taylor, W. P. 1916 A, 426.  
 Toldt, C. 1905 A, 337, figs.  
 Tornier, G. 1891 A, 117.  
 Trouessart, E. L. 1904 A, 513.  
 Vicq-d'Asy, F. 1792 A, 614 ("urson").  
 Wagner, A. 1841 A, 127.  
 Weber, M. 1904 A, 506.  
 Weber and Abel 1928 A, 289.  
 Winge, H. 1924 A, 8, 61.  
 Zurkirch, J. 1910 A, 138.

### *Erethizon dorsatum* (Linnæus).

Hay, O. P. 1902 A, 733 (E. cloacinus, E. dorsatus).  
 Allen, J. A. 1904 A, 384 (E. cloacinus).

Baker, F. C. 1920 A, 208, 214, 397 (E. dorsatus).  
 Brown, B. 1908 A, 192, pl. xx.  
 Cuvier, F. 1822 B, 432, pl. ii, figs. 1-4.  
 Cuvier, G. 1825 A, v, 1, 19 (Hystrix).  
 Elliot, D. G. 1901 A, 264, pl. xxiv (E. dorsatus).  
 Fischer, J. B. 1829 A, 368 (Hystrix).  
 Frech and Geinitz 1903 A, 36.  
 Haug, E. 1911 A, 1886.  
 Hay, O. P. 1914 A, 32.  
 1920 B, 106.  
 1923 A, 484.  
 Leche, W. 1887 A, 603.  
 Leidy, J. 1889 H, 18.  
 Mercer, H. 1894 A, 98 ("porcupine").  
 1896 A ("porcupine").  
 1897 A, 58.  
 Miller, G. S. 1912 B, 289.  
 1924 C, 436.  
 Osborn, H. F. 1909 D, 90.  
 1910 B, 469.  
 Peterson, O. A. 1926 A, 279, fig. 5.  
 Rehs, J. 1914 A, 92.  
 Rhoads, S. N. 1903 A, 242.  
 Scharff, R. F. 1911 A, 27, 69.  
 Schlosser, M. 1902 H, 140.  
 Seton, E. T. 1909 A, 605, pl. xli; text-fig. 173, map\*36.  
 Trouessart, E. L. 1904 A, 513.  
 Recent; eastern Canada: Pleistocene; Pennsylvania, Tennessee, Arkansas.

### *Erethizon epixanthum* Brandt.

Brandt, J. F. 1835, Mém. Acad. Imp. Sci. St. Pétersb. (6), III, 390 (E. epixanthus).  
 Elliot, D. G. 1901 A, 265 (E. epixanthus).  
 Frech, F. 1906 A, 484.  
 Furlong, E. L. 1904 A, 54, 55.  
 1906 A, 243, 245.  
 Hay, O. P. 1927 D, 214.  
 Kellogg, L. 1912 A, 162, fig. 11.  
 Miller, G. S. 1912 B, 289.  
 1924 C, 437.  
 Miller, L. H. 1912 A, 73.  
 Scharff, R. F. 1911 A, 70.  
 Stock, C. 1925 A, 113.

Recent; Alaska to Arizona and Nebraska: Pleistocene (Samwel Cave); California.

### *Erethizon godfreyi* Allen.

Allen, J. A. 1904 A, 383.  
 Hay, O. P. 1927 D, 133.  
 Pleistocene; Arizona.

### *Erethizon* sp. indet.

Gidley, J. W. 1913 B, 96 (Maryland). Pleistocene (Middle); Maryland.  
 1920 B, 282 ("porcupines"). Pleistocene (Middle); Maryland.  
 Hay, O. P. 1923 A, 321. Pleistocene or Recent; Pennsylvania.

## DASYPROCTIDÆ Smith.

Smith, H. 1842.

Hay, O. P. 1902 A, 734.

Ameghino, F. 1889 A, 1010.

Arlt, T. 1907 C, 876.

1907 D, 83.

Beddard, F. E. 1902 A, 493.

Burmeister, H. 1879 B, 257 (Cœlogenyidæ).

Cockerell and Miller 1914 A, 373.

Coues, E. 1883 A, 83.

Doran, A. H. G. 1878 A, 416, pl. lx.

Eggeling, H. 1904 A, 91 (Dasyprocta).

Frey, H. 1911 A, 408 (Dasyprocta).

Giebel, C. G. 1865 C, 431 (Dasyprocta).

Gray, J. E. 1821 A, 304 (Agoutidæ).

Krumbach, T. 1904 A, 278 ("caviiden").

Mackenzie, W. 1911 A, 364 (Dasyprocta).

Miller and Gidley 1918 A, 447.

Palmer, T. S. 1904 A, 845 (Dasyproctidæ, Agoutidæ).

Preller, W. 1907 A, 378, 418 (Dasyprocta).

Rehs, J. 1914 A, 69 (Dasyprocta).

Schlosser, M. 1900 G, 306 (Dasyprocta).

Schwalbe, G. 1904 A, 207 (Dasyprocta).

Scott, W. B. 1905 B, 492.

Sinclair, W. J. 1905 D, 384, 492.

Wagner, A. 1841 A, 128 (Subungulata, in part).

Weber, M. 1904 A, 506 (Dasyprocta).

Weber and Abel 1928 A, 290 (Dasyproctinæ).

Winge, H. 1924 A, 64, 76 (Dasyproctini).

Zaaijer, T. 1894 A, 340.

CUNICULUS Brisson. Type *Mus paca* Linnæus.

Brisson, M. J. 1762, Regn. Anim. ed. 2, 13.

Hay, O. P. 1902 A, 734 (Agouti).

Beddard, F. E. 1902 A, 493 (Cœlogenys).

Berthold, A. A. 1825 A, 910, 993 (Aguti).

Bronn, H. G. 1849 A, 714 (Cœlogenys).

Burmeister, H. 1879 A, 258 (Cœlogenys).

Cleland, J. 1863 B, 301 ("paca").

Coues, E. 1883 A, 84, fig. 36 (Dasyprocta).

Cuvier, F. 1806 A, 134 (Osteopera); 135 (Cœlogenus).

1807 B, 203, pl. ix (Paca, Cœlogenus).

1812 A, 287, pl. xv, fig. 11 (Cœlogenus); 290 (Cloromis).

Erdl, M. 1843 A, 529, 537 (Cœlogenys).

Gegenbaur, C. 1864 C, 173, pl. iv, fig. 4 (Cœlogenys).

1865 C, 548 (Cœlogenys).

Giebel, C. G. 1855 A, 58 (Cœlogenys).

1865 C, 331 (Cœlogenys).

1883 A, pls. xxiv, xlv, lxx (Cœlogenys).

Hagmann, G. 1907 A, 464, figs. 7-20 (Cœlogenus).

Heilprin, A. 1887 A, 361 (Cœlogenys).

Höfer, H. 1911 A, 463, pl. xxi, figs. 37, 38 (Cœlogenus).

Köstlin, O. 1844 A (Agouti).

Leche, W. 1887 A (Cœlogenys).

Le Damany, P. 1906 B, 164 ("paca").

Meckel, J. F. 1825 A ("paca").

Miller, G. S. 1912 B, 289 (Agouti).

1924 C, 445 (Cuniculus).

Owen, R. 1845 B, 401, pl. cv, fig. 14 (Dasyprocta).

Owen, R. 1866 B, 371, fig. 237 (Cœlogenys).

1868 A, 868 (Cœlogenus).

Palmer, T. S. 1904 A, 84, 845 (Agouti).

Pander and Alton 1823 B, 7, pl. v ("paca").

1824 A, pl. ii (Dasyproctus).

Paulli, S. 1900 B, 519 (Cœlogenys).

Pictet, F. J. 1953 A, 280 (Cœlogenys).

Preller, W. 1907 A, 378, 418 (Cœlogenys).

Rehs, J. 1914 A, 92 (Cœlogenys).

Retzius, A. 1849 A, 543 (Dasyprocta).

Schwalbe, G. 1904 A, 207 (Cœlogenys).

Scott, W. B. 1905 B, 491 (Agouti).

Sinclair, W. J. 1905 D, 395, 490 (Agouti).

Tims, H. W. M. 1901 A, 285 (Cœlogenys).

Tornier, G. 1891 A, 176 (Cœlogenys).

Weber, M. 1904 A, 506 (Cœlogenys).

Weber and Burlet 1927 A, fig. 51 (Cœlogenys).

Winge, H. 1888 A, 64, 109, 133, 156 (Cœlogenys).

1924 A, 66, 77 (Cœlogenys).

## Cuniculus paca (Linnæus).

Hay, O. P. 1902 A, 734.

Beddard, F. E. 1902 A, 493 (Cœlogenys).

Bronn, H. G. 1849 A, 715 (Osteopera platycephala).

Cuvier, G. 1825 A, v, 1, 21, 37, pl. i ("paca").

Hagmann, G. 1907 A, 479, pl. xxv (Cœlogenys).

Krumbach, T. 1904 A, 278, fig. 7 (Cœlogenys).

Miller, G. S. 1924 C, 445 (C. paca nelsoni).

Weber, M. 1904 A, 54, fig. 41 (Cœlogenys).

Recent; Mexico to South America. It is probable that this species has not been found fossil in North America.

## CAVIIDÆ.

Inasmuch as *Hydrochærus* is often referred to this family, the following citations of the literature are made.

Hay, O. P. 1902 A, 734.

Adloff, P. 1904 A, 141 (Cavia).

1913 A, 238 ("meerschweinchen").

Alezais, H. 1901 A, 126, 270, figs. 23-42 (Cavia).

Ameghino, F. 1889 A, 1008 (Caviidæ).

1893 B, 444.

Arlt, T. 1907 C, 876.

Beddard, F. E. 1902 A, 491.

Bonaparte, C. L. 1832 A, 290 (Subungulata, Caviidæ).

Burmeister, H. 1879 B, 259 (Caviidæ).

Cockerell and Miller 1914 A, 373, figs. 118-124.

Doran, A. H. G. 1878 A, 416.

Erdl, M. 1843 A (Cavia).

Foot, J. S. 1916 A, 92, pl. ix (Cavia).

Freund, P. 1892 A, 547 (Cavia).

Giebel, C. G. 1865 C, 431 ("caviinen").

1883 A ("caviinen").

Gill, T. 1885 B, 21 (Caviidæ, Hydrochæridæ).

Gray, J. E. 1821 A, 304 (Caviadæ).

Höfer, H. 1911 A, 463.

Hogben, L. T. 1919 A, 73.

Leuckart, F. S. 1835 A, 167 (Cavia).

Lobley, J. L. 1908 A, 205.  
 Löhle, B. 1913 A, 595 (Cavia).  
 Meckel, J. F. 1825 A ("cavien").  
 Miller and Gidley 1918 A, 448.  
 Miram, E. 1841 A, 542 ("meerschweinchen").  
 Preller, W. 1907 A, 378 ("caviden").  
 Rehs, J. 1914 A, 69.  
 Retterer, E. 1884 A, 483 ("cochon d'Inde").  
 Schlosser, M. 1902 I, 708.  
 Scott, W. B. 1905 B, 492.  
 Sinclair, W. J. 1905 D, 460, 492.  
 Thomas, O. 1916 A, 301.  
 Tims, H. W. M. 1901 A, 261.

Toldt, C. 1905 A, 330, figs. (Cavia).  
 Tournoux, F. and J. P. 1912 A, 81, fig. 11 ("cobaye").  
 Trouessart, E. L. 1904 A, 524.  
 Wallace, A. R. 1876 A, x, 241.  
 Waterhouse, G. R. 1839 B, 61.  
 1839 C, 174.  
 1839 D, 91.  
 1842 A, 199.  
 Winge, H. 1888 A, 156.  
 Zittel and Schlosser 1911 A, 432 (Caviinæ).  
 1923 A, 516 (Cavinæ).

## HYDROCHÆRIDÆ Gill.

Gill, T. 1872 A, 304.  
 Coues, E. 1883 A, 82.  
 Gill, T. 1872 B, 22.

Miller and Gidley 1918 A, 448.  
 Wagner, A. 1841 A, 128 (Subungulata, in part).  
 Weber and Abel 1928 A, 290 (Hydrochærinæ).

HYDROCHÆRUS Brisson. Type *Sus hydrochæris* Linnæus.

Hay, O. P. 1902 A, 731.  
 Abel, O. 1912 F, 548, fig. 424.  
 1914 A, 200, fig. 158.  
 Altmann, F. 1925 A, 108.  
 Ameghino, F. 1888 B, 70.  
 1885 A, 44, 150, 177, 204.  
 1889 A, 1015.  
 1897 B, 263.  
 1902 C, 244, pl. iii, figs. 14, 15.  
 1912 B, 179.  
 Anderson, R. J. 1902 A, 1022, fig. 18.  
 1903 A, 651 ("capybara").  
 1905 A, 326, fig. 17 ("capybara").  
 1908 A, 547 ("capybara").  
 Anthony, R. 1912 A.  
 Arldt, T. 1907 B, 451.  
 Bayer, F. 1897 A, 147.  
 Beddard, F. E. 1899 A, 798, figs. 1-5.  
 1902 A, 492.  
 Berthold, A. A. 1825 A, 910, 983, pl. viii, fig. 5.  
 Boas, J. E. V. 1909 A, 536.  
 Böcking, A. 1865 A, 32.  
 Boule and Thevenin 1920 A, 227.  
 Burlet, H. M. 1917 A, 381.  
 Cope, E. D. 1880 U, 158.  
 Coues, E. 1883 A, 82.  
 Cuvier, F. 1825 A, 141, pl. xlii ("capybara").  
 Doran, A. H. G. 1878 A, 417, pl. lx.  
 Erdl, M. 1843 A, 529, 544.  
 Fischer, E. 1903 A, 704.  
 Fischer, J. B. 1829 A, 378.  
 Flower, W. H. 1884 A, 252.  
 Foote, J. S. 1916 A, 102, pl. x.  
 Frech and Geinitz 1908 A, 34.  
 Gervais, P. 1855 A, 12, pl. xiii, fig. 3.  
 Giebel, C. G. 1855 A, 58, pl. xxiv, fig. 10.  
 1883 A, pl. xxiv.  
 Hasse and Schwarck 1870 A, 111, figs. 35-37.  
 Hay, O. P. 1919 D, 364.  
 1927 C, 281 ("capybaras").  
 Heilprin, A. 1887 A, 361, 365.  
 Höfer, H. 1911 A, 465, pl. xxii, figs. 39, 40.  
 Hogben, L. T. 1919 A, 73, 77.  
 Kampfen, P. N. 1905 A, 556.  
 Kingsley, J. S. 1925 A, 209, fig. 221.  
 Köstlin, O. 1844 A.  
 Kraglievich, L. 1926 C, 68.

Kükenthal, W. 1891 C, 373, 384.  
 Leche, W. 1887 A.  
 Leunis and Ludwig 1883 A, 227.  
 Lilljeborg, W. 1866 A, 56.  
 Matthew, W. D. 1910 G, 159.  
 Owen, R. 1845 B, 400, pl. cv, fig. 17.  
 1858 A, 22 ("capybara").  
 1866 B, 369, fig. 234.  
 1868 A, 585, fig. 235.  
 Palmer, T. S. 1904 A, 334, 344.  
 Pander and Alton 1823 B, 6, pl. viii.  
 Paulli, S. 1900 B, 520, figs. 31, 32.  
 Perna, G. 1906 A, 122, 139, pl.  
 Preller, W. 1907 A, 377, pls. ix-xiv.  
 Rehs, J. 1914 A, 92.  
 Reynolds, S. H. 1897 A, 437, 454, 476, 511, 526.  
 Schapiro, B. 1913 A, 219.  
 Scott, W. B. 1905 B, 495.  
 1913 A, 205 (Hydrochærus).  
 Sellards, E. H. 1916 B, 617.  
 Taschenberg, O. 1899 A, 4594.  
 Terra, P. 1911 A, 299, fig. 121.  
 Tims, H. W. M. 1901 A, 285.  
 Tornier, G. 1891 A, 177.  
 1910 A, 558.  
 Trouessart, E. L. 1904 A, 529.  
 Van den Broeck, A. J. P. 1912 A, 782.  
 Virchow, H. 1910 E, 253.  
 1913 A, 53.  
 Wagner, A. 1841 A, 128.  
 Wallace, A. R. 1876 A, x, 130.  
 Waterhouse, G. R. 1839 B, 61.  
 1839 D, 597.  
 Weber, M. 1904 A, 506 (Hydrochærus); 44, 66, 178, text-figs. 37, 38, 52, 138 (H. capybara).  
 Weber and Abel 1928 A, 255, 257, 290.  
 Weber and Burlet 1927 A, 60, figs. 40, 41, 64, 193.  
 Winge, H. 1888 A, 69, 109, 133, 156.  
 1924 A, 68, 77.  
 Zietzschmann, O. 1917 A, 446.  
 Zittel and Schlosser 1911 A, 432.  
 1923 A, 507, 516, fig. 629.

**Hydrochærus æsopi** Leidy.  
 Hay, O. P. 1902 A, 734.  
 Allen, G. M. 1926 A, 449.  
 Hay, O. P. 1923 A, 363.

Holmes, F. S. 1860 A, iv ("capybara").  
 Leidy, J. 1886 D, 276.  
 Pleistocene (Early); South Carolina.

**Hydrochoerus holmesii Simpson.**

Simpson, G. G. 1928 H, 2, 7, figs. 2, 3.  
 Pleistocene (Early); Florida.

**Hydrochoerus robustus Leidy.**

Leidy, J. 1886 D, 275, fig. 1.  
 Hay, O. P. 1902 A, 734 (By error given as Leidy, J. 1888 B).  
 1923 A, 382.  
 This species may belong to *Neochœrus*.  
 Pleistocene; Nicaragua.

**NEOCHÆRUS Hay. Type *Hydrochoerus pinckneyi* Hay.**

Hay, O. P. 1926 C, 6.  
 1926 E, 388 ("capybaras")  
 Simpson, G. G. 1928 H, 8.  
**Neochœrus pinckneyi (Hay).**  
 Hay, O. P. 1923 A, 365, fig. 18 (Hydrochoerus).  
 Allen, G. M. 1926 A, 448 (Hydrochoerus; syn. of *H. asopii*?).

**Hydrochoerus sp. indet.**

Sellards, E. H. 1915 D, 114, fig. 50 ("capybara"). Pleistocene (Early); Florida.  
 1916 C, 151, 158 ("Hydrochoerus"). Pleistocene (Early); Florida.  
 1916 D, 617 (H. sp.). Pleistocene (Early); Florida.  
 1916 E, 16 (H. sp.). Pleistocene (Early); Florida.  
 1916 F, 9 (H. sp.). Pleistocene (Early); Florida.

Hay, O. P. 1923 B, 103, pl. vii, figs. 3-6 (Hydrochoerus).  
 1926 C, 5, pl. i, fig. 2; pl. vi, fig. 2; pl. vii, fig. 2.  
 1927 C, 281 ("capybaras").  
 1927 D, 287.  
 1928 C, 426.  
 Simpson, G. G. 1928 H, 8 (Hydrochoerus).  
 Pleistocene (Early); South Carolina, Texas.

**Order PRIMATES Linnæus**

Linnæus, C. 1758 A, 20.  
 Hay, O. P. 1902 A, 785.  
 Abel, O. 1913 B, 755a.  
 1919 A, 869.  
 1920 A, 453.  
 Adloff, P. 1901 B, 219 ("menschen").  
 1901 C, 420 ("menschen").  
 1903 A, 362 ("primaten").  
 1906 A, 106 ("menschen").  
 1907 B, 530 ("menschen").  
 1908 A ("primaten").  
 1908 B, 113 ("menschenaffen").  
 1909 A, 444 ("primaten").  
 1909 B, 828 ("menschen").  
 1910 B, 277 ("primaten").  
 1911 A, 505 ("primaten").  
 1912 A ("primaten").  
 1913 D, 869 ("primaten").  
 1915 A, 436 ("primaten").  
 1917 B, 352 ("mensch").  
 1920 A, 177 ("menschen").  
 1922 C, 293 ("primates").  
 Agassiz, L. 1844 C, 255 ("quadrumanes").  
 1844 D, 187 (Quadrumana).  
 Ahrens, H. 1913 B, 110 ("primaten").  
 Aichel, O. 1917 A, 98 ("primaten").  
 1918 A, 502 ("menschen").  
 Airey, L. B. 1919 A, 59, figs. 1, 2 ("man").  
 Allen, J. A. 1913 B, 110 ("primaten").  
 Altmann, F. 1925 A, 85 ("menschen").  
 Ameghino, F. 1902 D, 430.  
 1904 B, 74 ("primatos").  
 Anderson, R. J. 1903 A, 651.  
 1904 A, 147.  
 1910 A, 112.  
 1911 A, 639.  
 1912 C, 429.  
 1912 E, 907.  
 1913 A, 123.

Andrews, C. W. 1916 D, 548.  
 Anthony, R. 1903 A, 131 ("primates").  
 1905 A, 855.  
 1912 A.  
 1913 A, 257.  
 Appleton, A. B. 1922 A, 295.  
 Arldt, T. 1907 A, 237, 243.  
 1907 B, 448 ("primaten").  
 1907 D, 675.  
 1907 E, 209 ("primaten").  
 1912 A, 686.  
 1913 A, 82-98 ("primäten").  
 Bardeen, C. R. 1905 A, 163 ("man").  
 1905 B, 265 ("man").  
 Bardeleben, K. 1885 C, 160 ("menschen").  
 1889 A, 107 ("primaten").  
 1893 A, 163 ("menschen").  
 1904 A, 111 ("primaten").  
 1905 C, 158 ("primaten").  
 1909 A, 2 ("menschen", "affen").  
 Barrell, J. 1917 A, 18-26.  
 Bateson, W. 1892 A, 105.  
 Beddard, F. E. 1902 A, 533.  
 Bensley, B. A. 1902 A, 4 ("primates").  
 Berggias, B. 1925 A, 127-143 ("menschen").  
 Bertelli, D. 1909 A, 182 ("primati").  
 Beyer, H. 1908 A, 78, 88 ("affen", "halbaffen").  
 1909 A, 18 ("menschen").  
 Black, D. 1925 A, 133-138, table 1.  
 Black, N. 1900 A, 20.  
 Bluntschli, H. 1911 A, 120.  
 1912 A, 489 ("primaten").  
 1912 B, 351, 353 ("primaten").  
 1913 A, 33 ("primaten").  
 Boas, J. E. V. 1884 B, 390 ("menschen", "affen").  
 1909 A, 536 ("primaten").  
 1914 B, 577 ("primaten").  
 Bolk, L. 1906 A, 108 ("primaten").

- Bolk, L. 1909 A, 362.  
 1910 A ("primaten").  
 1910 B ("primaten").  
 1910 C, 525.  
 1913 A ("primaten").  
 1914 A ("primaten").  
 1915 A ("primaten").  
 1915 B, 611 ("primaten").  
 1921 A, 335 ("menschen").  
 1921 B, 138, 161.  
 1921 C, 219.  
 1922 A, 119.  
 1923 A, 16.  
 1923 B, 373.
- Bonaparte, C. L. 1832 A, 283.  
 1833 A, 1042.
- Bonsdorff, E. J. 1871 A, 303 ("menschen").
- Boule, M. 1923 A, 499
- Broom, R. 1897 B, 252.  
 1911 C, 319.  
 1914 F, 296.  
 1915 A, 162.
- Brown, A. E. 1901 A, 119.
- Burnett, G. T. 1823 A, 301 (Manupeda or Quadrumana).
- Callender, G. 1868 A, 447 ("human").
- Capitan, L. 1901 A ("l'homme").
- Carus, V. 1875 A, 66.
- Case, E. C. 1899 B, 183.
- Caush, D. E. 1904 A, 157.
- Chalikiopoulos, L. 1905 A, 647 ("man", "monkeys").
- Chandler, A. C. 1914 B, 139 ("primates").
- Cleland, J. 1863 B, 296 (Quadrumana).
- Cohen, T. E. 1918 A, 33 ("menschen").
- Cope, E. D. 1844 N, 79, 90 ("lemurs", "monkeys", "man").
- Corner, E. M. 1896 A, 386 ("monkeys").
- Coues, E. 1870 A ("man").
- Cuvier, F. 1825 A, 7, pl. i ("quadrumanes").
- Deinse, A. B. 1914 A, 289.
- Depéret, C. 1904 B, 43.  
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- Dieulafé and Herpin 1906 A, 242 ("homme").
- Dijkstra, O. H. 1923 A, 297-318, figs. 1-11 (Homo).
- Doran, A. H. G. 1878 A, 372 ("man", "monkeys").
- Dublin, L. I. 1903 A, 732.
- Duckworth, W. L. H. 1904 A, 28.
- Earle, C. 1897 A, 569.  
 1897 B, 309 ("apes").
- Eastman, C. R. 1917 B, 656 ("primates").
- Eastman, Gregory and Matthew 1917 A, 120.
- Ebner, V. 1906 A ("menschen").
- Eggeling, H. 1904 A, 99 ("quadrumanen").  
 1922 A, 33.
- Eimer, G. H. T. 1901 A, 256 ("affen").
- Eisler, P. 1895 A ("primaten").
- Elliot, S. G. 1921 A, 185.
- Eternod, A. C. F. 1895 A ("l'homme").  
 1900 A, 174 ("l'homme").  
 1911 A, 144.
- Fawcett, E. 1910 A ("human").  
 1911 A, 378, figs. 1-23, 24 ("man").
- Fejérváry, G. J. 1925 A, 178 ("primaten").
- Fischer, E. 1903 A ("affen").  
 1905 B, 400 ("apes, man").
- Fischer, G. 1909 A, pls. li-lxiv; text-figs. 1-27.
- Fischer, J. B. 1829 A, 1.
- Fischer, P. 1902 A, 410 ("primaten").
- Fleischmann, A. 1904 A, 483.
- Frassetto, F. 1903 A, 161, 189, 195, 215.
- Frets, G. P. 1909 A, 107 ("primaten").  
 1912 A, 409, figs. 1-10, 26-50 ("primaten").  
 1913 A, 557 ("primaten").
- Freudenberg, W. 1923 A, 122 (Homo, "menschen").
- Freund, L. 1902 A.
- Frey, H. 1911 A, 422.
- Fuchs, H. L. 1909 B, 142.  
 1914 A, 24 ("primaten").
- Gaudry, A. 1902 B, 269 ("hommes", "singes").
- Gaupp, E. 1910 D, 81 ("menschen").
- Gegenbaur, C. 1864 C, 188 ("quadrumanen").  
 1880 A, 537 ("menschen").
- Geoffroy St. Hilaire, E. F. 1812 A, 85 ("quadrumanes").  
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- Gervais, P. 1852 A, 4.  
 1853 B, 40 ("singes").  
 1859 A, 6.
- Gidley, J. W. 1919 A, 275.  
 1922 D, 269.  
 1923 A, 2, 15, 18.
- Gottlieb, H. 1914 A, 190.
- Gray, J. E. 1825 B, 337.
- Gregory, W. K. 1912 C, 194.  
 1913 C, 248.  
 1914 F, 529.  
 1915 A, 419.  
 1915 B, 349.  
 1915 C, 383.  
 1916 A, 239, 248.  
 1916 B, 258, 266.  
 1917 A, 386.  
 1917 D, 635.  
 1920 A, 200, 246, 248.  
 1921 A, 49-243.  
 1922 A, 544.  
 1926 B, 415.  
 1927 A, 602 ("primates").  
 1927 F, 386, 395, fig.  
 1927 G, 271.  
 1927 I, 549.  
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- Gregory and Hellman 1926 A, 9.
- Gruber, W. 1873 A, 338 ("menschen", Simiæ).
- Haeckel, E. 1873 A, 568, 570.  
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- Hasse, C. 1872 B, 542 ("menschen").
- Hasse and Schwarck 1870 A, 21 ("menschen"); 79 (Quadrumana).
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- Heilprin, A. 1887 A, 393.
- Hensel, R. 1879 A, 555.
- Hill, J. P. 1920 A, 476.
- Hoernes, R. 1886 A, 703.
- Hoever, R. 1911 A, 81 ("menschen").
- Holl, M. 1882 A, 181 ("menschen").
- Hommel, J. H. 1924 A, 39.
- Hrdlička, A. 1903 A ("man", "monkeys").  
 1920 A, 460.  
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- Hubrecht, A. A. W. 1897 A, 1-41.  
1908 A, 150.
- Huene, F. 1912 F, 522 ("primaten").
- Huxley, T. H. 1863 E, 554, 555, 607, 633.  
1863 F, 190 ("man").  
1864 D, i, ii.  
1868 C, 318.  
1869 G, 449, fig. 6 ("human").  
1880 E, 459.
- Kaempfert, W. 1927 A, 8.
- Keith, A. 1902 A, 18.
- Kjellberg, K. 1904 A, 159 ("mensch").
- Klaatsch, H. 1901 B.  
1913 A, 161 ("primates").
- Kostlin, O. 1844 A ("affen").
- Kükenthal, W. 1913 A, 684.
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- Laloy, L. 1907 A, 584 ("primates").
- Lavocat, A. 1885 A, 51 ("quadrumanes").
- Lazarus, S. P. 1896 A, 1 ("primaten").
- Leboucq, H. 1884 A, 66 ("singes").  
1904 C, 227 ("homme").
- Leche, W. 1887 A.  
1900 A, 1035.  
1912 A.  
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- Le Damany, P. 1906 B, 164.
- Ledouble, A. F. 1903 A, 646.
- Loomis, F. B. 1911 C, 479.  
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- Lubosch, W. 1906 B, 322 ("menschen").  
1911 A, 329 ("primaten").
- Lull, R. S. 1906 B, 563.  
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- Lydekker, R. 1903 D, 125.
- MacBride, E. W. 1920 A, 497.
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- Major, C. J. F. 1872 A, 153 (Quadrumana).  
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1901 A, 129 ("monkeys").
- Manners-Smith, T. 1908 A, 397.
- Martins, C. 1857 A ("quadrumanes").  
1872 A, 307.
- Matthew, W. D. 1901 B, 374.  
1909 C, 92, 93, 95, 98, 100.  
1909 D, 298, 308, 333, 549.  
1912 E, 254.  
1915 A, 274, figs. 7, 8.  
1915 F, 433.  
1915 K, 439, 442.  
1916 I, 108 ("primates").  
1921 D, 214.  
1923 C, 410.  
1928 B, 948, 965, 975.
- Mead, C. S. 1906 A, 482.
- Meckel, J. F. 1825 A ("affen").
- Merriam, J. C. 1910 D, 601 ("primates").
- Miller, G. S. 1912 B, 379.  
1920 A, 213-245, 3 figs.
- Mitchell, P. C. 1920 A, 497.
- Mivart, St. G. 1874 B, 9.
- Mochi, A. 1908 A, 182.
- Mollison, T. 1910 A ("primaten").  
1924 A, 701 ("primaten").
- Moreau, L. 1914 A, 83.
- Morton, D. J. 1924 A, 1-52, figs. 1-25.
- Müller, F. 1911 A, 535 ("primaten").
- Nowikoff, M. M. 1909 A, 1 ("mensch").
- Oken, L. 1823 A, 278-284 ("menschen," "affen," "lemur").
- Oppenheim, S. 1911 A, 1 ("primaten").
- Osborn, H. F. 1901 D, 623 ("primates").  
1902 E, 356, fig. 1.  
1905 I, 99.  
1905 N, 241.  
1907 G, 14, 48, 56, 101, 157.  
1909 D, 134.  
1910 D, 737.  
1916 B, 543.  
1917 B, 319.  
1922 D, 721.  
1922 E, 283.  
1924 K, 275 ("primates").  
1925 B, 18.
- Ossenkopp, G. J. 1925 A, 463-507.
- Owen, R. 1848 B, 132, fig. 25 ("man").  
1855 E, 26 (Quadrumana, Bimana).  
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1868 A, 904 (Quadrumana).
- Palacký, J. 1899 A, 1 ("affen").
- Pander and Alton 1824 B, 1 ("vierhänder").
- Parker and Haswell 1897 A, 520.
- Paterson, A. M. 1901 A, 21 ("man").
- Paulli, S. 1899 A, 169 ("primaten").
- Perna, G. 1906 A, 122 ("affen," "mensch").
- Perrier, E. 1920 A, 372.
- Pia, J. 1916 A, 128 ("primaten").
- Pilgrim, G. E. 1915 A, 1-74, pls. i-iv.
- Pinkus, F. 1904 A, 122 ("mensch").
- Pocock, R. I. 1918 A, 51.  
1920 A, 494.
- Puccioni, N. 1908 A, 41.
- Remane, A. 1922 A.
- Retterer, E. 1884 A, 503, 531 ("singes").
- Retterer and Valois 1912 A, 379 ("primates").  
1912 C, 432 ("l'homme").
- Reynolds, S. H. 1897 A, 551.
- Röse, C. 1892 F, 395 ("menschen").
- Rosenberg, E. 1895 A.
- Ruge, G. 1892 A, 184 ("primaten").  
1892 B, 377 ("mensch," "affen").
- Scharff, R. F. 1911 A, 230.
- Schlösser, M. 1898 B, 361.  
1900 B, 301.  
1900 C, 133 ("menschen," "affen").  
1901 K, 467.  
1902 J, 229.  
1905 A, 324 ("primaten").  
1907 C, 197.  
1911 A, 143.  
1921 A, 100.
- Schorr, G. 1907 A, 25 ("menschen").
- Schwalbe, G. 1904 B ("primaten").  
1910 A ("primaten").
- Schwarz, E. 1924 A, 419.
- Scott, W. B. 1896 C, 308.  
1913 A, 281, 577.
- Seeley, H. G. 1878 A, 226 ("lemurs," "apes").
- Sera, G. L. 1921 A, 47 ("primati").
- Shaw, D. M. 1917 A, 97 ("men").
- Smith, G. E. 1907 A, 163.  
1907 B, 7.  
1913 A, 562.  
1920 A, 465.

- Standing, H. F. 1907 A, 59.  
1907 B, 55.
- Stehlin, H. G. 1912 A, 1290 ("primaten").  
1916 B ("primaten").
- Steinmann, G. 1909 A, 81 ("primaten").
- Stratz-Hoag, C. H. 1906 A, 90 ("menschen," "affen").
- Strecker, C. 1887 A, 319 ("quadrumanen").
- Stromer, E. 1902 B, 561 ("primaten").  
1912 A, 188, 244.
- Sutton, J. B. 1884 A, 567, 568, text-figs. 1-3 ("man").
- Taschenberg, O. 1899 A, 4449.
- Terra, P. 1911 A, 348.
- Thacker, A. G. 1914 A, 283.  
1922 A, 594.
- Thompson, A. H. 1900 A, 924 ("primates")
- Tims, H. W. M. 1903 A, 145.
- Todd, T. W. 1922 A, 271.
- Toldt, C. 1904 A, 43 ("menschen," "affen").
- Tornier, G. 1889 A, 175 ("affen").  
1891 A, 125.  
1894 A, 97 ("anthropomorphen").
- Tredgold, A. F. 1897 A, 288.
- Underhill, B. M. 1910 A, 76, 85.
- Underwood, A. S. 1910 A, 354, figs. 1-14 ("man," "apes").
- Vallois, H. V. 1921 B, 975.
- Van den Broeck, A. J. P. 1911 A, 163 ("primaten").  
1911 B, 185 ("primaten").  
1912 A, 781.  
1914 A, 1 ("primaten").
- Vicq-d'Azyr, F. 1792 A, xcv, 1, 265 ("singes").
- Vriese, B. 1908 A, 163 ("menschen").
- Wagner, R. 1843 A, 12 (Quadruman).  
Walkhoff, O. 1901 A, 582 ("primaten").
- Wallace, A. R. 1876 A, I, 500; II, 170-180.
- Wallisch, W. 1906 A, 303 ("mensch").
- Walmsley, T. 1918 A, 327.
- Weber, M. 1904 A, 740 (Primates); 774 (Quadruman).  
Weber and Abel 1928 A, 714.
- Weber and Burlet 1927 A, 123.
- Weidenreich, F. 1913 A, 497 ("primaten").  
1922 B, 55.
- Weinberg, R. 1926 A, 137, pls. vi, vii, figs. 1-4 (Homo).
- Westrienen, A. F. A. S. 1906 A, 1 ("primaten").
- Whitehead and Waddell 1911 A, 103 ("human").
- Wiedersheim, R. 1892 A, 61 ("primaten").
- Wilder, B. G. 1887 A, 44 ("man").
- Windle and Humphreys 1887 A, 688 ("man").
- Winge, H. 1924 A, 250.
- Woodward, A. S. 1898 B, 403.  
1898 D, 336.
- Woodward, H. 1904 B, 163.
- Worthmann, F. 1922 A, 307, fig. 2 ("menschen," "affen").
- Wortman, J. L. 1901 C, 209.  
1902 A, XIII, 45.  
1903 A, xv, 168, 399, 419, 430.  
1921 A, 181.
- Wright, R. R. 1838 A, 480.
- Zaaijer, T. 1894 A, 337, figs. 1, 2 ("menschen").
- Zietzschmann, O. 1917 A, 434 ("primaten").
- Zittel and Schlosser 1911 A, 544.  
1923 A, 637, 650.
- Zondek, M. 1895 A, 503 ("mensch").

### Suborder LEMURIFORMES Gregory.

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- Unless otherwise indicated the authors, as quoted, use for this group the name *Prosimia*.
- Hay, O. P. 1902 A, 786.
- Abel, O. 1908 C, (36) (Lemuroidea).  
1912 F, 294.  
1913 B, 755a (Lemuroidea).  
1914 A, 254 (Lemuroidea).  
1920 A, 453 (Lemuroidea).
- Adloff, P. 1906 A, 108 ("lemuriden").
- Ameghino, F. 1889 A, 1023 (Prosimia).  
1901 A, 355.  
1906 A, 289, 421 ("prosimiens").
- Appleton, A. B. 1922 A, 301.
- Arlt, T. 1907 D, 676.  
1907 E, 208 ("halbaffen").
- Bardleben, K. 1885 B, 85 ("halb-affen").  
1904 A, 113 ("halbaffen").
- Bardenfleth, K. S. 1913 A, 84 (Lemuroidea).
- Beddard, F. E. 1902 A, 534 (Lemuroidea).
- Beyer, H. 1908 A, 88 ("halbaffen").
- Black, D. 1925 A, 141.
- Bluntschli, H. 1911 A, 121 ("prosimier").  
1911 B, 353 ("halbaffen").  
1912 B, 353 ("lemurinen").  
1913 A, 38.
- Boas, J. E. V. 1909 A, 536 ("prosimier").  
1914 B, 577, 598.
- Bolk, L. 1922 A, 118.  
1923 B, 372, fig. 2 (Lemur).
- Bonaparte, C. L. 1833 A, 1042 (Lemures).
- Brown, A. E. 1901 A, 125 (Lemuroidea).
- Burnett, G. T. 1828 A, 307 (Lemuridae).
- Carlsson, A. 1922 A, 233, 236.
- Carter, J. T. 1922 A, 601 (Lemuroidea, Lemuriformes).
- Carus, V. 1875 A, 113 (Prosimii).
- Carus and Engelmann 1861 A, 1903, 1687, 1798 (Quadruman, in part).
- Chardin, T. 1922 A, 106 ("lémuroïdes").
- Clark, W. E. L. 1924 A, 564.
- Clark and Sonntag 1926 A, 461. (Prosimia).
- Cope, E. D. 1880 U, 152 (Mesodonta).  
1885 EE, 609 (Lemuroidea).
- Cunningham, J. T. 1920 A, 496 ("lemurs").
- Duckworth, W. L. H. 1904 A, 34 (Lemuroidea).
- Earle, C. 1897 A, 570 ("lemurs"); 571, 681 (Lemuroidea).  
1897 B, 309, 311 (Lemuroidea).
- Eggeling, H. 1922 A, 33 ("halbaffen").
- Elliot, S. G. 1921 A, 185.
- Geoffroy St. Hilaire, E. F. 1912 A, 156 (Strepsirrhini).
- Gidley, J. W. 1922 A, 269 (Lemuroidea).
- Giebel, C. G. 1855 A, 6.  
1883 A ("halbaffen").
- Gill, T. 1872 A, 786.  
1872 B, 50, 54.

- Granger and Gregory 1817 A, 842 (Lemuri-  
formes, as suborder).
- Gregory, W. K. 1914 B, 141 (Lemuroidea).  
1914 F, 529 (Lemuroidea).  
1915 A, 426, 432 (Lemuroidea, Lemuri-  
formes).  
1916 B, 261, 266 (Lemuroidea, Lemuri-  
formes).  
1920 A, 200 (Lemuroidea).  
1921 A, 58, 59, 183, 232 (Lemuroidea).  
1922 A, 114, 115 (Lemuroidea).  
1927 I, 549 ("lemurs").
- Haacke, W. 1886 A, 367 ("lemuroiden").
- Haeckel, E. 1873 A, 544, 589.  
1908 A.
- Heilprin, A. 1887 A, 393 (Lemuroidea).  
Henckel, K. O. 1927 A, 365, 382 (Lemuroidea).  
Hill, J. P. 1920 A, 478 ("lemuroids").  
Hoernes, R. 1886 A, 702.  
Hogben, L. T. 1919 A, 76.  
Hrdlička, A. 1920 A, 462 ("lemurs").  
Hubrecht, A. A. W. 1897 A, 9 (Prosimiæ).  
1908 A, 161 (Lemuroidea).  
Huxley, T. H. 1880 E, 459 (Lemuroidea).  
Kampfen, P. N. 1905 A, 329, 654.  
Kaudern, W. 1910 A, 561 ("halbaffen").  
Klaatsch, H. 1913 A, 163 ("prosimier").  
Köstlin, A. 1844 A ("halbaffen").  
Kohlbrugge, J. H. F. 1902 A, 318 ("halbaffen").  
Kükenthal, W. 1913 A, 684.  
Laloy, L. 1907 A, 588 ("lemuriens").  
Leche, W. 1887 A, 1024 (Prosimiæ).  
Lemis and Ludwig 1883 A, 164 (Prosimii).  
Lubosch, W. 1911 A, 329 ("prosimier").  
Lull, R. S. 1917 B, 643 (Lemuroidea).  
Lydekker, R. 1903 D, 124 (Lemuroidea).  
MacBride, E. W. 1920 A, 497 ("lemurs").  
Major, C. J. F. 1901 A, 163 ("prosimier").  
Manners-Smith, T. 1908 A, 413 (Lemuroidea).  
Matschie, P. 1896 A, 249 ("halbaffen").  
Matthew, W. D. 1909 D, 298, 308 (Lemuroidea).  
1912 E, 255 ("lemuroids").  
1915 A, 215 (Lemuroidea).  
1915 K, 442 (Lemuroidea).  
Mitchell, P. C. 1905 A, 503.  
1920 A, 497 ("lemurs").  
Mivart, St. G. 1874 B, 9 (Lemuroidea).  
Osborn, H. F. 1898 U, 686 (Lemuroidea).  
1907 G, 14, 157 (Lemuroidea).  
1925 B, 13 (Lemuroidea).  
Paulli, S. 1900 B, 521, 541.
- Perrier, E. 1920 A, 372 ("lemuriens").  
Pia, J. 1916 A, 128 ("prosimier").  
Pocock, R. I. 1916 G, 548 ("lemuroids").  
1918 A, 51, 53 (Lemuroidea).  
1920 A, 494 ("lemurs").  
Retterer and Vallois 1912 A, 379 ("lemuriens").  
Reynolds, S. H. 1897 A, 545 (Lemuroidea).  
Ruge, G. 1892 A, 185 ("halbaffen").  
Scharff, R. F. 1911 A, 364 ("lemuroids").  
Schlosser, M. 1898 B, 360 (Lemuroidea).  
1899 L, 356 ("halbaffen").  
1902 I, 738.  
1902 J, 133.  
1905 A, 326, 328 (Lemuroidea).  
1921 A, 103 (Lemuriformes).  
Schmidt, O. 1886 A, 294.  
Schwalbe, G. 1904 A, 219 ("prosimier").  
1904 B ("halbaffen").  
Scott, W. B. 1913 A, 578, 684 (Lemuroidea).  
Seeley, H. G. 1886 A, 414 (Prosimiæ).  
Smith, G. E. 1907 A, 175, 176.  
1907 B, 7 (Lemuroidea).  
1920 A, 466 (Lemuroidea).  
Standing, H. F. 1907 A, 161.  
1907 B, 55 ("lemurs").  
Steinmann, G. 1907 A, 504.  
Storr, G. C. C. 1780, Prod. Meth. Mamm., 32  
(Prosimiæ).  
Stromer, E. 1902 B, 555, 561 ("prosimier").  
Taschenberg, O. 1899 A, 4448 (Prosimiæ).  
Terra, P. 1911 A, 345 (Prosimiæ).  
Thacker, A. G. 1922 A, 603 (Lemuroidea).  
Toldt, C. 1905 A, 335 ("halbaffen").  
Tornier, G. 1894 B, 104 ("halbaffen").  
Tredgold, A. F. 1897 A, 289 (Lemuroidea).  
Trouessart, E. L. 1907 A, 125 ("lemuriens").  
Van den Broeck, A. J. P. 1912 A, 783.  
Wallace, A. R. 1876 A, xi, 176 (Lemuroidea).  
Weber, M. 1904 A, 757, 764 (Lemures); 762,  
765 (Mesodonta).  
Weber and Abel 1928 A, 716, 718, 733, 739, 888  
(Lemuroidea).  
Weber and Burlet 1927 A, xv (Lemuroidea).  
Weidenreich, F. 1922 B, 61 ("prosimier").  
Winge, H. 1924 A, 253 (Lemuroidei).  
Wood-Jones, F. 1920 A, 491 (Lemuroidea).  
Woodward, A. S. 1898 B, 403 (Lemuroidea).  
1917 D, pl. lxviii (Lemuroidea).  
Wright, R. R. 1883 A, 481 (Lemuroidea).  
Zittel and Schlosser 1911 A, 544 (Lemuroidea).  
1923 A, 638.

### Superfamily LEMUROIDÆ, new name.

- Abel, O. 1908 C (36) (Mesodonta).  
Major, C. J. F. 1880 A, 42 ("lemuroiden").  
Matthew, W. D. 1928 B, 960 ("lemuroid pri-  
mates").  
Osborn, H. F. 1902 C, 178 (Mesodonta).  
1907 C, 613 (Mesodonta).  
Ossenkopp, G. J. 1925 A, 468, 479 (Lemuroidea).  
Schuchert and Levene 1927 A, 311 ("lemurs").
- Schlosser, M. 1907 C, 222 (Mesodonta).  
1921 A, 102.  
Weber and Burlet 1927 A, xv (Lemuroidea).  
Winge, H. 1924 A, 253 (Lemuroidei).  
Wortman, J. L. 1903 A, xv, 408 (Mesodonta).  
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vii, 223, 225.  
Abel, O. 1908 C (36).  
1913 B, 755b.
- Abel, O. 1914 A, 255.  
Ameghino, F. 1889 A, 102, 893 (Adapidae).  
1904 A, 110, 111 (Adapis).  
1906 A, 291.



- Beddard, F. E. 1902 A, 553 (Adapis).  
 Behlen, H. 1907 A, 269 (Adapis).  
 Black, D. 1925 A, 143.  
 Bluntschli, H. 1911 A, 121.  
 1912 B, 354 ("adapiden"); 370, fig. 13 (Adapis).  
 Bronn, H. G. 1849 A, 707 (Adapis).  
 Chapman, H. C. 1904 A, 149, 155.  
 Cope, E. D. 1880 U, 153 ("adapidées").  
 Cuvier, G. 1825 A, III, 265, pls. (Adapis).  
 Earle, C. 1897 A, 686 (Adapis).  
 Filhol, H. 1877 A, 87 (Adapis).  
 Gervais, P. 1859 A, 171 (Adapis).  
 Gidley, J. W. 1923 A, 20.  
 Granger and Gregory 1917 A, 842.  
 Gregory, W. K. 1913 C, 251 (Adapis).  
 1914 F, 529.  
 1915 A, 420, 432.  
 1915 C, 383.  
 1916 A, 253.  
 1916 B, 261, 266.  
 1917 D, 631.  
 1920 A, 202 (Adapis).  
 1921 A, 58, 62, 183.  
 1922 A, 531, figs 66, 69, 71.  
 1927 I, 559 ("adapids").  
 Gregory and Hellman 1926 A, 12.  
 Heilprin, A. 1887 A, 348, 402 (Adapis).  
 Hubrecht, A. A. W. 1908 A, 160, 165.  
 Leche, W. 1900 A, 1025 (Adapis).  
 Lemoine, V. 1889 A, 236 (Adapis).  
 Loomis, F. B. 1906 A, 280.  
 Major, C. J. F. 1901 A, 134 (Adapis).  
 Matthew, W. D. 1909 D, 298.  
 1915 A, 216.  
 1915 F, 433.  
 1921 D, 214.  
 Neumayer, L. 1906 A, 100 (Adapis).  
 Osborn, H. F. 1902 D, 266, fig. 5 (Adapis).  
 Ossenkopp, G. J. 1925 A, 479.  
 Palacký, J. 1899 A, 2.  
 Palmer, T. S. 1904 A, 77, 890 (Adapis).  
 Pia, J. 1916 A, 129 ("adapiden").  
 Schlosser, M. 1887 B, 22.  
 1889 L, 357 (Adapis).  
 1905 A, 329.  
 1907 C, 222.  
 1911 A, 62 (Adapis).  
 1921 A, 107 ("adapiden").  
 Seeley, H. G. 1878 A, 226 (Adapis).  
 Stehlin, H. G. 1912 A, 1272 ("adapiden").  
 1916 B, 1386 ("adapiden").  
 Stromer, E. 1902 B, 555 (Adapis).  
 Thacker, A. G. 1922 A, 604.  
 Trouessart, E. L. 1904 A, 43.  
 Weber and Abel 1928 A, 741.  
 Winge, H. 1924 A, 257, 259 (Adipini).  
 Woodward, A. S. 1898 B, 404, fig. 226 (Adapis).  
 Wortman, J. L. 1903 A, 412.  
 Zittel and Schlosser 1911 A, 545.  
 1923 A, 639, 666.

## NOTHARCTINÆ Trouessart.

- Unless otherwise indicated the authors, as quoted, use for this group the family name Notharctidæ.  
 Trouessart, E. L. 1904 A, 40.  
 Abel, O. 1908 C (36).  
 1913 B, 756.  
 1914 A, 255, 257.  
 1919 A, 875.  
 1922 C, 293.  
 Bluntschli, H. 1911 A, 121.  
 1912 B, 354.  
 Depéret, C. 1905 C, 703 ("notharctidés").  
 1908 A, 112.  
 Gidley, J. W. 1922 A, 269 ("notharctids").  
 1923 A, 8, 20, 24.  
 Granger and Gregory 1917 A, 842 (Notharctinæ).  
 Gregory, W. K. 1914 F, 529.  
 1915 A, 420 (Notharctidæ; 433 (Notharctinæ)).  
 1915 C, 383 (Notharctidæ, Notharctinæ).  
 1921 A, 58 (Notharctidæ); 123, 134, 139, 149, 178, 184, 193, 208, 229 (Notharctinæ).  
 1922 A, 541.  
 Gregory and Hellman 1926 A, 12, 103.  
 Hilzheimer, M. 1913 A, 568.  
 Loomis, F. B. 1911 C, 432.  
 Matthew, W. D. 1909 C, 92, 95, 98, 100.  
 1909 D, 509.  
 1914 B, 387.  
 1917 C, 837.  
 Osborn, H. F. 1901 D, 623.  
 1902 C, 176, 190.  
 1902 E, 361.  
 1905 I, 101.  
 1909 D, 46, 52.  
 1910 B, 134, 161, 164, 543.  
 Ossenkopp, G. J. 1925 A, 482, 489, fig. 3.  
 Pia, J. 1916 A, 128 ("notharctier").  
 Schlosser, M. 1907 C, 222.  
 Scott, W. B. 1913 A, 578.  
 Stehlin, H. G. 1912 A, 1286 ("notharctiden").  
 1916 B, 1386, 1476, 1518, 1539 ("notharctiden").  
 Thacker, A. G. 1922 A, 604.  
 Todd, T. W. 1922 A, 276.  
 Weber, M. 1904 A, 763.  
 Weber and Abel 1928 A, 741.  
 Wortman, J. L. 1903 A, xv, 408.

PELYCODUS Cope. Type *Prototomus jarrovi* Cope.

- Hay, O. P. 1902 A, 789.  
 Abel, O. 1913 B, 756.  
 1914 A, 257.  
 1922 C, 293.  
 Black, D. 1925 A, table.  
 Boule, M. 1923 A, 78.  
 Carter, J. T. 1922 A, 604, 607.  
 Chardin, T. 1922 A, 83.  
 Depéret, C. 1905 C, 704.  
 1912 A, 707.  
 Gidley, J. W. 1923 A, 8, 21.  
 Granger and Gregory 1917 A, 841.  
 Gregory, W. K. 1913 A, 117.  
 1913 C, 251.

- Gregory, W. K. 1915 A, 420, 433.  
 1917 D, 630.  
 1920 A, 202.  
 1921 A, 57, 184.  
 1922 A, 118, 423, 513, 543, fig. 315.
- Haug, E. 1911 A, 1528.
- Loomis, F. B. 1906 A, 280, 281.  
 1911 C, 479.
- Matthew, W. D. 1909 C, 100.  
 1909 D, 509.  
 1915 F, 434, 435.  
 1915 K, 472.  
 1918 H, 570.  
 1924 E, 749.  
 1928 B, 975.
- Osborn, H. F. 1901 D, 623.  
 1902 C, 192.  
 1907 G, 157, figs. 127, 132.  
 1909 D, 133.  
 1910 B, 134, 543.  
 1912 G, 236, fig. 3.
- Ossenkopp, G. J. 1925 A, 483.
- Palmer, T. S. 1904 A, 521, 901.
- Perrier, E. 1920 A, 273.
- Pia, J. 1916 A, 123.
- Rogers, A. F. 1924 A, 545.
- Schlosser, M. 1911 A, 67.  
 1921 A, 103.
- Scott, W. B. 1913 A, 530.
- Seeley, H. G. 1886 A, 416.
- Stehlin, H. G. 1912 A, 1283.  
 1916 B, 1319, 1430, 1434, 1518.
- Trouessart, E. L. 1904 A, 40.
- Weber, M. 1904 A, 508, 762, 763, 765.
- Weber and Abel 1928 A, 741.
- Wortman, J. L. 1903 A, xv, 409.
- Zittel and Schlosser 1911 A, 546.  
 1923 A, 639, 666.
- Pelycodus frugivorus Cope.**
- Hay, O. P. 1902 A, 789.
- Abel, O. 1913 B, 755 b, figs. 110, 111.  
 1914 A, 258, figs. 233, 234.  
 1922 C, 293, figs. 246, 247.
- Gidley, J. W. 1926 E, 41.
- Granger and Gregory 1917 A, 841.
- Gregory, W. K. 1915 C, 333.  
 1917 D, 631.  
 1921 A, 141, pl. xxxv.  
 1922 A, pl. vii.
- Loomis, F. B. 1906 A, 281, 285, fig. 3.  
 1907 B, 356.
- Matthew, W. D. 1909 C, 92.  
 1915 F, 436, 439, figs. 11-14.
- Osborn, H. F. 1902 C, 191, 193, figs. 20, 21.
- Ossenkopp, G. J. 1925 A, 483.
- Reeside, J. B. 1924 A, 46.
- Trouessart, E. L. 1904 A, 40.
- Weber, M. 1904 A, 762, fig. 545.
- Weber and Abel 1928 A, 741, fig. 523.
- Zittel and Schlosser 1911 A, 546, fig. 740.  
 1923 A, 639, fig. 782.
- Lower Eocene (Wasatch); Wyoming, New Mexico.

### **Pelycodus jarrovi Cope.**

- Hay, O. P. 1902 A, 790.
- Chardin, T. 1922 A, 98 (P. jarrovi).
- Gregory, W. K. 1917 D, 631.  
 1921 A, 133, 137, pls. xxxv-xxxvii.  
 1922 A, pl. v.
- Loomis, F. B. 1906 A, 282.
- Matthew, W. D. 1909 C, 92.  
 1915 F, 436, 438, figs. 9, 10.
- Osborn, H. F. 1902 C, 174, 193.
- Ossenkopp, G. J. 1925 A, 483.
- Reeside, J. B. 1924 A, 46.
- Trouessart, E. L. 1904 A, 40 (P. jarrovi).  
 Lower Eocene (Wasatch); New Mexico.

### **Pelycodus ralstoni Matthew.**

- Matthew, W. D. 1915 F, 436, figs. 4-6.
- Gidley, J. W. 1918 B, 59 (Pelycodus).
- Granger and Gregory 1917 A, 841.
- Gregory, W. K. 1916 B, 263, fig. 2.  
 1917 D, 630, 631.  
 1921 A, 60, 134, 138, 141, 190, pls. xxxv-xxxvii; text-figs. 39, 71.  
 1922 A, pl. vii.  
 1927 I, 558.
- Ossenkopp, G. J. 1925 A, 483.
- Stehlin, H. G. 1916 B, 1519, 1544.  
 Lower Eocene (Wasatch); Wyoming.

### **Pelycodus trigonodus Matthew.**

- Matthew, W. D. 1915 F, 436, figs. 7, 8.
- Granger and Gregory 1917 A, 841.
- Gregory, W. K. 1916 A, 240, figs. 1, 10, 11.  
 1917 D, 631.  
 1918 A, 8, figs. 4-6, 9.  
 1921 A, 60, 133, 135, pls. xxxv-xxxviii, xl, xli.  
 1922 A, 120, 127, 129, pl. v; text-figs. 55, 61, 62.
- Ossenkopp, G. J. 1925 A, 483.
- Stehlin, H. G. 1916 B, 1477, 1544.  
 Lower Eocene (Wasatch); Wyoming.

### **Pelycodus tutus Cope.**

- Hay, O. P. 1902 A, 790.
- Loomis, F. B. 1906 A, 281, 285, fig. 4.  
 1907 B, 356.
- Matthew, W. D. 1909 C, 92.  
 1915 F, 436, 441, fig. 15.
- Osborn, H. F. 1902 C, 174, 176, 194, fig. 4.
- Ossenkopp, G. J. 1925 A, 483.
- Reeside, J. B. 1924 A, 46.
- Seeley, H. G. 1886 A, 416 (Tomitherium).
- Trouessart, E. L. 1904 A, 40.  
 Lower Eocene (Wasatch); Wyoming, New Mexico.

### **Pelycodus sp. indet.**

- Matthew, W. D. 1909 C, 92, 95. Middle Eocene (Bridger and Wind River); Wyoming.

NOTHARCTUS Leidy. Type *N. tenebrosus* Leidy.

- Hay, O. P. 1902 A, 788 (Tomitherium), 789 (Notharctus, Limnotherium), 793 (Hipposyus, Telmalestes).
- Abel, O. 1913 B, 758.  
1914 A, 257.  
1922 C, 293.
- Beddard, F. E. 1902 A, 552, 553 (Tomitherium).
- Black, D. 1925 A, table.
- Bolk, L. 1914 A, 132, fig. 41.
- Carter, J. T. 1922 A, 804, 607.
- Chapman, H. C. 1904, A, 150 (Notharctus, Limnotherium).
- Chardin, T. 1922 A, 98.
- Cope, E. D. 1872 OO, 2.  
1872 PP, 2 (Tomitherium, type *T. rostratum*; Notharctus).
- Delafontaine, M. 1875 A, 171 (Notharctos).
- Depéret, C. 1912 A, 707.
- Gidley, J. W. 1919 A, 274.  
1923 A, 18, 25.
- Granger, W. 1909 A, 22.
- Granger and Gregory 1917 A, 841, 845 (Notharctus); 845 (Thinolestes, Tomitherium as syns.).
- Gregory, W. K. 1913 A, 117.  
1913 C, 250.  
1914 A, 141.  
1914 F, 529.  
1915 A, 419, 421, 433 (Notharctus); 421, 433 (Telmalestes).  
1916 A, 242, fig. 3.  
1916 B, 262, 331.  
1917 A, 845 (Hipposyus a syn.).  
1917 D, 630.  
1920 A, 200, fig. 180.  
1921 A, 49-243, pls. xxvii, xxviii, liii, lvii; text-fig. 37.  
1922 A, 133, 216, 217, 513, 519, fig. 351.  
1927 A, 603 ("notharctids").  
1927 G, 268, 271, fig. 1.  
1927 I, 557, 559 ("notharctids").
- Haug, E. 1911 A, 1528 (Notharctus, Telmatolestes).
- Heilprin, A. 1887 A, 348 (Tomitherium); 403 (Limnotherium).
- Loomis, F. B. 1905 C, 296.  
1906 A, 280.  
1911 C, 482.
- Matthew, W. D. 1904 D, 814.  
1906 B, 361.  
1909 C, 95 (Telmatolestes); 100 (Telmalestes, Notharctus).  
1915 F, 434, 441.  
1924 E, 748.  
1928 B, 965, 975 (Notharctus); 975 (Telmalestes).
- Morton, D. J. 1924 A, 25.
- Osborn, H. F. 1901 D, 623.  
1902 C, 176, 191, 194, figs. 3, 20, 23 (Notharctus); 190 (Limnotherium).  
1907 G, 89, 160, figs. 43, 128, 132, 133, 214.  
1909 D, 46, 47.  
1910 B, 625, fig. 61.  
1912 G, 236, fig. 3.  
1924 A, 175.  
1925 C, 750.
- Osborn, H. F. 1928 B, 193.
- Ossenkopp, G. J. 1925 A, 433.
- Palmer, T. S. 1904 A, 327, 901 (Hipposyus); 377, 901 (Limnotherium); 461, 901 (Notharctus); 667, 901 (Telmalestes); 674, 901 (Thinolestes); 682, 901 (Tomitherium).
- Schlosser, M. 1898 D, 122 (Tomitherium).  
1902 D, 302 (Tomitherium).  
1911 A, 67.  
1921 A, 107.
- Schuchert and Levene 1927 A, 335, fig.
- Scott, W. B. 1913 A, 579.
- Stehlin, H. G. 1912 A, 1288.  
1916 B, 1518.
- Stromer, E. 1902 B, 555 (Tomitherium).
- Thacker, A. G. 1922 A, 604.
- Trouessart, E. L. 1904 A, 40.
- Troxell, E. L. 1926 A, 423.
- Wallace, A. R. 1876 A, I, 133 (Limnotherium).
- Weber, M. 1904 A, 763.
- Weber and Abel 1928 A, 741, 797, fig. 523.
- Weber and Burlet 1927 A, 138.
- Winge, H. 1924 A, 253, 259, 310.
- Woodward, A. S. 1920 C, 465.
- Wortman, J. L. 1901 C, 209.  
1903 A, xv, 410 (Notharctus, Limnotherium).
- Zittel and Schlosser 1911 A, 547.  
1923 A, 639, 640, 647, 668.

## Notharctus affinis (Marsh).

- Hay, O. P. 1902 A, 788 (Tomitherium).
- Granger and Gregory 1917 A, 850, pl. ciii, fig. 3; pl. cv, fig. 1.
- Gregory, W. K. 1917 D, 631.
- Matthew, W. D. 1909 C, 95.
- Osborn, H. F. 1902 C, 172, 197 (Limnotherium = ? Notharctus).
- Ossenkopp, G. J. 1925 A, 484.
- Trouessart, E. L. 1904 A, 41.  
Middle Eocene (Bridger); Wyoming.

## Notharctus anceps (Marsh).

- Hay, O. P. 1902 A, 794 (Thinolestes).
- Granger and Gregory 1917 A, 849, pl. civ, fig. 3; pl. cvi, figs. 2, 2a.
- Gregory, W. K. 1917 D, 631.
- Matthew, W. D. 1909 C, 95.
- Osborn, H. F. 1902 C, 172, 197.
- Ossenkopp, G. J. 1925 A, 484.
- Trouessart, E. L. 1904 A, 41.  
Middle Eocene (Bridger); Wyoming.

## Notharctus crassus (Marsh).

- Hay, O. P. 1902 A, 793 (Telmalestes).
- Granger and Gregory 1917 A, 841, 854; pl. ciii, fig. 9; pl. cv, fig. 6; pl. cvii, fig. 5.
- Gregory, W. K. 1917 D, 630.  
1921 A, 133, 152, 164, pls. xxxv-xxxvii, xxxix, xli, xlii, lix; text-figs. 38, 40, 42, 48, 62.  
1922 A, 541, figs. 60, 61, 63, 66, 149.
- Osborn, H. F. 1902 C, 172, 198.
- Ossenkopp, G. J. 1925 A, 467, 485, figs. 1, 2.
- Trouessart, E. L. 1904 A, 41.  
Middle Eocene (Bridger); Wyoming.

**Notharctus formosus** (Leidy).

Hay, O. P. 1902 A, 793 (Hipposyus).

Gregory, W. K. 1916 B, 262, fig. 1.  
1917 D, 631.

Merrill, G. P. 1907 A, 39 (Hipposyus).

Osborn, H. F. 1902 C, 172, 193 (To Notharctus?).

Trouessart, E. L. 1904 A, 41

Zittel and Schlosser 1923 A, 640, fig. 783.

Middle Eocene (Bridger); Wyoming.

**Notharctus matthewi** Granger and Gregory.*Granger and Gregory* 1917 A, 847, pl. ciii, fig. 1;  
pl. civ, fig. 1; pl. cvi, fig. 1.

Ossenkopp, G. J. 1925 A, 484.

Troxell, E. L. 1926 A, 428 (Syn. of *N. gracilis*).

Middle Eocene (Bridger); Wyoming.

**Notharctus nunienum** (Cope).*Cope, E. D.* 1881 D, 187 (Pelycodus).

Hay, O. P. 1902 A, 789 (Pelycodus frugivorus, in part).

Abel, O. 1913 B, 755 b, fig. 111 (*N. nunienus*).Bolk, L. 1914 A, 132, fig. 42 (*P. nunienus*).Granger and Gregory 1917 A, 845 (*N. nunienus*).Gregory, W. K. 1917 D, 631 (*N. nunienus*).1921 A, 14, 185, pls. xxxv, xxxvi (*N. nunienus*).1922 A, pl. vii (*N. nunienus*).Loomis, F. B. 1906 A, 282, 285, fig. 5 (*P. nunienus*).Matthew, W. D. 1909 C, 92 (*N. nunienus*).1915 E, 442, 444, fig. 19 (*N. nunienus*).Osborn, H. F. 1902 C, 175, 191, 194, fig. 20 (Pelycodus *nunienus*); 195, fig. 20 (Notharctus *nunienus*).Ossenkopp, G. J. 1925 A, 483 (*N. nunienus*).

Stehlin, H. G. 1916 B, 1476 (Pelycodus).

Trouessart, E. L. 1904 A, 40 (*N. nunienus*).Weber and Abel 1928 A, 741, fig. 523 (*N. nunienus*).

Lower Eocene (Wind River); Wyoming.

**Notharctus osborni** Granger and Gregory.*Granger and Gregory* 1917 A, 848, pl. ciii, fig. 2;  
pl. civ, fig. 2.

Gregory, W. K. 1919 B, 423, fig. 6.

1921 A, 61, 77, 169, pls. xxiii, xxv, xxix, xxx-xxxii, xxxiv-xxxvii, xxxix, xli, xlv, xlv, xlix, liii, liv, lvi; text-figs. 1, 6, 8, 10, 12, 15-17, 22, 23, 26, 27, 30, 35, 40, 42, 49, 54, 56, 58, 78, 83, 84.

Gregory and Hellman 1926 A, pl. xxv, fig. 1.

Ossenkopp, G. J. 1925 A, 484.

Troxell, E. L. 1922 A, 542, pl. vi, fig. 3; text-figs. 56, 57, 59, 67, 150.

1926 A, 428.

1927 F, 356, fig.

1927 I, 551, fig. 2.

Weber and Abel 1928 A, 740, fig. 522.

Middle Eocene (Bridger); Wyoming.

**Notharctus pugnax** Granger and Gregory.*Granger and Gregory* 1917 A, 853, pl. ciii, fig. 8;  
pl. cv, fig. 4.

Gregory, W. K. 1917 D, 631.

1921 A, 98, 126, 133, 146, pls. xxxv, xxxvi, xlii; text-figs. 21, 32, 43.

Ossenkopp, G. J. 1925 A, 485.

Middle Eocene (Bridger); Wyoming.

**Notharctus relictus** (Gregory).*Gregory, W. K.* 1917 D, 630, 631 (Pelycodus).1921 A, 61, pls. xxxv, xxxvi, xl (*N. matthewi*).*Granger and Gregory* 1917 A, 847, pl. ciii, fig. 1;  
pl. civ, fig. 1; pl. cvi, fig. 1 (*N. matthewi*).

Middle Eocene (Bridger); Wyoming.

**Notharctus robustior** (Leidy).

Hay, O. P. 1902 A, 793 (Hipposyus).

Cope, E. D. 1872 PP, 3.

Merrill, G. P. 1907 A, 39 (Hipposyus); 50 (Notharctus).

Osborn, H. F. 1902 C, 172.

Trouessart, E. L. 1904 A, 41.

Middle Eocene (Bridger); Wyoming.

**Notharctus rostratus** Cope.*Cope, E. D.* 1872 PP, 2 (Tomtherium).

Hay, O. P. 1902 A, 788 (Tomtherium).

Gregory, W. K. 1914 F, 529.

1917 D, 631.

1921 A, 56 (Tomtherium).

Matthew, W. D. 1909 C, 95.

Osborn, H. F. 1902 C, 173, 197.

Trouessart, E. L. 1904 A, 41.

Middle Eocene (Bridger); Wyoming.

**Notharctus tenebrosus** Leidy.

Hay, O. P. 1902 A, 789.

Cope, E. D. 1872 PP, 3.

*Granger and Gregory* 1917 A, 851, pl. ciii, figs. 6, 7; pl. cv, figs. 2, 3.

Gregory, W. K. 1917 D, 631.

1921 A, 56, 77, 93, 94, 96, 156, pls. xxxvi, xlii, text-figs. 19, 51.

Matthew, W. D. 1909 C, 95.

Merrill, G. P. 1907 A, 50.

Osborn, H. F. 1902 C, 172, 196.

Ossenkopp, G. J. 1925 A, 484.

Trouessart, E. L. 1904 A, 41.

Wortman, J. L. 1901 C, 209.

Middle Eocene (Bridger); Wyoming.

**Notharctus tyrannus** (Marsh).

Hay, O. P. 1902 A, 789 (Limnotherium).

Cope, E. D. 1872 PP, 3.

*Granger and Gregory* 1917 A, 851, pl. cviii, fig. 4; pl. civ, fig. 6.

Gregory, W. K. 1917 D, 631.

1921 A, 80, 94, pl. xxiv, xxix, xxx, xxxiv, xlii, text-fig. 11.

1922 A, 138, figs. 64, 65.

1927 I, 555, fig. 7.

Matthew, W. D. 1909 C, 95.

Osborn, H. F. 1902 C, 172 (*Limnotherium*); 197 (*Notharctus*).

Ossenkopp, G. J. 1925 A, 484.

Trouessart, E. L. 1904 A, 41.

Troxell, E. L. 1926 A, 428.

Middle Eocene (Bridger); Wyoming.

#### **Notharctus nintensis (Osborn).**

Hay, O. P. 1902 A, 791 (*Microsyops*).

Granger and Gregory 1917 A, 856.

Gregory, W. K. 1922 A, 280 (This genus?).

Matthew, W. D. 1909 C, 98.

Osborn, H. F. 1902 C, 175, 202, fig. 27 ("Microsyops"?).

Ossenkopp, G. J. 1925 A, 485 (*Notharctus*); 494 (*Omomys*).

Schlosser, M. 1905 A, 334 (*Omomys*).

Trouessart, E. L. 1904 A, 40 (*Anaptomorphus*).

Wortman, J. L. 1904 A, 134 (*Omomys*).

Upper Eocene (Uinta); Utah; Middle (Bridger); Wyoming.

#### **APHANOLEMUR Granger and Gregory. Type *A. gibbosus* Granger and Gregory.**

*Granger and Gregory* 1917 A, 856.

Black, D. 1925 A, table.

Ossenkopp, G. J. 1925 A, 485.

Zittel and Schlosser 1923 A, 640.

#### **Notharctus venticolus Osborn.**

*Osborn, H. F.* 1902 C, 175, 195.

Granger and Gregory 1917 A, 846.

Gregory, W. K. 1917 D, 631.

1921 A, 125, 133, 139, 147, 156, 199, pl. xxxv, xxxvi; text-figs. 31, 40, 45, 52, 74, 76.

1922 A, 123, fig. 58.

Loomis, F. B. 1906 A, 284.

Matthew, W. D. 1909 C, 92.

1915 F, 442 (*Pelycodus*); 443, figs. 16-18 (*Notharctus*).

Ossenkopp, G. J. 1925 A, 483.

Stehlin, H. G. 1916 B, 1544.

Trouessart, E. L. 1904 A, 41.

Lower Eocene (Wind River); Wyoming.

#### **Notharctus sp. indet.**

Granger and Gregory 1917 A, 846. Eocene (Huerfano); Colorado.

Matthew, W. D. 1909 C, 95. Middle Eocene (Bridger); Wyoming.

Ossenkopp, G. J. 1925 A, 484. Eocene; Colorado.

#### **SMILODECTES Wortman. Type *Hyopsodus gracilis* Marsh.**

*Wortman, J. L.* 1903 A, xvi, 362.

Hubrecht, A. A. W. 1908 A, 161.

Matthew, W. D. 1909 C, 100.

Ossenkopp, G. J. 1925 A, 498.

Palmer, T. S. 1904 A, 635, 851.

Schlosser, M. 1905 A, 323, 332.

Troxell, E. L. 1926 A, 423, 428 (Syn. of *Notharctus*).

Wortman, J. L. 1903 A, xv, 401 (Name only).

Zittel and Schlosser 1911 A, 370.

1923 A, 449.

A genus of uncertain position; a synonym of *Notharctus* according to Troxell.

#### **Smilodectes gracilis (Marsh).**

*Hay, O. P.* 1902 A, 790 (*Hyopsodus*).

Matthew, W. D. 1909 C, 95 (*Smilodectes*); 99 (*Hyopsodus*).

Osborn, H. F. 1902 C, 172 (*To Sarcoulemur*); 198 (*Notharctus*).

Ossenkopp, G. J. 1925 A, 498.

Schlosser, M. 1905 A, 332.

Trouessart, E. L. 1904 A, 41 (*Notharctus*).

Troxell, E. L. 1926 A, 423, figs. 1-3 (*Notharctus*).

Wortman, J. L. 1903 A, xvi, 362, fig. 118.

Upper Eocene (Uinta); Utah.

#### **PROSINOPE Trouessart. Type *Sinopa eximia* Leidy.**

*Hay, O. P.* 1902 A, 788.

#### **Prosinopa eximia (Leidy).**

*Hay, O. P.* 1902 A, 788.

Osborn, H. F. 1902 C, 190, fig. 18 (*Sinopa*).

Trouessart, E. L. 1904 A, 41.

Middle Eocene (Bridger); Wyoming.

#### **Superfamily TARSIODÆ, new name.**

Abel, O. 1908 C, (36) (*Palæopithecinae*).

Gidley, J. W. 1922 A, 269 (*Tarsioidae*).

Gregory, W. K. 1915 A, 437 (*Tarsiiformes*, as "series").

1922 A, 546 (*Tarsioidae*).

1927 I, 549 ("tarsioids").

Henckel, K. O. 1927 A, 367 (*Tarsioidae*).

Ossenkopp, G. J. 1925 A, 468, 493 (*Tarsioidae*).

Schlosser, M. 1907 C, 222 (*Palæopithecinae*).

1911 A, 1540 ("palæopithecini").

Smith, G. E. 1920 A, 465 (*Tarsioidae*).

Stehlin, H. G. 1916 B, 1541 (*Tarsiiformes*); 1540 (*Palæopithecini*).

Weber and Abel 1928 A, 716, 746, 753, 896 (*Tarsioidae*).

Weber and Bulet 1927 A, xv (*Tarsioidae*).

Winge, H. 1924 A, 253, 254 (*Tarsioidae*).

Wortman, J. L. 1903 A, xv, 411 (*Palæopithecinae*).

1904 A, 25 (*Palæopithecinae*).

## TARSIIDÆ Burnett.

- Unless otherwise indicated the authors, as quoted, employ for this family the name Anaptomorphidæ.
- Burnett, G. T. 1828 A, 307 (Tarsiidæ).  
 Abel, O. 1908 C (36).  
     1913 B, 755b, 756.  
     1914 A, 255, 257.  
     1919 A, 875.  
 Ameghino, F. 1889 A, 893.  
 Arldt, T. 1907 D, 637.  
     1907 E, 208 ("anaptomorphiden").  
     1912 A, 698.  
 Beddard, F. E. 1902 A, 550 (Tarsiidæ); 552 (Anaptomorphidæ).  
 Bluntshli, H. 1911 A, 122 (Tarsiidæ).  
 Brown, A. E. 1901 A, 123.  
 Carter, J. T. 1922 A, 607, pl. iii, fig. 1; pl. iv, fig. 1 (Tarsius).  
 Cope, E. D. 1883 I, 80.  
 Cunningham, J. T. 1920 A, 495 (Tarsius).  
 Depéret, C. 1907 B ("anaptomorphidés").  
     1912 A, 707 ("anaptomorphidés").  
 Earle, C. 1897 A, 569 (Tarsius).  
 Elliot, S. G. 1921 A, 185, pl. i (Tarsiidæ, Tarsioidæ).  
 Fischer, E. 1905 B, 397 (Tarsius).  
 Gidley, J. W. 1923 A, 3, 22.  
 Gregory, W. K. 1914 F, 529 (Anaptomorphidæ, Tarsiidæ).  
     1915 A, 426, 438 (Tarsiidæ).  
     1916 B, 267 (Tarsiidæ).  
     1920 A, 204 (Tarsiidæ).  
     1921 A, 221 (Tarsiidæ).  
     1922 A, 112, 546.  
 Gregory and Hellman 1926 A, 12.  
 Hill, J. P. 1920 A, 476 (Tarsius).  
 Hrdlička, A. 1924 A, 126 (Tarsii).  
 Hubrecht, A. A. W. 1897 A, 6, figs. 1, 2, 4-6 (Tarsius).  
 Kingsley, J. S. 1925 A, 219, figs. 231, 272, 323.  
 Leche, W. 1900 A, 1025, fig. 103 (Tarsius).  
 Loomis, F. B. 1906 A, 277.  
     1911 C, 481.  
 MacBride, E. W. 1920 A, 497 (Tarsius).  
 Matthew, W. D. 1906 B, 361.  
     1909 C, 93, 95, 100.  
     1909 D, 298, 549.  
     1914 B, 387.  
     1915 A, 215.  
     1915 F, 445, 447 (Tarsiidæ).  
     1915 K, 44.  
     1921 D, 214.  
     1928 B, 957 ("tarsioid primates").  
 Mitchell, P. C. 1920 A, 496 (Tarsius).  
 Mivart, St. G. 1874 B, 69, 81, 83.  
 Morton, D. J. 1924 A, 24 (Tarsius).  
 Osborn, H. F. 1901 D, 623.  
     1902 C, 176, 199.  
     1905 I, 101.  
     1909 D, 46, 52.  
     1910 B, 161, 543.  
 Palacký, J. 1899 A, 1 (Tarsiidæ).  
 Palmer, T. S. 1905 A, 890 (Anaptomorphidæ); 903 (Tarsiidæ).  
 Pia, J. 1916 A, 128 ("tarsier").  
 Pocock, R. I. 1920 A, 494 (Tarsius).  
 Schlosser, M. 1905 A, 333.  
     1907 C, 215, 222.  
 Scott, W. B. 1913 A, 578.  
 Simpson, G. G. 1928 A, 9.  
 Smith, G. E. 1920 A, 465 (Tarsius).  
 Stehlin, H. 1912 A, 1286 ("anaptomorphiden").  
     1916 B, 1389 ("tarsiiden"); 1540 (Anaptomorphidæ).  
 Terra, P. 1911 A, 346.  
 Thacker, A. G. 1922 A, 604 (Anaptomorphidæ).  
 Todd, T. W. 1922 A, 273.  
 Weber, M. 1904 A, 763.  
 Winge, H. 1924 A, 253, 259 (Tarsiini).  
 Wood-Jones, F. 1920 A, 491 (Tarsius).  
 Woodward, A. S. 1920 C, 465 (Tarsius).  
 Wortman, J. L. 1903 A, xv, 411.  
     1904 A, 29.  
 Wright, R. R. 1883 A, 489, fig. 228.  
 Zittel and Schlosser 1911 A, 548.

## ANAPTOMORPHINÆ.

- Abel, O. 1908 C (36).  
     1922 C, 294 ("anaptomorphiden").  
 Black, D. 1925 A, 143 (Anaptomorphidæ).  
 Gregory, W. K. 1914 F, 529.  
     1927 I, 557, 559 ("anaptomorphs").  
 Gregory and Hellman 1926 A, 103.  
 Pia, J. 1916 A, 129 ("anaptomorphiden").  
 Schlosser, M. 1905 A, 335.  
     1907 C, 215, 222.  
     1911 A, 81.  
 Stehlin, H. G. 1916 B, 1540.  
 Wortman, J. L. 1904 A, 29, 208.  
 Zittel and Schlosser 1923 A, 644, 666, 667.

CARPODAPTES Matthew and Granger. Type *C. aulacodon* Matthew and Granger.

- Matthew and Granger 1921 A, 6.  
 Simpson, G. G. 1928 A, 8.  
     1928 D, 301.  
 A genus of uncertain position.

## Carpodaptes aulacodon Matthew and Granger.

- Matthew and Granger 1921 A, 6.  
 Reeside, J. B. 1924 A, 47.  
 Paleocene (Tiffany); Colorado.

CARPOLESTES Simpson. Type *C. nigridens* Simpson.

- Simpson, G. G. 1928 A, 7.  
     1928 D, 301.

## Carpolestes nigridens Simpson.

- Simpson, G. G. 1928 A, 7, fig. 5.  
 Upper Cretaceous (Fort Union); Montana.

OMOMYS Leidy. Type *O. carteri* Leidy.

- Hay, O. P. 1902 A, 788 (Omomys); 794 (Palaeocodon).  
 Adloff, P. 1927 A, 443, fig. 7.  
 Black, D. 1925 A, table.  
 Bluntschli, H. 1911 A, 122.  
 1912 B, 357.  
 Chardin, P. T. 1924 A, 13.  
 1927 A, 16, pls iii, iv; text-figs. 12-14.  
 Dollo and Chardin 1924 A, 13, 14.  
 Gidley, J. W. 1923 A, 9, 21.  
 Gregory, W. K. 1915 A, 438.  
 1916 A, 244, pls. I, O; text-fig. 10.  
 1918 A, 8.  
 1921 A, 219.  
 1922 A, 138, 190, 514.  
 Haug, E. 1911 A, 1528.  
 Heilprin, A. 1887 A, 348 (Palaeocodon).  
 Matthew, W. D. 1909 C, 100.  
 1915 F, 447, 448, figs. 20, 21.  
 1918 H, 567.  
 1928 B, 966, 976, fig. 14.  
 Ossenköpp, G. J. 1925 A, 494, 495, 502.  
 Palmer, T. S. 1904 A, 476, 901 (Omomys); 497, 851 (Palaeocodon).  
 Pia, J. 1916 A, 129.  
 Schlosser, M. 1905 A, 333.  
 1907 C, 216.  
 1911 A.  
 Stehlin, H. G. 1916 B, 1388, 1404, 1539.  
 Troxell, E. L. 1926 A, 426.  
 Weber, M. 1904 A, 763 (Palaeocodon).  
 Weber and Abel 1928 A, xxi, 754, 758.  
 Wortman, J. L. 1903 A, xv, 408.  
 1904 A, 27, 29, 211.  
 Zittel and Schlosser 1911 A, 548.  
 1923 A, 645, 666.
- Omomys ameghini Wortman.**  
 Wortman, J. L. 1904 A, 134; fig. 127.  
 Matthew, W. D. 1909 C, 95.  
 Ossenköpp, G. J. 1925 A, 494.  
 Schlosser, M. 1905 A, 334 (O. ameghini).  
 Stehlin, H. G. 1916 B, 1411.  
 Middle Eocene (Bridger); Wyoming.
- Omomys carteri Leidy.**  
 Hay, O. P. 1902 A, 788 (O. carteri); 787 (Antiacodon nanus).  
 Gregory, W. K. 1921 A, 55.
- Hayden, F. V. 1871 A, 145.  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1902 C, 172, 173, 190, 200, fig. 19.  
 Ossenköpp, G. J. 1925 A, 494.  
 Schlosser, M. 1905 A, 333.  
 1907 C, 216.  
 Stehlin, H. G. 1916 B, 1410.  
 Wortman, J. L. 1904 A, 30, figs. 120-122.  
 Middle Eocene (Bridger); Wyoming.
- Omomys minutus (Loomis).**  
 Loomis, F. B. 1906 A, 283-285, fig. 6 (Notharcus).  
 Matthew, W. D. 1909 C, 93 (Omomys?).  
 1915 F, 442, 449.  
 Ossenköpp, G. J. 1925 A, 495.  
 Stehlin, H. G. 1916 B, 1544.  
 Lower Eocene (Wind River); Wyoming.
- Omomys pucillus (Marsh).**  
 Hay, O. P. 1902 A, 794 (Hemiacodon).  
 Matthew, W. D. 1909 C, 95.  
 Osborn, H. F. 1902 C, 173, 190.  
 Ossenköpp, G. J. 1925 A, 494.  
 Schlosser, M. 1905 A, 333 (O. pusillus).  
 Stehlin, H. G. 1916 B, 1410.  
 Wortman, J. L. 1904 A, 133; figs. 124-126.  
 Middle Eocene (Bridger); Wyoming.
- Omomys vagus (Marsh).**  
 Hay, O. P. 1902 A, 794 (Palaeocodon).  
 Matthew, W. D. 1909 D, 298 (Syn. of O. carteri).  
 Osborn, H. F. 1902 C, 173, 200 (Omomys?).  
 Trouessart, E. L. 1904 A, 291 (Palaeocodon).  
 Wortman, J. L. 1904 A, 30, 33, fig. 123 (Syn. of O. carteri).  
 Middle Eocene (Bridger); Wyoming.
- Omomys vespertinus Matthew.**  
 Matthew, W. D. 1915 F, 450; figs. 22, 23 (This genus?).  
 Ossenköpp, G. J. 1925 A, 495.  
 Stehlin, H. G. 1916 B, 1410.  
 Lower Eocene (Wasatch); New Mexico, Wyoming.
- Omomys sp. indet.**  
 Gregory, W. K. 1922 A, 187. Eocene (Bridger); Wyoming.

HEMIACODON Marsh. Type *H. gracilis* Marsh.

- Hay, O. P. 1902 A, 794.  
 Black, D. 1925 A, table.  
 Bluntschli, H. 1911 A, 122.  
 1912 B, 357.  
 Carter, J. T. 1922 A, 604, 607, pl. vi, fig. 1.  
 Gidley, J. W. 1917 B, 59.  
 1923 A, 9.  
 Granger, W. 1909 A, 22.  
 Granger and Gregory 1917 A, 827, 856.  
 Gregory, W. K. 1915 A, 426, 438.  
 1922 A, 537.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 100.  
 1915 F, 447, 451.
- Matthew, W. D. 1913 H, 567.  
 Osborn, H. F. 1910 B, 543.  
 Ossenköpp, G. J. 1925 A, 495, 501, 502.  
 Palmer, T. S. 1904 A, 316, 390.  
 Schlosser, M. 1905 A, 329, 332.  
 1907 C, 216.  
 1911 A.  
 Scott, W. B. 1913 A, 578.  
 Stehlin, H. G. 1916 B, 1388, 1431, 1536, 1539.  
 Weber and Abel 1928 A, 754, 758.  
 Wortman, J. L. 1903 A, xv, 408.  
 1904 A, 27, 29, 211.  
 Zittel and Schlosser 1911 A, 548.  
 1923 A, 645 (Syn. of Omomys).

**Hemiadon gracilis** Marsh.

- Hay, O. P. 1902 A, 794.  
 Gregory, W. K. 1922 A, 190, figs. 113, 114.  
 Matthew, W. D. 1909 C, 95.  
     1915 F, 452, fig. 24.  
 Osborn, H. F. 1902 C, 173, 190 (To Omomys).  
 Ossenkopp, G. J. 1925 A, 495.  
 Schlosser, M. 1905 A, 334.  
 Wortman, J. L. 1903 A, xv, 408.  
     1904 A, 135, figs. 128-131.  
     Middle Eocene (Bridger); Wyoming.

**Hemiadon pygmaeus** Wortman.

- Wortman, J. L. 1904 A, 138, fig. 132.  
 Matthew, W. D. 1909 C, 95.  
 Ossenkopp, G. J. 1925 A, 495.  
 Schlosser, M. 1905 A, 334.  
     Middle Eocene (Bridger); Wyoming.

**Hemiadon sp. indet.**

- Gidley, J. W. 1918 B, 59. Lower Eocene (Wasatch); Colorado.  
 Reeside, J. B. 1924 A, 46. Lower Eocene (Wasatch); Colorado.

**UINTANIUS** Matthew. Type *U. turriculorum* Matthew.

- Matthew, W. D. 1915 F, 448, 455.  
 Gregory, W. K. 1915 A, 438.  
     1922 A, 198.  
 Ossenkopp, G. J. 1925 A, 495, 502.  
 Simpson, G. G. 1928 A, 10.  
 Stehlin, H. G. 1916 B, 1387, 1404, 1432.  
 Weber and Abel 1928 A, 751, 754, 759.  
 Zittel and Schlosser 1923 A, 645.

**Uintanius turriculorum** Matthew.

- Matthew, W. D. 1915 F, 455, 456, figs. 27, 28.  
 Gregory, W. K. 1922 A, 199, fig. 125.  
 Ossenkopp, G. J. 1925 A, 495.  
 Stehlin, H. G. 1916 B, 1544.  
     Middle Eocene (Bridger); Wyoming.

**WASHAKIUS** Leidy. Type *W. insignis* Leidy.

- Leidy, J. 1873 B, 123.  
 Hay, O. P. 1902 A, 787 (Anaptomorphus, in part).  
 Black, D. 1925 A, table.  
 Bluntschli, H. 1912 B, 370.  
 Gidley, J. W. 1923 A, 21.  
 Gregory, W. K. 1915 A, 438.  
     1921 A, 220.  
     1922 A, 192.  
 Haug, E. 1911 A, 1528.  
 Matthew, W. D. 1909 C, 100.  
     1915 F, 453.  
 Osborn, H. F. 1910 B, 130, 134, 543.  
 Ossenkopp, G. J. 1925 A, 495, 502.  
 Palmer, T. S. 1904 A, 709, 890.  
 Schlosser, M. 1905 A, 329, 335.  
     1907 C, 215, 217.  
     1911 A, 58.  
 Stehlin, H. G. 1916 B, 1320, 1388, 1395, 1432, 1536, 1539.  
 Wallace, A. R. 1876 A, x, 134.

- Weber, M. 1904 A, 763.  
 Weber and Abel 1928 A, 754, 758.  
 Winge, H. 1924 A, 238.  
 Wortman, J. L. 1903 A, xv, 408.  
     1904 A, 28, 208.  
 Zittel and Schlosser 1911 A, 549.  
     1923 A, 645.

**Washakius insignis** Leidy.

- Hay, O. P. 1902 A, 787 (Anaptomorphus).  
 Bluntschli, H. 1912 B, 369, fig. 11.  
 Gregory, W. K. 1922 A, 193, figs. 115, 116.  
 Matthew, W. D. 1909 C, 95.  
     1915 F, 453, fig. 25.  
 Osborn, H. F. 1902 C, 173, 200, fig. 23a.  
 Ossenkopp, G. J. 1925 A, 495.  
 Schlosser, M. 1905 A, 335.  
 Stehlin, H. G. 1916 B, 1395.  
 Trouessart, E. L. 1904 A, 40 (Anaptomorphus).  
 Wortman, J. L. 1904 A, 208, figs. 142-146.  
     Middle Eocene (Bridger); Wyoming.

**SHOSHONIUS** Granger. Type *S. cooperi* Granger.

- Granger, W. 1910 A, 249.  
 Black, D. 1925 A, table.  
 Gregory, W. K. 1915 A, 438.  
 Matthew, W. D. 1915 F, 454.  
     1928 B, 976, fig. 14.  
 Osborn, H. F. 1912 G, 236, fig. 3.  
 Ossenkopp, G. J. 1925 A, 490, 502.  
 Stehlin, H. G. 1916 B, 1320, 1431, 1536, 1539.  
 Zittel and Schlosser 1923 A, 645.

**Shoshonius cooperi** Granger.

- Granger, W. 1910 A, 249, fig. 5.  
 Gregory, W. K. 1922 A, 194, fig. 117.  
 Matthew, W. D. 1915 F, 454, fig. 26.  
 Ossenkopp, G. J. 1925 A, 496.  
 Stehlin, H. G. 1916 B, 1544.  
 Weber and Abel 1928 A, 754, fig. 531.  
     Lower Eocene (Wind River); Wyoming.

**ANAPTOMORPHIUS** Cope. Type *A. æmulus* Cope.

- Cope, E. D. 1872 TT, 1.  
 Hay, O. P. 1902 A, 787.  
 Abel, O. 1908 C, (37).  
     1913 B, 756.  
     1914 A, 257, 258.  
 Adloff, P. 1903 A, 362, fig. 4.  
 Ameghino, F. 1906 A, 428.  
 Beddard, F. E. 1902 A, 552.

- Black, D. 1925 A, table.  
 Bluntschli, H. 1912 A, 134.  
 Case, E. C. 1899 B, 133.  
 Chapman, H. C. 1904 A, 150, 153.  
 Cope, E. D. 1880 U, 153.  
 Earle, C. 1897 A, 682.  
     1897 B, 309.  
 Gregory, W. K. 1912 C, 195.



Gregory, W. K. 1913 C, 252.

1915 A, 426, 438.

1916 A, 252.

1922 A, 531.

1927 A, 603 ("anaptomorphids").

Haug, E. 1911 A, 1528.

Heilprin, A. 1887 A, 349, 403.

Hubrecht, A. A. W. 1897 A, 6, 7.

1903 A, 160.

Loomis, F. B. 1905 C, 296.

1906 A, 277.

1911 C, 479.

Matthew, W. D. 1909 C, 100.

1915 F, 456.

1915 K, 420.

1916 I, 109.

Osborn, H. F. 1902 C, 200.

1902 D, 265, fig. 4.

1907 G, 89, 158; figs. 38, 40, 43, 127, 129, 130, 213.

1910 B, 127, 134, 543.

1912 G, 236, fig. 3.

Ossenkopp, G. J. 1925 A, 496.

Palacký, J. 1899 A, 1 (Anaptomorphus).

1902 B, 151.

Palmer, T. S. 1904 A, 100, 890.

Schlosser, M. 1898 B, 363.

1905 A, 329, 335.

1907 C, 215.

1911 A.

Scott, W. B. 1913 A, 281, 581, 675.

Seeley, H. G. 1886 A, 417.

Smith, G. E. 1920 A, 470.

Stehlin, H. G. 1916 B, 1384, 1388.

Thompson, A. H. 1900 A, 921.

1906 A, 262.

Weber, M. 1904 A, 763.

Weber and Abel 1928 A, 753, 759.

Winge, H. 1924 A, 253, 258, 310, 312.

Woodward, A. S. 1920 C, 465.

Wortman, J. L. 1903 A, xv, 407.

1904 A, 28, 140, 208.

Zittel and Schlosser 1911 A, 548.

1923 A, 645.

### **Anaptomorphus æmulus Cope.**

Cope, E. D. 1872 TT, 1.

Hay, O. P. 1902 A, 787.

Bluntschli, H. 1911 A, 134.

Gregory, W. K. 1921 A, 56.

Loomis, F. B. 1906 A, 277.

Matthew, W. D. 1909 C, 95.

1915 F, 457, fig. 29.

Osborn, H. F. 1902 C, 173, 177, 202, figs. 4, 26.

Ossenkopp, G. J. 1925 A, 496.

Schlosser, M. 1905 A, 335.

1911 A.

Seeley, H. G. 1886 A, 417, fig.

Stehlin, H. G. 1916 B, 1384.

Trouessart, E. L. 1904 A, 39.

Wortman, J. L. 1904 A, 140, 211.

Middle Eocene (Bridger); Wyoming.

### **Anaptomorphus minimus Loomis.**

Loomis, F. B. 1906 A, 278, 279, fig. 1.

1907 B, 356 (Anaptomorpha).

Matthew, W. D. 1909 C, 93.

Lower Eocene (Wasatch); Wyoming.

### **EURYACODON Marsh. Type *E. lepidus* Marsh.**

Hay, O. P. 1902 A, 741.

Matthew, W. D. 1909 C, 100.

1915 F, 457.

Palmer, T. S. 1904 A, 279, 871.

Schlosser, M. 1905 A, 333.

1907 C, 216.

1911 A, 66.

Stehlin, H. G. 1916 B, 1388, 1421, 1431 ("=Anaptomorphus?").

Weber and Abel 1928 A, 755.

Wortman, J. L. 1903 A, xv, 407.

1904 A, 27, 29.

Zittel and Schlosser 1923 A, 645 (Syn. of Omomys).

### **Euryacodon lepidus Marsh.**

Hay, O. P. 1902 A, 741.

Matthew, W. D. 1909 C, 95.

Schlosser, M. 1905 A, 334.

1911 A, 70.

Ossenkopp, G. J. 1925 A, 496.

Wortman, J. L. 1904 A, 139, figs. 133, 134.

Middle Eocene (Bridger); Wyoming.

### **PALÆCHTHON Gidley. Type *P. alticuspis* Gidley.**

Gidley, J. W. 1923 A, 6.

Simpson, G. G. 1927 B, 5.

Weber and Abel 1928 A, 759.

### **Palæchthon alticuspis Gidley.**

Gidley, J. W. 1923 A, 6, pl. i, fig. 1.

Ossenkopp, G. J. 1925 A, 498.

Paleocene (Fort Union); Montana.

### **Palæchthon minor Gidley.**

Gidley, J. W. 1923 A, 7, 11, pl. iv, fig. 1.

Ossenkopp, G. J. 1925 A, 498.

Paleocene (Fort Union); Montana.

### **ABSAROKIUS Matthew. Type *Anaptomorphus abbotti* Loomis.**

Matthew, W. D. 1915 F, 463.

Black, D. 1925 A, table.

Ossenkopp, G. J. 1925 A, 496, 502.

Simpson, G. G. 1928 A, 10.

Stehlin, H. G. 1916 B, 1386, 1404, 1431.

Zittel and Schlosser 1923 A, 645.

### **Absarokius abbotti (Loomis).**

Loomis, F. B. 1906 A, 278, 279, fig. 2 (Anaptomorphus).

Matthew, W. D. 1909 C, 93 (Anaptomorphus).

1915 F, 463, fig. 35.

Ossenkopp, G. J. 1925 A, 496.

Stehlin, H. G. 1916 B, 1386, 1544.  
Zittel and Schlosser 1923 A, 645.  
Lower Eocene (Wind River); Wyoming.

**PAROMOMYS** Gidley. Type *P. maturus* Gidley.

Gidley, J. W. 1923 A, 3, 10.  
Ossenkopp, G. J. 1925 A, 497.  
Simpson, G. G. 1927 B, 5.  
Weber and Abel 1928 A, 759.

**Paromomys depressidens** Gidley.

Gidley, J. W. 1923 A, 4, pl. iii, fig. 7; text-fig. 3.

**TETONIVIVIPARUS** Matthew. Type *Anaptomorphus homunculus* Cope.

Matthew, W. D. 1915 F, 457.  
Black, D. 1925 A, table.  
Granger and Gregory 1917 A, 857.  
Gregory, W. K. 1915 A, 433.  
1920 A, 204, fig. 191.  
1921 A, 197.  
1922 A, 547.  
Matthew, W. D. 1918 H, 566.  
1923 B, 966, 976, fig. 14.  
Ossenkopp, G. J. 1925 A, 496.  
Simpson, G. G. 1928 A, 10.  
Stehlin, H. G. 1916 B 1404, 1431, 1506, 1536.  
Weber and Abel 1928 A, 753, 754, 759.  
Winge, H. 1924 A, 257.  
Zittel and Schlosser 1923 A, 644, 666.

**Tetoniviviparus ambiguus** Matthew.

Matthew, W. D. 1915 F, 462, fig. 32.  
Ossenkopp, G. J. 1925 A, 497.  
Stehlin, H. G. 1916 B, 1544.  
Lower Eocene (Wasatch); Wyoming.

**Tetoniviviparus homunculus** (Cope).

Unless otherwise indicated the authors, as quoted, use the generic name *Anaptomorphus*.  
Hay, O. P. 1902 A, 787.  
Abel, O. 1913 B, 756, figs. 112, 113.  
1914 A, 259, figs. 235, 236.  
1922 C, 294, fig. 248.  
Bluntschli, H. 1912 B, 369, fig. 12.  
Boule, M. 1923 A, 78, 80, 454.  
Cope, E. D. 1885 EE, 609, fig. 2.  
Gregory, W. K. 1915 A, 430.  
1921 A, pl. li (Tetoniviviparus).

**ELPHIDOTARSIVIVIPARUS** Gidley. Type *E. florencae* Gidley.

Gidley, J. W. 1923 A, 10, 22.  
Simpson, G. G. 1928 A, 10.  
Weber and Abel 1928 A, 759.

**NAVAJOVIVIPARUS** Matthew and Granger. Type *N. kohlhaasae* Matthew and Granger.

Matthew and Granger 1921 A, 5.  
Black, D. 1925 A, table.  
Ossenkopp, G. J. 1925 A, 498.  
Zittel and Schlosser 1923 A, 645.

**Absarokiviviparus noctivagus** Matthew.

Matthew, W. D. 1915 F, 465, figs. 36, 37.  
Stehlin, H. G. 1916 B, 1386, 1544.  
Lower Eocene (Wind River); Wyoming.

Ossenkopp, G. J. 1925 A, 498.  
Paleocene (Fort Union); Montana.

**Paromomys maturus** Gidley.

Gidley, J. W. 1923 A, 3, pl. i, fig. 3; pl. ii, figs. 2, 3; text-figs. 1, 2.  
Ossenkopp, G. J. 1925 A, 497.  
Paleocene (Fort Union); Montana.

Gregory, W. K. 1922 A, 187, figs. 118, 119, 121, 123.  
Henckel, K. O. 1927 A, 366.  
Hubrecht, A. A. W. 1897 A, 6, fig. 3.  
Loomis, F. B. 1906 A, 277, 278, 279.  
Matthew, W. D. 1909 C, 93, 459.  
1915 F, 457, 459, figs. 30, 31.  
Osborn, H. F. 1902 C, 175, 200, figs. 24, 25.  
Ossenkopp, G. J. 1925 A, 496.  
Schlosser, M. 1911 A.  
Scott, W. B. 1913 A, 581, fig. 285.  
Seeley, H. G. 1886 A, 417, fig.  
Stehlin, H. G. 1916 B, 1384.  
Trouessart, E. L. 1904 A, 40.  
Weber, M. 1904 A, 763, fig. 547.  
Weber and Abel 1928 A, 753, fig. 532.  
Wortman, J. L. 1903 A, xv, 407 (*Anaptomorphus* or *Eurysacodon*).  
1904 A, 23, 212.  
Zittel and Schlosser 1911 A, 548, fig. 742 (*Anaptomorphus*).  
1923 A, 644, fig. 787.  
Lower Eocene (Wasatch); Wyoming.

**Tetoniviviparus musculus** Matthew.

Matthew, W. D. 1915 F, 463, figs. 33, 34.  
Gregory, W. K. 1922 A, 187.  
Ossenkopp, G. J. 1925 A, 497.  
Stehlin, H. G. 1916 B, 1386, 1544.  
Lower Eocene (Wind River); Wyoming.

**Tetoniviviparus rex** Gidley.

Gidley, J. W. 1923 A, 11, pl. iii, fig. 4.  
Ossenkopp, G. J. 1925 A, 497.  
Paleocene (Fort Union); Montana.

**Elphidotarsiviviparus florencae** Gidley.

Gidley, J. W. 1923 A, 10, pl. iv, fig. 2.  
Ossenkopp, G. J. 1925 A, 497.  
Paleocene (Fort Union); Montana.

**Navajoviviparus kohlhaasae** Matthew and Granger.

Matthew and Granger 1921 A, 5.  
Ossenkopp, G. J. 1925 A, 498.  
Reeside, J. B. 1924 A, 47.  
Paleocene (Tiffany); Colorado.

## Suborder ANTHROPIFORMES, new name.

- Abel, O. 1919 A, 877 (Anthropoidea).  
 1920 A, 453 (Anthropoidea).  
 Adloff, P. 1927 A, 431 ("anthropoiden").  
 Appleton, A. B. 1922 A, 295 ("chimpanzee," etc.).  
 Arldt, T. 1907 D, 144, 609 (Anthropomorpha).  
 Beyer, H. 1908 A, 88 ("affen").  
 Bolk, L. 1922 A, 119 (Anthropoidea).  
 1923 A, 16 ("anthropoids").  
 Boule, M. 1923 A, 487 ("anthropoid apes").  
 Carus and Engelmann 1861 A, 1303, 1687, 1793 (Quadruman, in part).  
 Clark and Sonntag 1926 A, 461 (Anthropoidea).  
 Cope, E. D. 1891 N, 79, 90 (Anthropomorpha).  
 Cunningham, J. T. 1920 A, 496 ("apes").  
 Earle, C. 1897 A, 685 ("apes").  
 Eggeling, H. 1922 A, 50 ("menschenaffen").  
 Falconer, H. 1868 A, 307 (Quadruman).  
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 Fischer, J. B. 1829 A, 8 (Quadruman).  
 Gill, T. 1872 A, 296 (Anthropoidea).  
 1872 B, 1 (Anthropoidea).  
 Gregory, W. K. 1922 A, 531 (Anthropoidea).  
 1924 B, 421 ("gorilla").  
 1927 A, 602 ("anthropoids").  
 1927 F, 297 ("anthropoid apes").  
 1927 I, 549, 560 ("anthropoids").  
 1927 J, 440, 445, 455 ("anthropoids").  
 Hill, J. P. 1920 A, 479 ("anthropoids").  
 Hrdlička, A. 1920 A, 461 ("apes").  
 Kaempfert, W. 1927 A, 8.  
 Kunster and Chaine 1906 A, 100 ("singes").  
 Lankester, E. R. 1924 A, 10 ("gorilla").  
 Leche, W. 1900 A, 1035 ("anthropomorphen").  
 Lydekker, R. 1885 B, 1 (Anthropoidea).  
 MacBride, E. W. 1920 A, 498 ("apes"). \*  
 Major, C. J. F. 1872 A, 160 (Anthropomorpha).  
 1880 A, 42 ("platyrhinen," "catarrhinen").  
 Mivart, St. G. 1874 B, 9, 69, 83 (Anthropoidea).  
 Osborn, H. F. 1910 B, 544 (Anthropoidea).  
 1922 D, 721, 722 (Anthropoidea).  
 1925 B, 18 (Anthropoidea).  
 1927 A ("anthropoid apes").  
 1928 B, 192 (Anthropoidea).  
 Ossenkopp, G. J. 1925 A, 469 (Anthropoidea).  
 Owen, R. 1859 C, 8 ("anthropoid apes").  
 1866 B, 511-553 (Quadruman).  
 1868 A, 313-322 (Quadruman).  
 Perrier, E. 1920 A, 372 ("singes").  
 Pilgrum, G. E. 1915 A, 54 (Anthropoidea).  
 Remane, A. 1921 A, 335 ("anthropoiden").  
 1922 A ("anthropoiden").  
 Reynolds, S. H. 1897 A, 532 (Anthropoidea).  
 Schlosser, M. 1887 B, 9 (Anthropomorpha).  
 1911 A, 60, 62, 145 (Anthropoidea).  
 Scott, W. B. 1913 A, 573 (Anthropoidea).  
 Smith, G. E. 1920 A, 467 (Anthropoidea).  
 Terra, P. 1911 A, 352 (Anthropoidea).  
 Thacker, A. G. 1922 A, 603 (Anthropoidea).  
 1923 A, 334 (Anthropoidea).  
 Wallis, W. D. 1925 A, 62 ("apes").  
 Weber and Abel 1928 A, 716, 880, 881 (Anthropoidea); 784, 811, 881 (Anthropomorpha).  
 Weber and Burlet 1927 A, xv (Anthropoiden).  
 Weidenreich, F. 1922 B, 60 ("anthropomorphen").  
 Winge, H. 1924 A, 271, 310 (Simiidae).  
 Wood-Jones, F. 1920 A, 491 (Anthropoidea).  
 Woodward, A. S. 1898 B, 406 (Anthropoidea).  
 1917 D, lix (Anthropoidea).  
 Worthmann, F. 1922 A, 307 ("affen").  
 Wortman, J. L. 1903 A, 411 (Anthropoidea).  
 1904 A, 23 (Anthropoidea).  
 Wright, R. R. 1883 A, 493 (Anthropoidea).  
 Zittel and Schlosser 1911 A, 551 (Anthropoidea).  
 1923 A, 646 (Anthropoidea).

## Superfamily PONGOIDEÆ, new name.

- Bertelli, D. 1909 A, figs. 27, 33 (Simia).  
 Brauer, A. 1914 A, 269 (Catarrhini).  
 Freudenberg, W. 1923 A, 122 ("menschenaffen").  
 Geoffroy-St. Hilaire, E. F. 1912 A, 86 (Catarrhini).  
 Gill, T. 1872 A, 296 (Simiæ).  
 1872 B, 1 (Simiæ catarrhinæ).  
 Gregory, W. K. 1910 A, 321 (Simiæ).  
 1922 A, 533 (Catarrhinæ).  
 Gruber, W. 1873 A, 338 (Simiæ).  
 Hill-Tout, C. 1924 A, 236 ("anthropoid apes").  
 Hrdlička, A. 1924 A, 112 ("anthropoid apes").  
 Morton, D. J. 1924 A, 27 ("anthropoid apes").  
 Mysberg, W. A. 1917 A, 658 (Simiæ).  
 Owen, R. 1845 B, 1440, pls. cxvi-cxx (catarrhines").  
 Pocock, R. I. 1916 G, 548 (Catarrhini).  
 1920 A, 495 (Catarrhini).  
 Remane, A. 1922 A ("anthropoiden").  
 Smith, G. E. 1920 A, 475 ("catarrhines").  
 Terra, P. 1911 A, 351 (Catarrhini).  
 Thacker, A. G. 1914 A, 280 ("apes").  
 1922 A, 603, 605 (Catarrhina).  
 1923 A, 334 (Catarrhina).  
 Weber and Abel 1928 A, 797, 825 (Catarrhina).  
 Weber and Burlet 1927 A, xv (Catarrhina).  
 Wright, R. R. 1883 A, 510 (Catarrhini, Simiidae).  
 Zaaijer, T. 1894 A, 339 (Simiæ).  
 Zittel, K. A. 1893 B, 705 (Catarrhini); 708 (Anthropomorpha).  
 Zittel and Schlosser 1911 A, 555 (Simiidae).  
 1923 A, 651 (Simiidae).

## PONGOIDEÆ.

- Appleton, A. B. 1922 A, 297 (Simiidae).  
 Arldt, T. 1907 D, 638 (Anthropomorpha).  
 Black, D. 1925 A, 149 (Simiidae).  
 Boule, M. 1923 A, 69 (Simiidae).  
 Gill, T. 1872 A, 296 (Simiidae).  
 Gill, T. 1872 B, 1 (Simiidae).  
 Gregory, W. K. 1922 A, 302, 412 (Simiidae).  
 1927 G, 268, 272, fig. 1 ("chimpanzee").  
 1927 I, 550 (Simiidae).  
 1927 J, 451 (Simiidae).

- |   |   |
|---|---|
| <p>Gregory and Hellman 1926 A, 9 ("anthropoid apes").</p> <p>Huxley, T. 1864 D, 648 (Anthropomorpha).</p> <p>Lydekker, R. 1885 B, 1 (Simiidæ).</p> <p>Mivart, St. G. 1874 B, 10 (Simiadæ).</p> <p>Mollison, T. 1924 A, 712 (Simiidæ).</p> <p>Osborn, H. F. 1910 B, 545 (Simiidæ).<br/>1922 E, 233 (Simiidæ).<br/>1927 A (Simiidæ).<br/>1928 B, 194, 196 (Simiidæ).</p> <p>Owen, R. 1835 A, 23, 38 (Pongo).</p> <p>Pilgrim, G. E. 1915 A, 9 (Simiidæ).</p> | <p>Remane, A. 1921 A, 339 (Simiidæ).<br/>1922 A (Simiidæ).</p> <p>Schlosser, M. 1911 A, 52, 62 (Simiidæ).</p> <p>Thacker, A. G. 1914 A, 280 (Simiidæ).<br/>1922 A, 604 (Simiidæ).</p> <p>Todd, T. W. 1922 A, 281 (Pongo).</p> <p>Trouessart, E. L. 1904 A, 1 (Simiidæ).</p> <p>Winge, H. 1924 A, 277 (Simiini).</p> <p>Woodward, A. S. 1898 B, 406 (Simiidæ).<br/>Inasmuch as the genus <i>Hesperopthecus</i> (<i>Prosthennops</i>) was formerly referred to this family, the citations to the literature of Pongoidæ and Pongidæ are retained.</p> |
|---|---|

### ADDENDA ET CORRIGENDA

On page 155 of volume I of this work the paper designated as Elliot, Smith G, 1921 A should have been entered as Smith, G. E. 1921 A.

On page 162 of the same volume a paper designated as Flower, W. H., 1886 A ought to have been recorded as Woodward, A. S. 1886 A.

On page 718 of the first volume the Ostariophysii are called a Class. They form an Order only.

On page 181, volume II of this book under *Dromaeosaurus? gracilis* the following entry should have been made:

Schuchert, C. 1910 A, 536 (C. medius). |

The following species should appear on page 111 of the present volume:

**Amyda? pennata** (Cope).

Hay, O. P. 1902 A, 454 (Trionyx).

1908 A, 511, 554, pl. xcvi, fig. 6 (Amyda).

Eocene (Shark River?); New Jersey.



# INDEX

|                                    | Page               |                                   | Page     |
|------------------------------------|--------------------|-----------------------------------|----------|
| abacura (Farancia).....            | 269                | Aceratherium— <i>Continued.</i>   |          |
| abacura (Helicops).....            | 269                | stigeri.....                      | 745      |
| abbotti (Absarokius).....          | 928                | tridactylum.....                  | 745      |
| abbotti (Anaptomorphus).....       | 928                | truquianum.....                   | 745      |
| abbotti (Peltosaurus).....         | 254                | tubifer.....                      | 745      |
| abbotti (Rhadinorhinus).....       | 717                | Acerotherium.....                 | 740, 746 |
| abeli (Gomphotherium).....         | 635                | copei.....                        | 740      |
| abeli (Tetrabelodon).....          | 635                | occidentale.....                  | 741      |
| abeli (Trilophodon).....           | 635                | platycephalum.....                | 742      |
| aberrans (Parahyus).....           | 162                | tridactylum.....                  | 743      |
| aberti (Sciurus).....              | 374                | Achænodon.....                    | 761      |
| abnormis (Typopus).....            | 23                 | insolens.....                     | 762      |
| abradens (Zapsalis).....           | 181                | robustus.....                     | 762      |
| abradus (Zaphalis).....            | 181                | uintensis.....                    | 762      |
| abradus (Zaphsalis).....           | 181                | Achænodontidæ.....                | 761      |
| abruptus (Holosaurus).....         | 261                | Achænodontinæ.....                | 761      |
| abruptus (Platycarpus).....        | 261                | Acherontemys.....                 | 84       |
| absarokæ (Didelphodus).....        | 432                | heckmani.....                     | 84       |
| Absarokius.....                    | 928                | Achilemys.....                    | 100      |
| abbotti.....                       | 928                | allabata.....                     | 100      |
| noctivagus.....                    | 929                | Acichelyidæ.....                  | 75       |
| abscessa (Baropezia).....          | 7                  | Aciprion.....                     | 246      |
| acadiensis (Ichthyodichnites)..... | 15                 | formosum.....                     | 246      |
| Acanthopholidæ.....                | 207, 232           | majus.....                        | 246      |
| accessor (Castor).....             | 387                | Acmeodon.....                     | 432      |
| Accipiter.....                     | 315                | secans.....                       | 432      |
| cooperi.....                       | 315                | Acmodon.....                      | 432      |
| velox.....                         | 315                | secans.....                       | 432      |
| Accipitres.....                    | 310, 313           | acolytus (Miocænus).....          | 608      |
| Accipitridæ.....                   | 320                | acolytus (Promiocænus).....       | 608      |
| Accipitriiformes.....              | 310, 313           | Acompsosaurus.....                | 140      |
| Accipitrinæ.....                   | 314                | wingatensis.....                  | 140      |
| Accipitrini.....                   | 313                | Acreodi.....                      | 465      |
| accipitrinus (Asio).....           | 361                | acridens (Arretotherium).....     | 759      |
| accolla (Telmatherium).....        | 714                | acridens (Cynarctus).....         | 509      |
| acer (Crocodilus).....             | 153                | Acrodelfidæ.....                  | 582      |
| acer (Crocodylus).....             | 153                | Acrodelfinæ.....                  | 582      |
| acer (Esthonyx).....               | 854                | Acrodelfus.....                   | 590      |
| acer (Symbolodon).....             | 718                | Acrosceles.....                   | 240      |
| Aceratherinæ.....                  | 746                | aculeata (Sinopa).....            | 476      |
| Aceratherinæ.....                  | 746                | aculeatus (Stypolophus).....      | 478      |
| Aceratherium.....                  | 736, 740, 742, 746 | acuminatus (Bascanion).....       | 269      |
| acutum.....                        | 749                | acupictus (Plastomenus).....      | 106      |
| annectens.....                     | 744                | acuta (Anas).....                 | 305      |
| copei.....                         | 740                | acuta (Dafila).....               | 305      |
| egregium.....                      | 744                | acutidens (Champsodelfus).....    | 590      |
| exiguum.....                       | 742                | acutidens (Esthonyx).....         | 854      |
| hasperium.....                     | 744                | acutidens (Holocodus).....        | 261      |
| matutinus.....                     | 747                | acutidens (Ictops).....           | 430      |
| megalodus.....                     | 747                | acutidens (Mesohippus).....       | 675      |
| mite.....                          | 742                | acutidens (Miohippus).....        | 675      |
| nebrascensis.....                  | 736                | acutirostris (Varanosaurus).....  | 47       |
| occidentale.....                   | 741, 742           | acutosquameus (Dioplosaurus)..... | 236      |
| oregonense.....                    | 745                | acutum (Aceratherium).....        | 749      |
| pacificum.....                     | 745                | acutus (Uintacyon).....           | 484      |
| persistens.....                    | 742                | acutus (Viverravus).....          | 483      |
| platycephalum.....                 | 742                | adamanteus (Crotalus).....        | 271      |
| profectum.....                     | 742                | adamsi (Ornithoides).....         | 16       |
| pumilum.....                       | 742                | Adapidæ.....                      | 919      |
| simplicidens.....                  | 742                | Adapisoricidæ.....                | 451      |

|                                  | Page     |                               | Page     |
|----------------------------------|----------|-------------------------------|----------|
| Adaposoricidæ .....              | 451      | Ælurodon— <i>Continued</i>    |          |
| addenus (Baptornis) .....        | 279      | ferox .....                   | 496      |
| Adelonycteris .....              | 455      | francisi .....                | 495      |
| fuscus .....                     | 455      | haydeni .....                 | 495      |
| Adipini .....                    | 920      | hyenoides .....               | 495      |
| Adipis .....                     | 919      | magnus .....                  | 507      |
| Adipisidæ .....                  | 919      | meandrinus .....              | 508      |
| adium (Mastodon) .....           | 632      | mustelinus .....              | 527      |
| Adjidaumidæ .....                | 887, 881 | platyrhinus .....             | 495      |
| Adjidauminæ .....                | 881      | pugnator .....                | 509      |
| Adjidaumo .....                  | 881      | sævus .....                   | 495      |
| minimus .....                    | 881      | secundus .....                | 496      |
| minor .....                      | 881      | simulans .....                | 496      |
| minutus .....                    | 881      | taxoides .....                | 496      |
| trilophus .....                  | 881      | ursinus .....                 | 513      |
| admirabilis (Conchochelys) ..... | 110      | validus .....                 | 495      |
| admirabilis (Conochelys) .....   | 110      | wheelerianus .....            | 498      |
| admirabilis (Ptilodus) .....     | 380      | Æluroidæ .....                | 538      |
| admirabilis (Trionyx) .....      | 110      | Ælurotherium .....            | 471      |
| Adocidæ .....                    | 87       | bicuspus .....                | 472      |
| Adocus .....                     | 88, 89   | latidens .....                | 472      |
| agilis .....                     | 89       | leidyanum .....               | 472      |
| beatus .....                     | 89       | æmulus (Anaptomorphus) .....  | 923      |
| bossi .....                      | 89       | Ænoceyon .....                | 501      |
| hesperius .....                  | 89       | ayresi .....                  | 501      |
| kirtlandius .....                | 89       | dirus .....                   | 501      |
| lacer .....                      | 90       | milleri .....                 | 501      |
| lineolatus .....                 | 90       | mississippiensis .....        | 501      |
| onerous .....                    | 90       | Æpinacodon .....              | 760      |
| pravus .....                     | 90       | americanus .....              | 760      |
| punctatus .....                  | 90       | deflectus .....               | 760      |
| substriata .....                 | 91       | rostratus .....               | 760      |
| substrictus .....                | 91       | æqua (Amyda) .....            | 110      |
| syntheticus .....                | 90       | æqualipes (Plesiornis) .....  | 6        |
| variolosus .....                 | 88       | æquierurius (Amphidon) .....  | 371      |
| vigoratus .....                  | 90       | æquidens (Oxyæna) .....       | 471      |
| aduncus (Captorhinus) .....      | 39       | æquifacies (Tichosteus) ..... | 186      |
| aduncus (Dromopus) .....         | 11       | æquus (Trionyx) .....         | 110      |
| aduncus (Pariotichus) .....      | 39       | æsope (Hydrochærus) .....     | 914      |
| advena (Blastomeryx) .....       | 818      | Aëtomorphæ .....              | 310      |
| advena (Protostega) .....        | 78       | Ætosauri .....                | 138      |
| adventa (Blastomeryx) .....      | 818      | Ætosauria .....               | 138      |
| advenum (Diceratherium) .....    | 737      | Aëtosauriformes .....         | 138      |
| advenus (Amynodon) .....         | 737      | Aëtosauridæ .....             | 136, 138 |
| advenus (Baptornis) .....        | 279      | Aëtosaurinæ .....             | 138      |
| advocata (Telmatherium) .....    | 714      | Aëtosaurus .....              | 138      |
| advocatum (Telmatherium) .....   | 714      | Æx .....                      | 308      |
| Æcomphorus .....                 | 286      | sponsa .....                  | 308      |
| lucasi .....                     | 286      | affine (Anchitherium) .....   | 679      |
| occidentalis .....               | 286      | affine (Hipparion) .....      | 691      |
| Æemothorus .....                 | 286      | affine (Hippotherium) .....   | 691      |
| occidentalis .....               | 286      | affine (Limnotherium) .....   | 692      |
| Ægialitis .....                  | 336      | affine (Neohipparion) .....   | 691      |
| vociferus .....                  | 336      | affine (Tinoceras) .....      | 618      |
| ægle (Echmatemys) .....          | 95       | affine (Tomitherium) .....    | 622      |
| Ægodontia .....                  | 338      | affine (Uimatherium) .....    | 618      |
| Ægyptidæ .....                   | 323      | affinis (Balæna) .....        | 577      |
| Ælueroceyon .....                | 526      | affinis (Barosaurus) .....    | 200      |
| Æluroceyon .....                 | 526      | affinis (Claosaurus) .....    | 215      |
| brevifacies .....                | 526      | affinis (Coelosaurus) .....   | 181      |
| brevifacies .....                | 526      | affinis (Crocodilus) .....    | 153      |
| Ælurodon .....                   | 495      | affinis (Crocodylus) .....    | 153      |
| aphobus .....                    | 495      | affinis (Ennacodon) .....     | 375      |
| brachygnathus .....              | 495      | affinis (Enneodon) .....      | 375      |
| compressus .....                 | 495      | affinis (Euphagus) .....      | 358      |

|                               | Page     |                              | Page     |
|-------------------------------|----------|------------------------------|----------|
| affinis (Fuligula).....       | 307      | Agomphus—Continued           |          |
| affinis (Goniopholis).....    | 146      | alabamensis.....             | 90       |
| affinis (Hyohippus).....      | 679      | firmus.....                  | 90       |
| affinis (Hypohippus).....     | 679      | masculus.....                | 90       |
| affinis (Hyrachys).....       | 733      | oxysternum.....              | 90       |
| affinis (Marila).....         | 307      | pectoralis.....              | 90       |
| affinis (Merycoidodon).....   | 780      | petrosus.....                | 91       |
| affinis (Notharctus).....     | 922      | tardus.....                  | 91       |
| affinis (Oreodon).....        | 780      | turgidus.....                | 91       |
| affinis (Ornithomimus).....   | 181      | Agorophiidae.....            | 579      |
| affinis (Scoleophagus).....   | 568      | Agorophius.....              | 579      |
| affinis (Stegosaurus).....    | 234      | pygmaeus.....                | 579      |
| affinis (Telmatornis).....    | 334      | Agostopus.....               | 2        |
| affinis (Uria).....           | 343      | matheri.....                 | 2        |
| aftoniæ (Stegomastodon).....  | 688      | medius.....                  | 2        |
| Aftonius.....                 | 843      | robustus.....                | 2        |
| calvini.....                  | 843      | Agouti.....                  | 913      |
| Agabelus.....                 | 589      | agrarius (Hyrachys).....     | 733      |
| porcatus.....                 | 589      | agreste (Anchitherium).....  | 681      |
| agapetillus (Oxyacodon).....  | 602      | agreste (Dinoceras).....     | 618      |
| agapetillus (Palæolagus)..... | 865      | agreste (Uintatherium).....  | 618      |
| agatensis (Kalobatippus)..... | 677      | agrestis (Archæohippus)..... | 681      |
| Agathauma.....                | 230      | agrestis (Colonoceras).....  | 734      |
| Agathaumas.....               | 212, 230 | agrestis (Hyrachys).....     | 733      |
| milo.....                     | 212      | agrestis (Miohippus).....    | 681      |
| mortuarius.....               | 231      | agrestis (Parahippus).....   | 681      |
| sphenocerus.....              | 226      | Agriocharis.....             | 329      |
| sylvestre.....                | 231      | Agriocharus.....             | 776      |
| sylvestris.....               | 222, 231 | Agriochari.....              | 776      |
| Agathaumidae.....             | 220      | Agriocheridae.....           | 776, 830 |
| Agelæus.....                  | 358      | Agriocheriformes.....        | 776      |
| Agelaius.....                 | 357      | Agriocherinae.....           | 776      |
| californicus.....             | 358      | Agriocheroidea.....          | 776      |
| gubernator.....               | 358      | Agriochcerus.....            | 776      |
| agenus (Palæosyops).....      | 713      | antiquus.....                | 777      |
| agile (Tritemnodon).....      | 478      | auritus.....                 | 777      |
| agilis (Adocus).....          | 89       | bullatus.....                | 777      |
| agilis (Allosaurus).....      | 174      | dakotensis.....              | 777      |
| agilis (Aminippus).....       | 670      | ferox.....                   | 777      |
| agilis (Boavus).....          | 268      | gaudryi.....                 | 777      |
| agilis (Cimolodon).....       | 381      | guiotianus.....              | 777      |
| agilis (Cimolomys).....       | 381      | guyotianus.....              | 777      |
| agilis (Claosaurus).....      | 215      | latifrons.....               | 777      |
| agilis (Cœlurus).....         | 185      | macrocephalus.....           | 777      |
| agilis (Cricetodipus).....    | 381      | major.....                   | 777      |
| agilis (Dipodomys).....       | 381      | maximus.....                 | 777      |
| agilis (Dromopus).....        | 11       | migrans.....                 | 777      |
| agilis (Graculavus).....      | 228      | minimus.....                 | 778      |
| agilis (Hadrosaurus).....     | 215      | ryderanus.....               | 778      |
| agilis (Ichthyornis).....     | 282      | trifrons.....                | 778      |
| agilis (Merycodus).....       | 381      | Agriotherium.....            | 523      |
| agilis (Morosaurus).....      | 191      | gregoryi.....                | 523      |
| agilis (Nanosaurus).....      | 204      | schneideri.....              | 523      |
| agilis (Orohippus).....       | 670      | aguti (Captothinus).....     | 40, 41   |
| agilis (Perodipus).....       | 381      | aguti (Pariotichus).....     | 40       |
| agilis (Saniwa).....          | 252      | Ailuroidea.....              | 588      |
| agilis (Sinopa).....          | 478      | Aix.....                     | 306      |
| agilis (Stypolophus).....     | 478      | sponsa.....                  | 306      |
| agilis (Tanaodon).....        | 372      | Ajaia.....                   | 298      |
| agilis (Tathiodon).....       | 372      | ajaja.....                   | 298      |
| agilis (Thespesius).....      | 215      | Ajaja.....                   | 298      |
| agilis (Thinosaurus).....     | 222      | ajaja.....                   | 298      |
| agilis (Tritemnodon).....     | 478      | ajax (Apatosaurus).....      | 195      |
| agmius (Compsemys).....       | 88       | ajax (Diatryma).....         | 283      |
| Agomphus.....                 | 90       | alabamensis (Globidens)..... | 265      |



|                                  | Page     |                                 | Page     |
|----------------------------------|----------|---------------------------------|----------|
| alabamensis (Agomphus).....      | 90       | Alethesaurus—Continued          |          |
| alabamensis (Globidens).....     | 265      | quadratus .....                 | 255      |
| Alabamornis .....                | 589      | Aletocyon .....                 | 513      |
| gigantea .....                   | 570      | multicuspis .....               | 513      |
| alacer (Hypisodus).....          | 811      | Aletomeryx .....                | 836      |
| Alamosaurus .....                | 201      | gracilis .....                  | 836      |
| sanjuanensis .....               | 201      | Aletornis .....                 | 332      |
| Alamosemys .....                 | 91       | bellus .....                    | 332      |
| annexa .....                     | 91       | gracilis .....                  | 332      |
| substriata .....                 | 91       | nobilis .....                   | 332      |
| substricta .....                 | 91       | pernix .....                    | 332      |
| alaskæ (Equus).....              | 707      | venustus .....                  | 332      |
| alatus (Empedias).....           | 35       | alexandræ (Alticamelus).....    | 800      |
| Alauda .....                     | 354      | alexandræ (Aplodontia).....     | 906      |
| alpestris .....                  | 354      | alexandræ (Illogoceras).....    | 839      |
| Alaudæ .....                     | 354      | alexandræ (Illogoceros).....    | 839      |
| Alaudidæ .....                   | 354      | alexandræ (Liodontia).....      | 906      |
| Alaudinæ .....                   | 354      | alexandræ (Shastasaurus).....   | 126      |
| albeola (Anas).....              | 307      | alexandræ (Thalattosaurus)..... | 241      |
| albeola (Charitonetta).....      | 307      | alfhildæ (Phasianus).....       | 323      |
| albeola (Clangula).....          | 307      | allabiata (Achilemys).....      | 100      |
| albertensis (Boremys).....       | 73       | allabiatu (Hadrianus).....      | 100      |
| albertensis (Champsosaurus)..... | 133      | Allacodon .....                 | 378      |
| albertensis (Dromæosaurus).....  | 180      | fortis .....                    | 378      |
| albertensis (Palæosinopa).....   | 425      | lentus .....                    | 378      |
| albertensis (Styracosaurus)..... | 225      | pumilis .....                   | 378      |
| Albertosaurus .....              | 179      | rarus .....                     | 378      |
| arctunguis .....                 | 179      | allani (Aspideretes).....       | 108      |
| sarcophagus .....                | 179      | alleni (Bison).....             | 840      |
| albifrons (Anser).....           | 303      | alleni (Microtus).....          | 900      |
| albolimbatus (Sciurus).....      | 874      | alleni (Neofiber).....          | 900      |
| Alca .....                       | 342      | alleni (Prorommarus).....       | 559      |
| impennis .....                   | 342      | Alligator .....                 | 156      |
| Alca .....                       | 342      | basiffusus .....                | 140      |
| Alce .....                       | 326, 327 | chamensis .....                 | 153      |
| americana .....                  | 327      | heterodon .....                 | 155      |
| Alces .....                      | 325, 326 | lucius .....                    | 157      |
| alces .....                      | 327      | mississippiensis .....          | 157      |
| americana .....                  | 327      | thomsoni .....                  | 157      |
| brevitrabalis .....              | 327      | Alligatores .....               | 151      |
| latifrons .....                  | 325, 327 | Alligatoridæ .....              | 150, 151 |
| machlis .....                    | 327      | Allodesmus .....                | 557      |
| runymedensis .....               | 327      | kernensis .....                 | 558      |
| scotti .....                     | 326      | Allodon .....                   | 377      |
| semipalmata .....                | 327      | fortis .....                    | 378      |
| shimeki .....                    | 327      | laticeps .....                  | 377      |
| shimekii .....                   | 327      | Allodontidæ .....               | 376      |
| alces (Cervus).....              | 327      | Allognathosuchus .....          | 155      |
| Alcidæ .....                     | 342      | heterodon .....                 | 155      |
| Aleiformes .....                 | 342      | polyodon .....                  | 155      |
| Aleina .....                     | 342, 343 | wartheni .....                  | 155      |
| Alcoidæ .....                    | 342      | Allomeryx .....                 | 813      |
| Alcoidea .....                   | 342      | planiceps .....                 | 813      |
| Alectoridae .....                | 324, 331 | Allomyidæ .....                 | 905      |
| Alectoromorphæ .....             | 324      | Allomyini .....                 | 905      |
| Alectornithes .....              | 324      | Allomys .....                   | 905      |
| Alectoropodes .....              | 324      | cavatus .....                   | 905      |
| Alectria .....                   | 324      | hippodus .....                  | 905      |
| Alectridæ .....                  | 324      | liolophus .....                 | 906      |
| Alectromorphæ .....              | 324      | multiplicatus .....             | 905      |
| Alectropodes .....               | 324      | nitens .....                    | 905      |
| alemani (Platygonus).....        | 772      | Allophagi .....                 | 188      |
| alemanii (Platygonus).....       | 772      | Allops .....                    | 719      |
| ales (Geranoastus).....          | 817      | amplus .....                    | 719      |
| Alethesaurus .....               | 255      | crassicornis .....              | 720      |

|                                   | Page     |                                | Page |
|-----------------------------------|----------|--------------------------------|------|
| Allops— <i>Continued</i>          |          | altispinus (Shastasaurus)..... | 126  |
| scrotinus.....                    | 720      | altispinus (Stegosaurus).....  | 234  |
| serotinus.....                    | 720      | althorax (Brachiosaurus).....  | 197  |
| walcottii.....                    | 720      | altus (Alticamelus).....       | 800  |
| Allopus.....                      | 2        | altus (Amphicoelias).....      | 200  |
| arizonæ.....                      | 2        | altus (Astrodon).....          | 193  |
| littoralis.....                   | 2        | altus (Comornis).....          | 280  |
| Allosauridæ.....                  | 176      | altus (Dryosaurus).....        | 236  |
| Allosaurus.....                   | 175, 181 | altus (Hesperornis).....       | 279  |
| agilis.....                       | 174      | altus (Laosaurus).....         | 206  |
| fragilis.....                     | 174      | altus (Meleagris).....         | 530  |
| lucaris.....                      | 184      | altus (Ornithomimus).....      | 182  |
| medius.....                       | 181      | altus (Pleurocelus).....       | 193  |
| Allotheria.....                   | 368, 375 | altus (Procamelus).....        | 800  |
| allum (Leptacetherium).....       | 741      | altus (Struthiomimus).....     | 182  |
| allus (Cænopus).....              | 741      | altus (Toniornis).....         | 279  |
| alpestris (Alauda).....           | 354      | Aluco.....                     | 351  |
| alpestris (Eremophila).....       | 354      | flammeus.....                  | 351  |
| alpestris (Otocoris).....         | 354      | pratincola.....                | 348  |
| alpestris (Otocorys).....         | 354      | Aluconidæ.....                 | 348  |
| alpha (Bathygenys).....           | 777      | amarorum (Eomoropus).....      | 725  |
| Alphodon.....                     | 391      | amarorum (Trplopus).....       | 725  |
| marshi.....                       | 391      | ambarvalis (Spilogale).....    | 534  |
| alpina (Pelidna).....             | 337      | ambiguus (Tetonius).....       | 929  |
| alpina (Tringa).....              | 337      | Ambloctonidæ.....              | 470  |
| alpinus (Glaucomyx).....          | 875      | Ambloctonus.....               | 473  |
| alpinus (Sciuropteryx).....       | 875      | coloradensis.....              | 473  |
| altarkansanus (Brachyrophus)..... | 201      | hyenoides.....                 | 473  |
| alternans (Didelphis).....        | 393      | priscus.....                   | 473  |
| alternans (Peratherium).....      | 393      | sinosus.....                   | 473  |
| Alticamelas.....                  | 799      | Amblyonx.....                  | 12   |
| Alticamelus.....                  | 799      | giganteus.....                 | 12   |
| alexandræ.....                    | 800      | Amblotheridæ.....              | 372  |
| altus.....                        | 800      | Amblotherium.....              | 373  |
| giraffinus.....                   | 800      | debile.....                    | 373  |
| leptocolon.....                   | 800      | gracile.....                   | 373  |
| priscus.....                      | 800      | Amblycastor.....               | 885  |
| procerus.....                     | 800      | fluminis.....                  | 885  |
| alticeps (Lophiohyus).....        | 754      | Amblyctonus.....               | 473  |
| alticeps (Uintatherium).....      | 618      | Amblyonx.....                  | 12   |
| alticornis (Bison).....           | 223      | giganteus.....                 | 12   |
| alticornis (Ceratops).....        | 223      | lyellianus.....                | 12   |
| alticornis (Triceratops).....     | 223      | Amblyopus.....                 | 2    |
| alticuspis (Diacodon).....        | 431      | pachypodus.....                | 2    |
| altidens (Centetodon).....        | 435      | Amblypeza.....                 | 75   |
| altidens (Didanodon).....         | 211      | entellus.....                  | 75   |
| altidens (Didymictis).....        | 432      | Amblypoda.....                 | 608  |
| altidens (Merycodus).....         | 331      | Amblypodi.....                 | 608  |
| altidens (Pteropelyx).....        | 211      | Amblypodon.....                | 176  |
| altidens (Scaptohyus).....        | 763      | Amblypus.....                  | 2    |
| altidens (Scuiravus).....         | 909      | dextratus.....                 | 2    |
| altidens (Telmatherium).....      | 714      | ambulator (Champsosaurus)..... | 133  |
| altidens (Trachodon).....         | 210      | Amebelodon.....                | 634  |
| altidens (Viverravus).....        | 432      | fricki.....                    | 637  |
| altigenis (Temnocyon).....        | 506      | Amebelodontidæ.....            | 622  |
| Altippus.....                     | 680      | ameghini (Omomys).....         | 926  |
| taxus.....                        | 682      | ameghinoi (Omomys).....        | 926  |
| altiramis (Merycochoerus).....    | 786      | carteri (Omomys).....          | 926  |
| altiramis (Pronomotherium).....   | 786      | americæ (Elephas).....         | 647  |
| altiramum (Pronomotherium).....   | 786      | americana (Alce).....          | 827  |
| altiramus (Merycochoerus).....    | 786      | americana (Alces).....         | 827  |
| altirostris (Symborodon).....     | 717      | americana (Anas).....          | 306  |
| altispinax (Shastasaurus).....    | 126      | americana (Antilocapra).....   | 835  |
| altispinus (Hypacrosaurus).....   | 217      | americana (Antilope).....      | 835  |
|                                   |          | americana (Bos).....           | 850  |

|                                 | Page          |                              | Page     |
|---------------------------------|---------------|------------------------------|----------|
| americana (Castor).....         | 337           | Aminippus— <i>Continued</i>  |          |
| americana (Fulica).....         | 334           | agilis .....                 | 670      |
| americana (Fuligula).....       | 307           | sylvaticus .....             | 671      |
| americana (Gavialosuchus).....  | 149           | uintanus .....               | 671      |
| americana (Mareca).....         | 305           | Ammobatrachus .....          | 2        |
| americana (Marila).....         | 307           | montanensis .....            | 2        |
| americana (Martes).....         | 527           | turbatans .....              | 2        |
| americana (Mazama).....         | 322           | Ammodon .....                | 765, 766 |
| americana (Mustela).....        | 527           | bathrodon .....              | 765      |
| americana (Mycteria).....       | 297           | leidyanus .....              | 766      |
| americana (Proviverra).....     | 478           | leidyanum .....              | 766      |
| americana (Recurvirostra).....  | 338           | potens .....                 | 765      |
| americana (Rupricapra).....     | 341           | Ammopus .....                | 2        |
| americana (Sus).....            | 351           | marshi .....                 | 2        |
| americana (Taxidea).....        | 535           | Ammosauridæ .....            | 170      |
| americana (Tomistoma).....      | 149           | Ammosaurus .....             | 171      |
| americanum (Hyotherium).....    | 768           | maior .....                  | 171      |
| americanum (Mammut).....        | 624           | major .....                  | 171      |
| americanum (Megatherium).....   | 405           | amnicola (Amphicyon).....    | 511      |
| americanum (Tomistoma).....     | 149           | amnicola (Platypeltis).....  | 112      |
| americanus (Æpiacodon).....     | 760           | amnicola (Pliocyon).....     | 511      |
| americanus (Alces).....         | 327           | amnigenis (Aspideretes)..... | 108      |
| americanus (Amphicyon).....     | 511           | Amphibia .....               | 26       |
| americanus (Ancodon).....       | 760           | squamata .....               | 26       |
| americanus (Ancodus).....       | 760           | amphibius (Arvicola).....    | 398      |
| americanus (Bison).....         | 349           | amphibius (Microtus).....    | 398      |
| americanus (Bos).....           | 349           | Amphicænopus .....           | 742      |
| americanus (Bothriodon).....    | 760           | simplicidens .....           | 743      |
| americanus (Camelops).....      | 307           | platycephalus .....          | 742      |
| americanus (Camelus).....       | 307           | Amphichelonoidea .....       | 69       |
| americanus (Cariacus).....      | 322, 329      | Amphichelidea .....          | 69       |
| americanus (Castor).....        | 337           | Amphichelyda .....           | 69       |
| americanus (Cervalces).....     | 326           | Amphichelydia .....          | 69, 74   |
| americanus (Cervus).....        | 326, 327      | Amphichelydideæ .....        | 69       |
| americanus (Corvus).....        | 355           | Amphichelyia .....           | 69       |
| americanus (Dipus).....         | 310           | Amphichelyidæ .....          | 69       |
| americanus (Dromomeryx).....    | 316           | Amphichelydii .....          | 69       |
| americanus (Elephas).....       | 625, 629, 644 | Amphicelias .....            | 200      |
| americanus (Equus).....         | 703           | altus .....                  | 200      |
| americanus (Euarctos).....      | 520           | fragillimus .....            | 200      |
| americanus (Eucomodon).....     | 379           | latus .....                  | 201      |
| americanus (Gavialosuchus)..... | 149           | Amphicælus .....             | 201      |
| americanus (Grus).....          | 331           | latus .....                  | 201      |
| americanus (Harlanus).....      | 351           | Amphicotylus .....           | 148      |
| americanus (Hypotamius).....    | 760           | lucasi .....                 | 148      |
| americanus (Lepus).....         | 363           | Amphictidideæ .....          | 481      |
| americanus (Manatus).....       | 659           | Amphicyon .....              | 505, 510 |
| americanus (Mastodon).....      | 624, 647      | americanus .....             | 511      |
| americanus (Mergus).....        | 309           | amnicola .....               | 511      |
| americanus (Neophrontops).....  | 323           | angustidens .....            | 490      |
| americanus (Neoplagiaulax)..... | 379           | cuspidiger .....             | 506      |
| americanus (Odocoileus).....    | 321           | entoptychi .....             | 506      |
| americanus (Olor).....          | 301           | frendens .....               | 511      |
| americanus (Oreamnos).....      | 341           | gigas .....                  | 511      |
| americanus (Oreamnus).....      | 341           | gracilis .....               | 491      |
| americanus (Paleomeryx).....    | 316           | hartshornianus .....         | 505      |
| americanus (Paleonictis).....   | 478           | idoneus .....                | 511      |
| americanus (Peromyscus).....    | 393           | ingens .....                 | 511      |
| americanus (Phasianus).....     | 328           | reinheimeri .....            | 511      |
| americanus (Sitomys).....       | 394           | sinapius .....               | 511      |
| americanus (Tapirus).....       | 731           | superbus .....               | 508, 511 |
| americanus (Taurotragus).....   | 339           | ursinus .....                | 513      |
| americanus (Ursus).....         | 520           | vetus .....                  | 505      |
| americanus (Zygodophodon).....  | 624           | vitus .....                  | 505      |
| Aminippus .....                 | 670           | vulpinus .....               | 483      |

|                              | Page     |                      | Page          |
|------------------------------|----------|----------------------|---------------|
| Amphicyoninae .....          | 508      | Anacodon .....       | 461           |
| Amphidon .....               | 371      | cultridens .....     | 464           |
| æquicrurus .....             | 371      | ursidens .....       | 464           |
| superstes .....              | 371      | Anamodon .....       | 489           |
| Amphidontidae .....          | 371      | snyderi .....        | 489           |
| Amphiemys .....              | 90       | Ananeus .....        | 630           |
| oxysternum .....             | 90       | antiquissimus .....  | 632           |
| Amphilestidae .....          | 370      | arizonæ .....        | 633           |
| Amphilestinae .....          | 370, 372 | arvernensis .....    | 630           |
| Amphimorphæ .....            | 298, 297 | bensonensis .....    | 630           |
| Amphisauridae .....          | 170      | braziosus .....      | 630           |
| Amphisaurus .....            | 170      | brazosius .....      | 630           |
| Amphisbæna .....             | 249      | deflocatus .....     | 631           |
| Amphisbænia .....            | 249      | edensis .....        | 631           |
| Amphisbænida .....           | 250      | felcis .....         | 631           |
| Amphisbænidæ .....           | 249      | gratus .....         | 631           |
| Amphisbænina .....           | 249      | hicksi .....         | 631           |
| Amphisbænoidea .....         | 249      | humboldtii .....     | 631           |
| Amphitheriidae .....         | 374      | hyodon .....         | 631           |
| amphithorax (Testudo) .....  | 104      | intermedius .....    | 632           |
| Amphycyon .....              | 510      | oligobunis .....     | 632           |
| amplexus (Epanterias) .....  | 192      | orarius .....        | 632           |
| amphidens (Ursus) .....      | 519      | progressus .....     | 632           |
| amplus (Allops) .....        | 719      | shepardi .....       | 639           |
| amplus (Apatosaurus) .....   | 196      | successor .....      | 632           |
| amplus (Aublysodon) .....    | 180      | tropicus .....       | 632           |
| amplus (Brontosaurus) .....  | 196      | Anaptogonia .....    | 889, 900      |
| amplus (Camptomus) .....     | 382      | cloacina .....       | 889           |
| amplus (Camptosaurus) .....  | 205      | hiatidens .....      | 900           |
| amplus (Deinodon) .....      | 180      | Anaptomorpha .....   | 928           |
| amplus (Diploclonus) .....   | 720      | Anaptomorphidæ ..... | 447           |
| amplus (Gymnogyps) .....     | 312      | Anaptomorphinæ ..... | 925           |
| amplus (Megacerops) .....    | 719      | Anaptomorphus .....  | 445, 754, 927 |
| amplus (Tyrannosaurus) ..... | 180      | abbotti .....        | 928           |
| Amyda .....                  | 110      | æmulus .....         | 928           |
| æqua .....                   | 110      | angulatus .....      | 449           |
| buiei .....                  | 110      | homunculus .....     | 929           |
| cariosa .....                | 110      | insignis .....       | 927           |
| cellulosa .....              | 111      | minimus .....        | 928           |
| concentrica .....            | 111      | minutus .....        | 435           |
| crassa .....                 | 111      | speirianus .....     | 445           |
| egregia .....                | 111      | uintensis .....      | 924           |
| eloisæ .....                 | 111      | Anas .....           | 302, 304      |
| exquisita .....              | 111      | albeola .....        | 307           |
| franciscæ .....              | 111      | americana .....      | 305           |
| halophila .....              | 111      | boscas .....         | 304           |
| lima .....                   | 111      | boschas .....        | 304           |
| mira .....                   | 111      | canadensis .....     | 302           |
| nelsoni .....                | 111      | carolinensis .....   | 305           |
| pennata .....                | 981      | collaris .....       | 307           |
| prisca .....                 | 111      | clypeata .....       | 306           |
| radula .....                 | 111      | cyanoptera .....     | 306           |
| salebrosa .....              | 111      | discors .....        | 306           |
| scutumantiquum .....         | 111      | histrionica .....    | 308           |
| tritor .....                 | 111      | hyemalis .....       | 307           |
| uintaënsis .....             | 111      | islandica .....      | 308           |
| ventricosa .....             | 111      | jamaicensis .....    | 308           |
| virginiana .....             | 112      | marila .....         | 307           |
| Amynodon .....               | 737      | nivalis .....        | 308           |
| advenus .....                | 737      | perspicillata .....  | 308           |
| antiquus .....               | 737      | platyrhynchos .....  | 304, 305      |
| erectus .....                | 737      | sponsa .....         | 306           |
| intermedius .....            | 737      | stelleri .....       | 308           |
| Amynodontidae .....          | 737      | strepera .....       | 305           |
| Amynodontinæ .....           | 737      | Anaspida .....       | 28            |

|                             | Page          |                                    | Page     |
|-----------------------------|---------------|------------------------------------|----------|
| Anatidae .....              | 299           | Anchitherium— <i>Continued</i>     |          |
| Anatiformes .....           | 299           | celer .....                        | 674      |
| Anatinae .....              | 304           | cognatum .....                     | 681      |
| Anatoidae .....             | 299           | equinum .....                      | 679      |
| Anatoidea .....             | 299           | gracile .....                      | 678      |
| anax (Coryphodon) .....     | 615           | minimum .....                      | 682      |
| anceps (Anchitherium) ..... | 676           | prestans .....                     | 678      |
| anceps (Canis) .....        | 498           | ultimum .....                      | 683      |
| anceps (Glyptosaurus) ..... | 250           | Anchylosauridae .....              | 237      |
| anceps (Graculavus) .....   | 232           | Anchylosaurus .....                | 238      |
| anceps (Ichthyornis) .....  | 282           | magniventris .....                 | 238      |
| anceps (Kalobatippus) ..... | 676           | Ancodon .....                      | 759, 760 |
| anceps (Oreonetes) .....    | 755           | americanus .....                   | 760      |
| anceps (Meshippippus) ..... | 676           | brachyrhynchus .....               | 759      |
| anceps (Miohippippus) ..... | 676           | leptodus .....                     | 760      |
| anceps (Notharctus) .....   | 922           | rostratus .....                    | 760      |
| anceps (Oracodon) .....     | 381           | Ancodus .....                      | 759      |
| anceps (Oreonetes) .....    | 755           | brachyrhynchus .....               | 760      |
| anceps (Ototriton) .....    | 250           | Ancylocentrum .....                | 261      |
| anceps (Thinolestes) .....  | 922           | overtoni .....                     | 261      |
| anceps (Tinoceras) .....    | 618           | Ancylopoda .....                   | 680      |
| anceps (Uintatherium) ..... | 618           | Ancylosauria .....                 | 237      |
| Anchiceratops .....         | 226           | Ancylosauridae .....               | 237      |
| ornatus .....               | 226           | Ancylosaurus .....                 | 238      |
| Anchiosaurus .....          | 170           | magniventris .....                 | 238      |
| Anchisauridae .....         | 170           | Ancyropus .....                    | 3        |
| Anchisaurus .....           | 170           | heteroclitus .....                 | 3        |
| Anchippodontidae .....      | 855           | andersoni (Canis) .....            | 498      |
| Anchippodus .....           | 680, 855      | andersoni (Machæroprosopus) .....  | 144      |
| minor .....                 | 855           | andersoni (Poebrotherium) .....    | 794      |
| riparius .....              | 855           | andicus (Mastodon) .....           | 682      |
| vetulus .....               | 855           | andium (Anancus) .....             | 682      |
| Anchippus .....             | 680           | andium (Cordillerion) .....        | 681      |
| breviens .....              | 681           | andium (Dibelodon) .....           | 682      |
| pachyops .....              | 689           | andium (Mastodon) .....            | 681      |
| texanus .....               | 682           | andium (Tetralodon) .....          | 681      |
| Anchisauridae .....         | 170           | andium (Tetralophodon) .....       | 682      |
| Anchisauripodidae .....     | 1             | anemofilus (Vesperugo) .....       | 455      |
| Anchisauripus .....         | 2             | anemophilus (Pipistrellus) .....   | 455      |
| danaus .....                | 3             | anex (Coryphodon) .....            | 616      |
| exsertus .....              | 3             | Angistorhinus .....                | 143      |
| expansus .....              | 11            | gracilis .....                     | 143      |
| hitchcocki .....            | 3             | grandis .....                      | 143      |
| hitchcockii .....           | 3             | maximus .....                      | 143      |
| minuscule .....             | 3             | Anguidae .....                     | 253      |
| parallelus .....            | 3             | Anguiformes .....                  | 248      |
| sillimani .....             | 3             | anguillulata (Terrapene) .....     | 99       |
| tuberatus .....             | 3             | Anguimorpha .....                  | 250      |
| tuberosus .....             | 3             | anguinea (Helcura) .....           | 14       |
| Anchisaurus .....           | 170           | Anguioidea .....                   | 250      |
| celurus .....               | 171           | Anguis .....                       | 24, 253  |
| colurus .....               | 171           | anguirivale (Gomphotherium) .....  | 635      |
| major .....                 | 171           | anguirivale (Rhynchotherium) ..... | 639      |
| polyzelus .....             | 169           | anguirivale (Serriodontinus) ..... | 635      |
| solus .....                 | 171           | angulatus (Chriacus) .....         | 725      |
| Anchisodon .....            | 735           | angulatus (Colodon) .....          | 725      |
| quadriplacatus .....        | 735           | angulatus (Cynodontomys) .....     | 449      |
| tubifer .....               | 743           | angulatus (Mylagaulodon) .....     | 907      |
| Anchitheridae .....         | 666, 672      | angulatus (Mylagaulus) .....       | 907      |
| Anchitheriinae .....        | 672           | angulatus (Ogmophis) .....         | 268      |
| Anchitherium .....          | 672, 675, 677 | angulatus (Pelycodus) .....        | 449      |
| affine .....                | 679           | anguliferus (Sironeetes) .....     | 264      |
| agatense .....              | 678           | angusta (Lytoloma) .....           | 76       |
| agreste .....               | 681           | angusta (Plectropterna) .....      | 19       |
| bairdi .....                | 678           |                                    |          |

|                                    | Page          |                                  | Page         |
|------------------------------------|---------------|----------------------------------|--------------|
| angusticeps (Captorhinus) .....    | 40            | annectens (Trachodon) .....      | 212          |
| angusticeps (Pariotichus) .....    | 40            | annectens (Umtatherium) .....    | 618          |
| angusticeps (Testudo) .....        | 104           | annexa (Alamosmys) .....         | 91           |
| angustidens (Amphicyon) .....      | 490           | annexus (Adocus) .....           | 91           |
| angustidens (Cynodietis) .....     | 490           | annexus (Synaptomys) .....       | 399          |
| angustidens (Cynodontomys) .....   | 449           | annulatum (Thinotherium) .....   | 776          |
| angustidens (Daphoenus) .....      | 490           | Anomalopus .....                 | 4            |
| angustidens (Dromomeryx) .....     | 819           | sturdevanti .....                | 4            |
| angustidens (Entomacodon) .....    | 435           | anomalous (Desmospondylus) ..... | 31           |
| angustidens (Eohippus) .....       | 668           | anomalous (Palamopus) .....      | 18           |
| angustidens (Mastodon) .....       | 636, 638      | Anomodon .....                   | 439          |
| angustidens (Megacerops) .....     | 720           | snyderi .....                    | 439          |
| angustidens (Mustela) .....        | 523           | Anomodonta .....                 | 61           |
| angustidens (Orohippus) .....      | 668, 669      | Anomodontia .....                | 61, 62       |
| angustidens (Procamelus) .....     | 801           | Anomodontoidea .....             | 62           |
| angustidens (Protolabis) .....     | 801           | Anomæpodidæ .....                | 1            |
| angustidens (Putorius) .....       | 528           | Anomæpus .....                   | 4            |
| angustigens (Megacerops) .....     | 720           | crassus .....                    | 4            |
| angustus (Elomeryx) .....          | 759           | culbertsoni .....                | 4            |
| angustus (Haploconus) .....        | 611           | cuneatus .....                   | 4            |
| angustus (Ornithomimipus) .....    | 16            | curvatus .....                   | 4            |
| angustus (Ornithomimus) .....      | 16            | gallinuloides .....              | 4            |
| angustus (Tarsoplectrus) .....     | 19            | giganteus .....                  | 4            |
| Anicanodonta .....                 | 408           | gracillimus .....                | 4            |
| Animalivora .....                  | 453           | intermedius .....                | 4, 5         |
| Animasaurus .....                  | 36            | isodactylus .....                | 4            |
| carinatus .....                    | 36            | major .....                      | 4            |
| Anisacodon .....                   | 426           | minimus .....                    | 4            |
| elegans .....                      | 426           | minor .....                      | 5            |
| Anisichnus .....                   | 8             | scambus .....                    | 5            |
| Anisonchina .....                  | 611           | anonymum (Trinaeromerum) .....   | 117          |
| Anisonchus .....                   | 611           | Anoplonassa .....                | 584          |
| gillianus .....                    | 611           | forcipata .....                  | 584          |
| mandibularis .....                 | 611           | Anoplotheriidae .....            | 757          |
| sectorius .....                    | 611           | Anoplotheriina .....             | 757          |
| Anisopus .....                     | 8             | Anoplotherium .....              | 757          |
| deweyanus .....                    | 8             | Anosteira .....                  | 92, 113      |
| gracilior .....                    | 8             | ornata .....                     | 93           |
| gracilis .....                     | 8             | radulina .....                   | 93           |
| Ankylosauria .....                 | 237           | trionychoidea .....              | 113          |
| Ankylosauridae .....               | 237           | Anosteiridae .....               | 92           |
| Ankylosaurina .....                | 237           | Anosterina .....                 | 92           |
| Ankylosaurus .....                 | 207, 232, 238 | Anostira .....                   | 92, 106, 113 |
| magniventris .....                 | 238           | molopinus .....                  | 106          |
| annæ (Testudo) .....               | 102           | œdenius .....                    | 106          |
| annectans (Claosaurus) .....       | 212           | trionychoidea .....              | 113          |
| annectans (Microsops) .....        | 450           | Anser .....                      | 302          |
| annectans (Aceratherium) .....     | 744           | albifrons .....                  | 303          |
| annectans (Bathrodon) .....        | 450           | condoni .....                    | 303          |
| annectans (Cænopus) .....          | 744           | gambeli .....                    | 303          |
| annectans (Champsosaurus) .....    | 133           | gambelli .....                   | 303          |
| annectans (Claosaurus) .....       | 212           | hypsibatus .....                 | 302          |
| annectans (Cœnopus) .....          | 744           | Anseres .....                    | 299, 301     |
| annectans (Corvus) .....           | 366           | Anseridae .....                  | 300, 301     |
| annectans (Diceratherium) .....    | 744           | Anseriformes .....               | 299, 300     |
| annectans (Eomoropus) .....        | 725           | Anserina .....                   | 301          |
| annectans (Fiber) .....            | 931           | anthonyi (Hipparion) .....       | 692          |
| annectans (Hylomeryx) .....        | 754           | anthracinus (Eumeces) .....      | 249          |
| annectans (Isctolophus) .....      | 727           | anthracinus (Plestiodon) .....   | 249          |
| annectans (Mesohippus) .....       | 676           | Anthracopus .....                | 5            |
| annectans (Miohippus) .....        | 676           | ellangowensis .....              | 5            |
| annectans (Nothocyon) .....        | 492           | Anthracotheriidae .....          | 758          |
| annectans (Ondatra) .....          | 901           | Anthracotherina .....            | 758          |
| annectans (Protagriochcerus) ..... | 776           | Anthracotheriina .....           | 758          |
| annectans (Tinoceras) .....        | 618           | Anthracotherioides .....         | 758          |

|                                 | Page     |                                   | Page          |
|---------------------------------|----------|-----------------------------------|---------------|
| Anthracotherium .....           | 758      | antiquus (Manatus) .....          | 656           |
| curtum .....                    | 759      | antiquus (Meleagrus) .....        | 329           |
| gibbiceps .....                 | 759      | antiquus (Perchoerus) .....       | 768           |
| karense .....                   | 758      | antiquus (Peromyscus) .....       | 893           |
| pygmæum .....                   | 759      | antiquus (Probassariscus) .....   | 516           |
| Anthropiformes .....            | 930      | antiquus (Prolimnocyon) .....     | 473           |
| Anthropoidæ .....               | 930      | antiquus (Sarcothraustes) .....   | 466           |
| Anthropoidea .....              | 930      | antiquus (Synthliboramphus) ..... | 344           |
| Anthropomorpha .....            | 930      | antiquus (Theretairas) .....      | 135           |
| Anthropomorphidæ .....          | 930      | antiquus (Thimohyus) .....        | 768           |
| Antiacodon .....                | 754, 926 | antiquus (Thinopus) .....         | 22            |
| furcatus .....                  | 755      | antiquus (Thryptacodon) .....     | 462           |
| nanus .....                     | 926      | antiquus (Tinopus) .....          | 22            |
| venustus .....                  | 754      | antiquus (Trichechus) .....       | 656           |
| Anticheropus .....              | 5        | antium (Mastodon) .....           | 631           |
| hamatus .....                   | 5        | Antrodemus .....                  | 173, 184      |
| pilulatus .....                 | 5        | fragilis .....                    | 174           |
| antigua (Hyporhina) .....       | 850      | lucaris .....                     | 184           |
| antigua (Hypsorhina) .....      | 850      | medius .....                      | 178           |
| Antilocapra .....               | 835      | sulcatus .....                    | 174           |
| americana .....                 | 835      | trihedrodon .....                 | 174           |
| furcifer .....                  | 835      | valens .....                      | 174, 184      |
| Antilocapridæ .....             | 834      | Antrozous .....                   | 455           |
| Antilocaprinæ .....             | 834      | pacificus .....                   | 455           |
| Antilope .....                  | 831, 835 | pallidus .....                    | 455           |
| americana .....                 | 835      | Apatemydæ .....                   | 445           |
| furcata .....                   | 831      | Apatemydidæ .....                 | 445           |
| Antilopidæ .....                | 838      | Apatemyidæ .....                  | 445           |
| Antilopina .....                | 838      | Apatemys .....                    | 445           |
| Antilopinæ .....                | 838      | bellulus .....                    | 445           |
| antilopinus (Dromomeryx) .....  | 819      | bellus .....                      | 445           |
| antilopinus (Blastomeryx) ..... | 819      | rodens .....                      | 445           |
| antilopinus (Palæomeryx) .....  | 816      | Apatichnus .....                  | 4, 5          |
| antipex (Terrapene) .....       | 98       | bellus .....                      | 8             |
| Antipus .....                   | 5        | circumagens .....                 | 5             |
| bifidus .....                   | 5        | crassus .....                     | 4             |
| flexiloquus .....               | 5        | hol yokensis .....                | 5             |
| antiqua (Aquila) .....          | 313      | minor .....                       | 5             |
| antiqua (Baëna) .....           | 71       | Apatodon .....                    | 201           |
| antiqua (Catarractes) .....     | 343      | mirus .....                       | 201           |
| antiqua (Hyporhina) .....       | 250      | Apatodonsaurus .....              | 123           |
| antiqua (Hypsorhina) .....      | 250      | grayi .....                       | 123           |
| antiqua (Meleagris) .....       | 329      | Apatomerus .....                  | 164           |
| antiqua (Minerva) .....         | 352      | mirus .....                       | 164           |
| antiqua (Platypeltis) .....     | 112      | Apatomydæ .....                   | 445           |
| antiqua (Thecachampsa) .....    | 153      | Apatomyidæ .....                  | 445           |
| antiqua (Uria) .....            | 343      | Apatornis .....                   | 282           |
| antiquior (Batrachoides) .....  | 7        | celer .....                       | 282           |
| antiquior (Palæosauropus) ..... | 17       | Apatornithidæ .....               | 281           |
| antiquior (Sauropus) .....      | 17       | Apatosauridæ .....                | 194           |
| antiquissimus (Anancus) .....   | 632      | Apatosaurus .....                 | 194, 195, 196 |
| antiquissimus (Dibelodon) ..... | 632      | ajax .....                        | 195           |
| antiquissimus (Mastodon) .....  | 632      | amplus .....                      | 196           |
| antiquum (Halitherium) .....    | 656      | excelsus .....                    | 196           |
| antiquum (Ischyrotherium) ..... | 122      | grandis .....                     | 191           |
| antiquus (Agriochoerus) .....   | 777      | laticollis .....                  | 195           |
| antiquus (Amynodon) .....       | 737      | louise .....                      | 195           |
| antiquus (Bassariscus) .....    | 516      | minimus .....                     | 195           |
| antiquus (Bison) .....          | 849      | montanus .....                    | 194           |
| antiquus (Cœlosaurus) .....     | 181      | apertus (Centrosaurus) .....      | 224           |
| antiquus (Crocodylus) .....     | 153      | apertus (Hyracodon) .....         | 736           |
| antiquus (Crocodylus) .....     | 153      | Aphalops .....                    | 746           |
| antiquus (Ctenigenys) .....     | 256      | brachyodus .....                  | 746           |
| antiquus (Ischyrosaurus) .....  | 122      | Aphanolemur .....                 | 924           |
| antiquus (Lutreola) .....       | 529      | gibbosus .....                    | 924           |

|                                  | Page          |                               | Page     |
|----------------------------------|---------------|-------------------------------|----------|
| Apheliseidæ .....                | 450           | aquilunguis (Lælaps) .....    | 178      |
| Apheliscus .....                 | 450           | Arachnichnus .....            | 5        |
| insidiosus .....                 | 450           | dehiscens .....               | 5        |
| Aphelophis .....                 | 268           | Aræocyon .....                | 507      |
| talpivorus .....                 | 268           | marshi .....                  | 507      |
| Aphelops .....                   | 746, 746, 749 | Aræoscelia .....              | 240      |
| brachyodus .....                 | 746           | Aræoscelidæ .....             | 240      |
| ceratorhinus .....               | 746           | Aræoscelidia .....            | 240      |
| crassus .....                    | 747           | Aræoscelis .....              | 37, 240  |
| fossiger .....                   | 749           | gracilis .....                | 37, 241  |
| jemezianus .....                 | 747           | Aræosceloidea .....           | 240      |
| longipes .....                   | 747           | Aræoscelomorphi .....         | 240      |
| malacorhinus .....               | 747           | Aramidæ .....                 | 332      |
| matutinus .....                  | 747           | Araminæ .....                 | 332      |
| megalodus .....                  | 747           | Aramornis .....               | 332      |
| meridianus .....                 | 747           | longurio .....                | 332      |
| montanus .....                   | 747           | Aramus .....                  | 332      |
| mutulus .....                    | 747           | aransas (Camelops) .....      | 803      |
| oregonensis .....                | 745           | arapahovius (Camelodon) ..... | 793      |
| planiceps .....                  | 747           | arcæmænus (Calamodon) .....   | 400      |
| profectus .....                  | 747           | Archælurus .....              | 543      |
| superciliosus .....              | 748           | debilis .....                 | 543      |
| aphobus (Æluroidon) .....        | 495           | major .....                   | 543      |
| apiculatus (Oxyacodon) .....     | 603           | Archæobellus .....            | 60       |
| Aplocerus .....                  | 340           | Archæobelus .....             | 60       |
| montanus .....                   | 341           | vellicatus .....              | 60       |
| Aploconodon .....                | 370           | Archæobolis .....             | 60       |
| comoënsis .....                  | 370           | Archæoceti .....              | 567      |
| Aplodontia .....                 | 906           | Archæodelphis .....           | 578      |
| alexandræ .....                  | 906           | patrius .....                 | 578      |
| californica .....                | 906           | Archæohippus .....            | 680      |
| fossilis .....                   | 906           | agrestis .....                | 681      |
| major .....                      | 906           | mourningi .....               | 682      |
| rufa .....                       | 906           | penultimus .....              | 682      |
| Aplodontiæ .....                 | 905           | ultimus .....                 | 682, 683 |
| Aplodontiæ .....                 | 906           | Archæolagus .....             | 866      |
| Aplodontiæ .....                 | 906           | onnisianus .....              | 866      |
| Aplodontoidea .....              | 906           | Archæopteridæ .....           | 276      |
| appalachianus (Palæoconus) ..... | 171           | Archæopterygidæ .....         | 276      |
| appalachiculus (Ovibos) .....    | 345           | Archæopterygiformes .....     | 276      |
| approximatum (Brontozoum) .....  | 11            | Archæopterygomorphi .....     | 276      |
| approximatus (Eubrontes) .....   | 11            | Archæopteryx .....            | 276      |
| Apternodontidæ .....             | 426           | Archæornithes .....           | 276      |
| Apternodontinæ .....             | 426           | Archæosauria .....            | 180      |
| Apternodus .....                 | 426           | Archæotherium .....           | 762, 763 |
| mediævus .....                   | 427           | coarctatum .....              | 763      |
| aptus (Crocodylus) .....         | 153           | clavum .....                  | 763      |
| aptus (Crocodylus) .....         | 153           | clavus .....                  | 763      |
| aquaticus (Scalops) .....        | 438           | crassum .....                 | 763      |
| aquaticus (Scalopus) .....       | 438           | darbyi .....                  | 763      |
| aquaticus (Sorex) .....          | 438           | imperator .....               | 763      |
| Aquila .....                     | 317, 318      | ingens .....                  | 764      |
| antiqua .....                    | 318           | marshi .....                  | 764      |
| chrisæctus .....                 | 318           | mortoni .....                 | 763, 764 |
| chrysaëtos .....                 | 318           | robustum .....                | 764      |
| danana .....                     | 317           | scotti .....                  | 764      |
| ferox .....                      | 318           | superbum .....                | 762      |
| haliaëtus .....                  | 319, 321      | wanlessi .....                | 764      |
| lydekkeri .....                  | 318           | Archæotrigon .....            | 372      |
| pliogryps .....                  | 318           | brevimaxillus .....           | 372      |
| sodalis .....                    | 319           | Archelon .....                | 79       |
| Aquilæ .....                     | 315           | ischyros .....                | 79       |
| Aquilidæ .....                   | 315           | marshi .....                  | 79       |
| Aquilinæ .....                   | 315           | Archæopteryx .....            | 277      |
| aquilunguis (Dryptosaurus) ..... | 178           | Archeria .....                | 45       |



|                                 | Page     |                                | Page     |
|---------------------------------|----------|--------------------------------|----------|
| Archæna— <i>Continued</i>       |          | arcuatus (Dryolestes).....     | 373      |
| robinsoni .....                 | 45       | arcuatus (Herpetairus).....    | 373      |
| Archibuteo .....                | 316      | arcuatus (Stegomus).....       | 139      |
| ferrugineus .....               | 316      | Ardea .....                    | 294, 332 |
| Archidiscodon .....             | 647      | canadensis .....               | 332      |
| imperator .....                 | 647      | herodias .....                 | 294      |
| Archidiskodon .....             | 640      | mexicanus .....                | 332      |
| columbi .....                   | 648      | paloccidentalis .....          | 295      |
| imperator .....                 | 647      | sellardsi .....                | 295      |
| maibeni .....                   | 648      | Ardæ .....                     | 293, 294 |
| Archornithidæ .....             | 276      | Ardeidæ .....                  | 294      |
| Archornithiformes .....         | 276      | Ardeiformes .....              | 293      |
| Archosauria .....               | 180      | Ardeinæ .....                  | 294      |
| arcidens (Hyracodon).....       | 736      | Ardeoidæ .....                 | 293      |
| arcta (Exocampe).....           | 12       | Ardeoidea .....                | 293      |
| arctatus (Cionodon).....        | 214      | ardetta (Eoecornis).....       | 295      |
| arcticos (Rangifer).....        | 824      | arenaria (Hybomys).....        | 96       |
| arcticus (Gulo).....            | 531      | arenarius (Merychyus).....     | 787      |
| arcticus (Rangifer).....        | 824      | arenarum (Camelops).....       | 803      |
| arcticus (Rosmarus).....        | 560      | arenarum (Merychyus).....      | 787      |
| Arctitherium .....              | 581      | arenarum (Ogmophis).....       | 288      |
| arctoamericanus (Camelus).....  | 807      | arenivaga (Testudo).....       | 102      |
| Arctocynidæ .....               | 463      | arenosa (Baëna).....           | 71       |
| Arctocyon .....                 | 463      | Areocelis .....                | 240      |
| Arctocyonidæ .....              | 463      | gracilis .....                 | 241      |
| Arctocyonoidæ .....             | 459      | Areoscelidæ .....              | 240      |
| Arctodon .....                  | 581      | arethusa (Echmatemys).....     | 95       |
| Arctodus .....                  | 581, 522 | argentatus (Larus).....        | 340      |
| haplodon .....                  | 523      | Argoides .....                 | 6        |
| pristinus .....                 | 523      | isodactylatus .....            | 6        |
| simus .....                     | 581      | isodactyletus .....            | 6        |
| yukonensis .....                | 522      | macroductylatus .....          | 6        |
| Arctoidea .....                 | 488      | macroductylus .....            | 6        |
| Arctoidei .....                 | 488      | macroductylotus .....          | 6        |
| Arctomis .....                  | 870      | minimus .....                  | 6        |
| empetra .....                   | 871      | redfieldianus .....            | 6        |
| Arctomydæ .....                 | 868      | redfieldii .....               | 6        |
| arctomyoides (Parasciurus)..... | 874      | robustus .....                 | 6        |
| arctomyoides (Sciurus).....     | 874      | Argozoum .....                 | 6        |
| Arctomys .....                  | 870      | disparidigitatum .....         | 6        |
| beecheyi .....                  | 872      | paridigitatum .....            | 6        |
| douglasii .....                 | 871      | redfieldianum .....            | 6        |
| flaviventer .....               | 870      | Argyrocerus .....              | 591      |
| grammurus .....                 | 871      | ankarense (Diceratherium)..... | 745      |
| ludovicianus .....              | 872      | arizonæ (Allopus).....         | 2        |
| minor .....                     | 871      | arizonæ (Eligmodontia).....    | 893      |
| monax .....                     | 871      | arizonæ (Glyptotherium).....   | 633      |
| nevadensis .....                | 871      | arizonæ (Marmota).....         | 870      |
| vetus .....                     | 868      | arizonense (Cinosternum).....  | 93       |
| Arctoryctes .....               | 429      | arizonense (Kinosternon).....  | 93       |
| terrenus .....                  | 429      | arizonensis (Mustela).....     | 528      |
| arctos (Ursus).....             | 520      | arizonensis (Putorius).....    | 528      |
| Arctosaurus .....               | 172      | arizonica (Bos).....           | 851      |
| osborni .....                   | 172      | armatum (Diceratherium).....   | 744      |
| Arctostylopide .....            | 660      | armatus (Coryphodon).....      | 615      |
| Arctostylops .....              | 660      | armatus (Elomeryx).....        | 750      |
| steini .....                    | 660      | armatus (Heptacodon).....      | 759      |
| Arctotherine .....              | 521      | armatus (Omosaurus).....       | 234      |
| Arctotherium .....              | 521      | armatus (Perognathus).....     | 880      |
| californicum .....              | 521      | armatus (Stegosaurus).....     | 234      |
| haplodon .....                  | 523      | armbrusteri (Canis).....       | 498      |
| pristinum .....                 | 523      | Arretherium .....              | 759      |
| simum .....                     | 521      | acridens .....                 | 759      |
| yukonense .....                 | 522      | Arrhinoceratops .....          | 221      |
| arctus (Barillopus).....        | 6        | brachyops .....                | 221      |

|                            | Page     |                                   | Page          |
|----------------------------|----------|-----------------------------------|---------------|
| Arribasaurus .....         | 48       | Aspideretes— <i>Continued</i>     |               |
| navajoicus .....           | 49       | subsquadratus .....               | 109           |
| arrodens (Marmota) .....   | 870      | vagans .....                      | 109           |
| Artiodactyla .....         | 750      | vegetus .....                     | 110           |
| Artiodactylus .....        | 6        | vorax .....                       | 110           |
| sinclairi .....            | 6        | Aspidonectes .....                | 110, 112      |
| Artionychia .....          | 776      | tritor .....                      | 111           |
| Artionyx .....             | 776      | assinihoiensis (Megacerops) ..... | 720           |
| Arvicola .....             | 898      | assinihoiensis (Mesohippus) ..... | 673           |
| amphibius .....            | 898      | assurgens (Microclanodon) .....   | 466           |
| borealis .....             | 899      | Astatoglyptica .....              | 64            |
| californica .....          | 897      | Asthenodon .....                  | 372           |
| gapperi .....              | 899      | segnis .....                      | 373           |
| longirostris .....         | 898      | Astrodon .....                    | 193           |
| montana .....              | 899      | altus .....                       | 193           |
| mordax .....               | 898      | johnstoni .....                   | 193           |
| pinetorum .....            | 900      | montanus .....                    | 193           |
| richardsoni .....          | 898      | nanus .....                       | 193           |
| Arvicolidæ .....           | 896, 897 | astutus (Barraris) .....          | 516           |
| Arvicoline .....           | 896      | astutus (Bassaris) .....          | 516           |
| Arvicolini .....           | 896      | astutus (Bassariscus) .....       | 516           |
| Ascalabota .....           | 245      | astutus (Opisthotomus) .....      | 605           |
| Ascalabotæ .....           | 245      | astutus (Phenacodus) .....        | 605           |
| Asinus .....               | 703      | atascosæ (Gopherus) .....         | 101           |
| calobatus .....            | 703      | atascosæ (Testudo) .....          | 101           |
| asinus (Equus) .....       | 709      | atavus (Orohippus) .....          | 671           |
| Asio .....                 | 349, 351 | atavus (Parahippus) .....         | 682           |
| accipitrinus .....         | 351      | atavus (Prolimnocyon) .....       | 473           |
| flammeus .....             | 351      | Athea .....                       | 67            |
| otus .....                 | 349      | Athece .....                      | 67            |
| wilsonianus .....          | 351      | Athene .....                      | 350           |
| asio (Megascops) .....     | 349      | whitneyi .....                    | 350           |
| asio (Otus) .....          | 349      | Athya .....                       | 307           |
| asio (Scops) .....         | 349      | marila .....                      | 307           |
| Asionidæ .....             | 349      | atlantica (Sula) .....            | 291           |
| Asioninæ .....             | 349      | atlanticus (Basilosaurus) .....   | 581           |
| asper (Palæoscincus) ..... | 236      | atlanticus (Hypocetus) .....      | 597           |
| Asperipes .....            | 6        | atlanticus (Squalodon) .....      | 581           |
| avipes .....               | 6        | Atlantochelys .....               | 78            |
| caudifer .....             | 6        | mortoni .....                     | 78            |
| flexilis .....             | 6        | Atlantosauridæ .....              | 189, 194      |
| Aspiderestes .....         | 108      | Atlantosaurus .....               | 194           |
| Aspideretos .....          | 108      | immanis .....                     | 194           |
| allani .....               | 108      | montanus .....                    | 194           |
| amnigenus .....            | 108      | Atemata .....                     | 28, 45        |
| austerus .....             | 108      | atropius (Belosphys) .....        | 589           |
| beecheri .....             | 108      | atropius (Ixacanthus) .....       | 589           |
| coalescens .....           | 108      | atropius (Priscodelphinus) .....  | 590           |
| ellipticus .....           | 108      | atrox (Creosaurus) .....          | 175           |
| fontanus .....             | 108      | atrox (Crotalus) .....            | 271           |
| foveatus .....             | 108      | atrox (Felix) .....               | 558           |
| grangeri .....             | 109      | attenuatus (Loxolophus) .....     | 460           |
| granifer .....             | 109      | attenuatus (Polymastodon) .....   | 383           |
| guttatus .....             | 109      | attenuatus (Protochriacus) .....  | 460           |
| lancensis .....            | 109      | atticornis (Triceratops) .....    | 223           |
| latus .....                | 109      | atwateri (Paramys) .....          | 902           |
| maturus .....              | 109      | Aublysodon .....                  | 176           |
| nassau .....               | 109      | amplus .....                      | 180           |
| perplexus .....            | 109      | cristatus .....                   | 180           |
| puercensis .....           | 109      | explanatus .....                  | 181           |
| quadratus .....            | 109      | lateralis .....                   | 177           |
| reesidei .....             | 109      | mirandus .....                    | 177           |
| sagatus .....              | 109      | Aublysodontinæ .....              | 176           |
| singularis .....           | 109      | Auchenia .....                    | 797, 808, 808 |
| splendidus .....           | 109      | californica .....                 | 808           |

|                           | Page     |                            | Page     |
|---------------------------|----------|----------------------------|----------|
| <i>Auchenia—Continued</i> |          | <i>Baena</i>               | 71       |
| castilli                  | 797      | antiqua                    | 71       |
| hesterna                  | 803      | arenosa                    | 71       |
| huerfanensis              | 803      | callosa                    | 71       |
| major                     | 798      | cephalica                  | 72       |
| minima                    | 798, 799 | clara                      | 71       |
| minor                     | 799      | emiliae                    | 71       |
| vitakeri                  | 803      | escavada                   | 71       |
| vitakerianus              | 803      | gigantea                   | 71       |
| auduboni (Lepus)          | 884      | hatcheri                   | 71       |
| auduboni (Polyborus)      | 321      | hayi                       | 71       |
| auduboni (Sylvilagus)     | 884      | hebraica                   | 73       |
| audubonii (Lepus)         | 884      | inflata                    | 71       |
| audubonii (Polyborus)     | 321      | marshi                     | 71       |
| auduboni (Sylvilagus)     | 884      | nodosa                     | 71       |
| augustus (Felis)          | 552      | platyplastra               | 71       |
| augustus (Machærodus)     | 552      | ponderosa                  | 92       |
| aulacodon (Carpodaptes)   | 925      | pulchra                    | 73       |
| aulacodus (Palæoctonus)   | 172      | riparia                    | 71       |
| aulacodus (Suchoprion)    | 172      | sima                       | 71       |
| Aulaxodon                 | 408      | undata                     | 73       |
| Aulophyseter              | 597      | <i>Baenidae</i>            | 71       |
| morricei                  | 597      | <i>Baeninae</i>            | 71       |
| aura (Catharista)         | 311      | baereckeii (Globicephala)  | 587      |
| aura (Cathartes)          | 311      | baereckeii (Globicephalus) | 587      |
| aurlus (Agriochoerus)     | 777      | baileyanus (Triænopus)     | 22       |
| aurlus (Cervus)           | 821      | baileyi (Triænopus)        | 22       |
| aurlus (Colymbus)         | 285      | bairdi (Anchitherium)      | 673      |
| aurlus (Podiceps)         | 285      | bairdi (Mesoshippus)       | 673      |
| aurlus (Podiceps)         | 285      | bairdi (Miohippus)         | 673      |
| aura (Vultur)             | 311      | bairdi (Palæotherium)      | 673      |
| austerus (Aspideretes)    | 108      | bairdianus (Hyrachiyus)    | 733      |
| austerus (Microtus)       | 898      | bairdii (Mesoshippus)      | 673      |
| australis (Champsosaurus) | 133      | <i>Balæna</i>              | 573, 577 |
| australis (Hypohippus)    | 681      | affinis                    | 578      |
| australis (Mastodon)      | 682      | boops                      | 576      |
| australis (Miohippus)     | 681      | longimana                  | 576      |
| australis (Parahippus)    | 681      | nodosa                     | 576      |
| australis (Scalops)       | 438      | palæatlanticus             | 573      |
| australis (Symbos)        | 847      | prisca                     | 572      |
| australis (Synaptomys)    | 399      | <i>Balænida</i>            | 576      |
| australis (Vulpavus)      | 438      | <i>Balænidae</i>           | 576      |
| Autarchoglossa            | 248      | <i>Balænina</i>            | 576      |
| Autosauri                 | 243      | <i>Balænnæ</i>             | 577      |
| Aves                      | 272      | <i>Balænnini</i>           | 577      |
| avia (Mephitis)           | 533      | <i>Balænodon</i>           | 598      |
| avipes (Asperipes)        | 6        | physaloides                | 598      |
| avus (Nautilornis)        | 344      | <i>Balænoidæ</i>           | 573      |
| avum (Diceratherium)      | 743      | <i>Balænoidea</i>          | 571, 577 |
| avus (Cenopus)            | 743      | <i>Balænoptera</i>         | 574, 598 |
| avus (Diplacodus)         | 720      | hoops                      | 576      |
| avus (Megacerops)         | 720      | physalus                   | 576      |
| avus (Merychippus)        | 681      | polyporum                  | 575      |
| avus (Parahippus)         | 681      | ryani                      | 575      |
| avus (Protohippus)        | 681      | sursiplana                 | 575      |
| avus (Teleodus)           | 720      | <i>Balænopterida</i>       | 573      |
| Axestemys                 | 110      | <i>Balænopteridæ</i>       | 573      |
| byssinus                  | 110      | <i>Balænopterine</i>       | 574      |
| Axestus                   | 110      | <i>Balænopterini</i>       | 574      |
| byssinus                  | 110      | <i>Balænula</i>            | 578      |
| ayersi (Ænocyon)          | 501      | <i>Balanada</i>            | 576      |
| ayersi (Canis)            | 501      | baldwini (Chriacus)        | 461      |
| babylorensis (Seymouria)  | 51       | baldwini (Elcobrossaurus)  | 51       |
| bachmani (Lepus)          | 864      | baldwini (Elcobrossaurus)  | 51       |
| bachmani (Sylvilagus)     | 864      | baldwini (Hemithlæus)      | 608      |
|                           |          | ballardi (Lophotherium)    | 671      |

|                                 | Page     |                                    | Page     |
|---------------------------------|----------|------------------------------------|----------|
| ballardi (Lophiotherium).....   | 671      | basifissus (Alligator).....        | 149      |
| ballardi (Orohippus).....       | 671      | basifissus (Crocodylus).....       | 149      |
| ballensis (Mesogaulus).....     | 907      | basifissus (Thoracosaurus).....    | 149      |
| ballensis (Mylagaulus).....     | 907      | basilatus (Enhydrocyon).....       | 507      |
| balloviatus (Parasciurus).....  | 904      | basilatus (Hyænocyon).....         | 507      |
| balloviatus (Prosciurus).....   | 904      | Basilemys.....                     | 88       |
| balloviatus (Sciurus).....      | 904      | imbricarius.....                   | 88       |
| bannackensis (Ticholeptus)..... | 789      | nobilis.....                       | 88       |
| Baptanodon.....                 | 127      | ognius.....                        | 88       |
| discus.....                     | 127      | præclarus.....                     | 88       |
| marshi.....                     | 127      | sinuosus.....                      | 88       |
| natans.....                     | 128      | variolosa.....                     | 88       |
| reedi.....                      | 128      | variolosus.....                    | 88       |
| robustus.....                   | 128      | Basilosauridæ.....                 | 569      |
| Baptanodontia.....              | 127      | Basilosaurus.....                  | 569, 569 |
| Baptanodontidæ.....             | 127      | atlanticus.....                    | 581      |
| Baptanodontinæ.....             | 127      | brachyspondylus.....               | 570      |
| Baptemys.....                   | 92       | cetoides.....                      | 570      |
| costilatus.....                 | 92       | kochi.....                         | 570      |
| fluvialilis.....                | 92       | macrospondylus.....                | 570      |
| tricarinata.....                | 92       | basitruncatus (Holops).....        | 149      |
| wyomingensis.....               | 92       | basitruncatus (Thoracosaurus)..... | 149      |
| Baptornis.....                  | 279      | Bassarididæ.....                   | 513      |
| addenus.....                    | 279      | Basarris.....                      | 515, 516 |
| advenus.....                    | 279      | astutus.....                       | 516      |
| Baptosaurus.....                | 264      | raptor.....                        | 516      |
| fraternus.....                  | 264      | Bassariscidæ.....                  | 515      |
| onchognathus.....               | 264      | Bassariscinæ.....                  | 515      |
| platyspondylus.....             | 264      | Bassariscoidæ.....                 | 515      |
| barbata (Phoca).....            | 585      | Bassariscus.....                   | 515      |
| barbatus (Erignathus).....      | 585      | antiquus.....                      | 516      |
| barbouri (Chalicomys).....      | 882      | astutus.....                       | 516      |
| barbouri (Gomphotherium).....   | 635      | matthewi.....                      | 516      |
| barbouri (Morrillia).....       | 635      | nevadensis.....                    | 516      |
| barbouri (Steneofiber).....     | 882      | oregonus.....                      | 516      |
| barbouri (Tetralophodon).....   | 635      | parvus.....                        | 516      |
| barcenæi (Equus).....           | 703      | raptor.....                        | 516      |
| barcenai (Equus).....           | 703, 709 | Bassarisinæ.....                   | 515      |
| Barillopus.....                 | 6        | Bassariscops.....                  | 516      |
| aretus.....                     | 6        | willistoni.....                    | 516      |
| confusus.....                   | 6        | Bathiopsis.....                    | 617      |
| unguifer.....                   | 6        | Bathmodon.....                     | 614      |
| Baropezia.....                  | 7        | cuspidatus.....                    | 616, 618 |
| abscissa.....                   | 7        | elephantopus.....                  | 615      |
| calkini.....                    | 7        | latidens.....                      | 615      |
| sydnensis.....                  | 7        | latipes.....                       | 616      |
| Baropus.....                    | 6, 7     | lomas.....                         | 616      |
| coconinoënsis.....              | 7        | molestus.....                      | 616      |
| lentus.....                     | 7        | radians.....                       | 616      |
| unguifer.....                   | 6        | semicinctus.....                   | 616      |
| Barornis.....                   | 283      | simus.....                         | 616      |
| regens.....                     | 284      | bathmodon (Pantolambda).....       | 613      |
| Barosauridæ.....                | 197      | bathmodon (Protolambda).....       | 613      |
| Barosaurus.....                 | 199, 200 | Bathmodontidæ.....                 | 614      |
| affinis.....                    | 200      | Bathornis.....                     | 339      |
| lentus.....                     | 200      | cavirictus.....                    | 613      |
| barratii (Sauropus).....        | 20       | veredus.....                       | 339      |
| barstowensis (Hemicyon).....    | 512      | Bathornithinæ.....                 | 339      |
| Barypodus.....                  | 7        | Bathrodon.....                     | 460      |
| metzseri.....                   | 7        | annectens.....                     | 460      |
| palmatus.....                   | 7        | typus.....                         | 460      |
| tridactylus.....                | 7        | bathrodon (Ammodon).....           | 765      |
| Bascanion.....                  | 269      | bathrodon (Ellotherium).....       | 765      |
| acuminatus.....                 | 269      | bathrodon (Pelonax).....           | 765      |
| constrictor.....                | 269      | Bathygenys.....                    | 779      |

|                               | Page     |                                   | Page     |
|-------------------------------|----------|-----------------------------------|----------|
| Bathygenys— <i>Continued</i>  |          | bellulus (Apatemys).....          | 445      |
| alpha.....                    | 779      | bellus (Aletornis).....           | 332      |
| Bathyglyptus.....             | 45       | bellus (Apatemys).....            | 445      |
| theodori.....                 | 45       | bellus (Apatichnus).....          | 8        |
| Bathygnathus.....             | 56       | bellus (Batrachopus).....         | 8        |
| borealis.....                 | 56       | bellus (Cumolomys).....           | 381      |
| bathygnathus (Lophiodon)..... | 851      | bellus (Tinodon).....             | 371      |
| bathygnathus (Miacyis).....   | 484      | Belodon.....                      | 143      |
| bathygnathus (Miocyon).....   | 484      | buceros.....                      | 144      |
| bathygnathus (Uintacyon)..... | 484      | carolinensis.....                 | 143      |
| Bathyopsis.....               | 617      | leaii.....                        | 142, 145 |
| Bathyopsis.....               | 615, 617 | lepturus.....                     | 142      |
| fissidens.....                | 617      | priscus.....                      | 145      |
| pachypus.....                 | 615      | scolopax.....                     | 142      |
| Batodon.....                  | 392      | validus.....                      | 143, 145 |
| tenuis.....                   | 392      | Belodonti.....                    | 140      |
| Batrachichnus.....            | 7        | Belodontia.....                   | 140, 141 |
| celer.....                    | 7        | Belodontidæ.....                  | 141      |
| delicatulus.....              | 7        | Belosphys.....                    | 590      |
| jacksonensis.....             | 7        | conradi.....                      | 590      |
| obscurus.....                 | 7        | spinosus.....                     | 590      |
| plainvillensis.....           | 7        | Beluga.....                       | 593, 594 |
| Batrachoidichnites.....       | 8        | catodon.....                      | 593, 594 |
| deweyi.....                   | 8        | loucas.....                       | 594      |
| Batrachites.....              | 7        | vermontana.....                   | 594      |
| plainvillensis.....           | 7        | Beluginæ.....                     | 593, 593 |
| Batrachoides.....             | 8        | belviderensis (Glyptops).....     | 70       |
| antiquior.....                | 8        | belviderensis (Plesiochelys)..... | 70       |
| nidificans.....               | 8        | bendrei (Otus).....               | 349      |
| Batrachopodidæ.....           | 1        | benedentatus (Procamelus).....    | 797      |
| Batrachopus.....              | 8        | benjamini (Lepus).....            | 863      |
| bellus.....                   | 8        | bensoni (Citellus).....           | 889      |
| deweyanus.....                | 8        | bensoni (Cratogeomys).....        | 880      |
| deweyi.....                   | 8        | bensoni (Onychomys).....          | 892      |
| dispar.....                   | 8        | bentonianum (Trinacromerum).....  | 117      |
| gracilior.....                | 8        | beresovkii (Elephas).....         | 649      |
| gracilis.....                 | 8        | Bernicle.....                     | 801      |
| baudistensis (Equus).....     | 703      | canadensis.....                   | 302      |
| baueri (Neurankylus).....     | 70       | hutchinsi.....                    | 302      |
| bauri (Cœlophysis).....       | 186      | Berycynthia.....                  | 6        |
| bauri (Tanystropheus).....    | 186      | redfieldii.....                   | 6        |
| bauri (Toxochelys).....       | 86       | biacros (Phytosaurus).....        | 144      |
| bautistensis (Equus).....     | 703      | bicalcaratus (Platygonus).....    | 772      |
| baylorensis (Seymouria).....  | 30       | bicarinata (Hoplochelys).....     | 91       |
| beata (Emys).....             | 89       | bicarinatus (Dysganus).....       | 215      |
| bestus (Adocus).....          | 89       | Biceros.....                      | 739      |
| bebbi (Felis).....            | 552      | bicornutus (Megacerops).....      | 720      |
| beecher (Aspideretes).....    | 108      | bicornutus (Metahyrachys).....    | 734      |
| beecheyi (Aretomys).....      | 872      | bicornutus (Teleoceras).....      | 750      |
| beecheyi (Citellus).....      | 871      | biculminatus (Diadectes).....     | 34       |
| Belemnosziphius.....          | 583, 584 | biculminatus (Trisodon).....      | 486      |
| compressus.....               | 583, 585 | bicuspis (Ælurotherium).....      | 472      |
| prorops.....                  | 583      | bicuspis (Palaictops).....        | 431      |
| recurvus.....                 | 585      | bicuspis (Paramys).....           | 802      |
| bella (Palæospiza).....       | 359      | bicuspis (Sarcolemur).....        | 755      |
| bella (Tringa).....           | 332      | bifidus (Antipus).....            | 5        |
| belli (Ceratops).....         | 223      | bifurcatus (Hylodichnus).....     | 14       |
| belli (Chasmasaurus).....     | 223      | bilobata (Bipezia).....           | 8        |
| belli (Chasmosaurus).....     | 223      | bilobatum (Chalicotherium).....   | 661      |
| belli (Chrysemys).....        | 96       | Bimana.....                       | 917      |
| belli (Emys).....             | 96       | Bipinnata.....                    | 565      |
| belli (Monoclonius).....      | 223      | biscuspis (Ælurotherium).....     | 472      |
| belli (Protosaurus).....      | 223      | biscuspis (Patriofelis).....      | 471      |
| Bellona.....                  | 11, 12   | Bison.....                        | 843      |
| gigantes.....                 | 11, 12   | alleni.....                       | 849      |

|                            | Page          |                           | Page          |
|----------------------------|---------------|---------------------------|---------------|
| Bison— <i>Continued</i>    |               | Boavus                    | 268           |
| alticornis                 | 228           | agilis                    | 268           |
| americanus                 | 849           | brevis                    | 268           |
| antiquus                   | 849, 851      | occidentalis              | 268           |
| bison                      | 849           | Boidæ                     | 267           |
| chaneyi                    | 850           | Boma                      | 267           |
| crampianus                 | 849           | Boinæ                     | 267           |
| crassicornis               | 850, 851, 852 | Bolbodon                  | 35            |
| curvicornis                | 852           | tenutectus                | 35            |
| ferox                      | 851           | Bolodon                   | 376           |
| figginsi                   | 853           | Bolodontidæ               | 376           |
| kansensis                  | 851           | Bolosauridæ               | 36            |
| laticornis                 | 849           | Bolosaurus                | 37            |
| latifrons                  | 849, 851, 852 | major                     | 37            |
| occidentalis               | 851           | rapidens                  | 35            |
| pacificus                  | 852           | striatus                  | 37            |
| priscus                    | 849           | bombifrons (Boötherium)   | 846           |
| regius                     | 852           | bombifrons (Bos)          | 846           |
| scaphoceras                | 843           | bombifrons (Deinictis)    | 541           |
| sylvestris                 | 852           | bombifrons (Dinictis)     | 541           |
| taylori                    | 852           | bombifrons (Ovibos)       | 846           |
| texanus                    | 852           | Bonasa                    | 325           |
| willistoni                 | 849           | umbellus                  | 325           |
| bison (Bison)              | 849           | Boöcherus                 | 765           |
| bison (Bos)                | 850           | humerosus                 | 765           |
| Bisoninæ                   | 847           | Boodontia                 | 853, 856      |
| Bisontinæ                  | 848           | Boöidea                   | 791, 853      |
| bisornata (Trachemys)      | 97            | boöps (Balæna)            | 576           |
| bisulcatus (Esthonyx)      | 854           | boöps (Balænoptera)       | 576           |
| bisulcatus (Geomys)        | 879           | boöps (Helaletes)         | 724           |
| bisulcus (Triconodon)      | 369           | boöps (Megaptera)         | 576           |
| bisuleus (Trioracodon)     | 369           | boöps (Rorqualis)         | 576           |
| biturgidus (Polydectes)    | 158           | Boötherium                | 846           |
| blackbergi (Miohippus)     | 676           | bombifrons                | 846, 847      |
| blairi (Tanyorhinus)       | 716           | nivicolens                | 846           |
| Blarina                    | 442           | sargenti                  | 846           |
| brevicauda                 | 442           | boreale (Telmatherium)    | 711           |
| carolinensis               | 442           | boreale (Telmatherium)    | 711           |
| floridana                  | 442           | borealis (Arvicola)       | 899           |
| ozarkensis                 | 442           | borealis (Bathygnaethus)  | 56            |
| peninsulæ                  | 442           | borealis (Blastomeryx)    | 819           |
| simplicidens               | 442           | borealis (Buteo)          | 316           |
| Blastoceras                | 823           | borealis (Cervales)       | 825           |
| Blastocerus                | 823           | borealis (Dromomeryx)     | 819           |
| extraneus                  | 823           | borealis (Eohippus)       | 668           |
| Blastomeryx                | 817           | borealis (Eotitanops)     | 711           |
| advena                     | 818           | borealis (Gulo)           | 531           |
| adventa                    | 818           | borealis (Meniscothussus) | 382           |
| antilopinus                | 819           | borealis (Micropternodus) | 427           |
| borealis                   | 819           | borealis (Myctomys)       | 899           |
| elegans                    | 818           | borealis (Osteopygis)     | 77            |
| gemmifer                   | 818           | borealis (Pachygnaethus)  | 56            |
| marshi                     | 818           | borealis (Paleomeryx)     | 819           |
| medius                     | 818           | borealis (Propleura)      | 76            |
| mollis                     | 818           | borealis (Rhytina)        | 658           |
| olcottii                   | 818           | borealis (Rytina)         | 658           |
| oreotti                    | 818           | borealis (Synaptomys)     | 899           |
| primus                     | 818           | borealis (Titanops)       | 711           |
| riparius                   | 819           | Boremys                   | 73            |
| scotti                     | 819           | albertensis               | 73            |
| sinclairi                  | 819           | pulchra                   | 73            |
| vigoratus                  | 819           | Boreodon                  | 380, 386      |
| wellsi                     | 819           | matutinus                 | 385           |
| blaynei (Uintacolotherium) | 619           | primævus                  | 380           |
| Boa                        | 268           | boreus (Elephas)          | 642, 643, 644 |

|                             | Page          |                                   | Page |
|-----------------------------|---------------|-----------------------------------|------|
| bornensis (Orlitia).....    | 79            | boylii (Peromyscus).....          | 893  |
| Borocyon.....               | 512           | Brachauchenidæ.....               | 119  |
| robustum.....               | 512           | Brachauchenius.....               | 119  |
| robustus.....               | 512           | lucasi.....                       | 119  |
| Borophagus.....             | 512           | Brachiceratops.....               | 221  |
| diversidens.....            | 512           | Brachiosauridæ.....               | 197  |
| gidleyi.....                | 508           | Brachiosaurus.....                | 197  |
| meandrinus.....             | 508           | altithorax.....                   | 197  |
| Bos.....                    | 837, 847, 848 | Brachyauchenias.....              | 119  |
| americana.....              | 850           | Brachybrachium.....               | 63   |
| americanus.....             | 849, 850      | brevipes.....                     | 63   |
| arizonica.....              | 851           | brachycephalus (Brontops).....    | 720  |
| bison.....                  | 850           | brachycephalus (Megacerops).....  | 720  |
| bombifrons.....             | 846           | brachycephalus (Platecarpus)..... | 260  |
| cavifrons.....              | 847           | brachyiceps (Chalicomys).....     | 882  |
| crassicornis.....           | 851           | brachyiceps (Euhapsis).....       | 885  |
| latifrons.....              | 849, 851      | brachyiceps (Oxydactylus).....    | 795  |
| moschatus.....              | 845           | brachyiceps (Steneo fiber).....   | 883  |
| occidentalis.....           | 852           | Brachyceratops.....               | 220  |
| primigenius.....            | 852           | dawsoni.....                      | 222  |
| priscus.....                | 851           | montanensis.....                  | 221  |
| scaphoeras.....             | 843           | montanus.....                     | 221  |
| boscas (Anas).....          | 304           | Brachychampsa.....                | 158  |
| boschas (Anas).....         | 304           | montana.....                      | 158  |
| Bosovis.....                | 845           | perrugosa.....                    | 158  |
| bossi (Adocus).....         | 89            | brachychira (Megaptera).....      | 575  |
| bossi (Eurhinodelphis)..... | 592           | brachyccelus (Pleuristion).....   | 40   |
| Botaurinæ.....              | 295           | Brachycrus.....                   | 786  |
| Botauroides.....            | 295           | rusticus.....                     | 786  |
| parvus.....                 | 295           | brachygnathus (Ælurodon).....     | 495  |
| Botaurus.....               | 295           | brachygnathus (Lophiodon).....    | 861  |
| lentiginosus.....           | 295           | brachygnathus (Peromyscus).....   | 893  |
| mugitans.....               | 295           | Brachylagus.....                  | 859  |
| Bothodon.....               | 760           | brachylophus (Mesohippus).....    | 676  |
| leptodus.....               | 760           | brachylophus (Miohippus).....     | 676  |
| Bothremydidae.....          | 74            | brachymelis (Ticholeptus).....    | 790  |
| Bothremys.....              | 74            | Brachymeiryx.....                 | 791  |
| cookii.....                 | 74            | feliceps.....                     | 791  |
| Bothriodon.....             | 759           | brachyodon (Paleolagus).....      | 685  |
| brachyrhynchus.....         | 760           | brachyodontus (Oxydactylus).....  | 795  |
| leptodus.....               | 760           | Brachyodus.....                   | 760  |
| bothrodon (Entelodon).....  | 765           | brachyrhynchus.....               | 760  |
| Bothrolabis.....            | 768           | brachyodus (Aphelops).....        | 746  |
| lentus.....                 | 768           | brachyodus (Diceratherium).....   | 740  |
| osmonti.....                | 768           | brachyops (Arrhinoceratops).....  | 221  |
| pristinus.....              | 768           | brachyops (Deinictis).....        | 542  |
| rostratus.....              | 769           | brachyops (Dinictis).....         | 542  |
| socialis.....               | 769           | brachyops (Mescryon).....         | 493  |
| subæquans.....              | 769           | brachyops (Nimravus).....         | 542  |
| trichenus.....              | 769           | brachyops (Pariotichus).....      | 42   |
| botte (Thomomys).....       | 877, 878      | brachyops (Pogonodon).....        | 542  |
| Bottosaurus.....            | 154, 157      | Brachiosauridæ.....               | 197  |
| harlani.....                | 157           | Brachiosaurus.....                | 197  |
| humilis.....                | 154           | altithorax.....                   | 197  |
| macrorhynchus.....          | 157           | Brachyostracon.....               | 421  |
| perrugosus.....             | 158           | cylindricus.....                  | 421  |
| tuberculatus.....           | 158           | mexicanus.....                    | 421  |
| Bovidæ.....                 | 833, 836      | Brachypodinae.....                | 748  |
| Bovina.....                 | 837, 847      | Brachyprotoma.....                | 531  |
| Bovinae.....                | 847           | fossidens.....                    | 531  |
| Bovini.....                 | 838           | leptops.....                      | 532  |
| Bovovis.....                | 844, 845      | obtusata.....                     | 532  |
| Bovoidæ.....                | 833           | obtusatus.....                    | 532  |
| boylei (Peromyscus).....    | 893           | pristina.....                     | 532  |
| boylii (Hesperomys).....    | 893           | spelsæ.....                       | 532  |

|                                      | Page          |                                     | Page          |
|--------------------------------------|---------------|-------------------------------------|---------------|
| Brachypsalis .....                   | 525, 526, 538 | brevidens (Gomphotherium) .....     | 635           |
| hyanoides .....                      | 495           | brevidens (Mammut) .....            | 635           |
| marshalli .....                      | 526           | brevidens (Mastodon) .....          | 635           |
| matutinus .....                      | 526           | brevidens (Merychippus) .....       | 681           |
| modicus .....                        | 526           | brevidens (Parahippus) .....        | 681           |
| obliquidens .....                    | 526           | brevidens (Rhynchotherium) .....    | 635           |
| pachycephalus .....                  | 526           | brevidens (Tetrabelodon) .....      | 635           |
| pristinus .....                      | 538           | brevidens (Trilophodon) .....       | 635           |
| simplicidens .....                   | 525           | brevifacies (Ælurocyon) .....       | 526           |
| brachypternus (Phenacodus) .....     | 605           | brevifacies (Ælurocyon) .....       | 526           |
| brachypus (Camus) .....              | 491           | brevifacies (Cyclopidius) .....     | 790           |
| brachypus (Cynodesmus) .....         | 491           | brevifacies (Pitheciastes) .....    | 790           |
| brachyrhinus (Toxochelys) .....      | 86            | brevifemur (Plesiosaurus) .....     | 116           |
| Brachyrhophus .....                  | 201           | brevimaxillus (Archæotricon) .....  | 372           |
| brachyrhynchus (Corvus) .....        | 356           | brevipes (Brachybrachium) .....     | 63            |
| brachyrhynchus (Ancodon) .....       | 760           | brevirostris .....                  | 623           |
| brachyrhynchus (Ancodus) .....       | 760           | brevirostris (Macis) .....          | 486           |
| brachyrhynchus (Bothriodon) .....    | 759           | brevirostris (Tomarctus) .....      | 509           |
| brachyrhynchus (Brachyodus) .....    | 759           | brevirostris (Uintacyon) .....      | 486           |
| brachyrhynchus (Hypotamus) .....     | 760           | brevirostris (Varanops) .....       | 48            |
| Brachyrophus .....                   | 201           | brevirostris (Varanops) .....       | 48            |
| altarkansanus .....                  | 201           | brevirostris (Varanosaurus) .....   | 48            |
| Brachysaurus .....                   | 261           | brevirostris (Vulpavus) .....       | 486           |
| overtoni .....                       | 261           | brevis (Boavus) .....               | 258           |
| brachyspondylus (Basilosaurus) ..... | 570           | brevis (Dipoides) .....             | 884           |
| brachyspondylus (Zeuglodon) .....    | 568, 570      | brevis (Meniscoessus) .....         | 382           |
| brachystomus (Diacodexis) .....      | 756           | brevis (Selenacodon) .....          | 382           |
| brachystomus (Trigonolestes) .....   | 756           | brevis (Stegoceras) .....           | 207           |
| brachystylus (Meshippus) .....       | 676           | brevis (Troodon) .....              | 207           |
| brachystylus (Miohippus) .....       | 676           | brevispinatus (Ostodolepis) .....   | 45            |
| Bradypodidæ .....                    | 403           | brevispinatus (Pantylus) .....      | 45            |
| Bradypus .....                       | 403, 405      | brevispinus (Holops) .....          | 149           |
| bransonii (Metarrhinus) .....        | 141           | brevispinus (Holops) .....          | 149           |
| bransonii (Palæorhinus) .....        | 141           | brevispinus (Thoracosaurus) .....   | 149           |
| Bianta .....                         | 301           | brevisterna (Testudo) .....         | 102           |
| hernida .....                        | 302           | brevitrahalis (Aloes) .....         | 827           |
| canadensis .....                     | 302           | breviusculus (Selenchnus) .....     | 20            |
| dickeyi .....                        | 302           | breweri (Parascalops) .....         | 438           |
| glaucoagstra .....                   | 302           | brewsterensis (Gomphotherium) ..... | 635           |
| hutchinsi .....                      | 302           | brewsterensis (Serridentinus) ..... | 685           |
| hypsibata .....                      | 302           | bridgerensis (Homogalax) .....      | 726           |
| hypsibatus .....                     | 302           | bridgeri (Tanyorhinus) .....        | 716           |
| moniscula .....                      | 302           | Brimosaurus .....                   | 119           |
| minima .....                         | 302           | grandis .....                       | 119           |
| minuscula .....                      | 302           | brolii (Labidosaurus) .....         | 41            |
| propinqua .....                      | 302           | brolii (Casea) .....                | 59            |
| braziosus (Ananeus) .....            | 630           | Brontops .....                      | 720, 721, 722 |
| braziosus (Ananeus) .....            | 630           | brachycephalus .....                | 720           |
| brevicalcaratus (Stypolophus) .....  | 478           | coloradensis .....                  | 721           |
| brevicauda (Blarina) .....           | 442           | dispar .....                        | 721           |
| brevicaudus (Sorex) .....            | 442           | robustus .....                      | 721           |
| breviceps (Cyclopidius) .....        | 790           | validus .....                       | 721           |
| breviceps (Gomphotherium) .....      | 635           | brontops (Testudo) .....            | 108           |
| breviceps (Hadrosaurus) .....        | 211           | Brontosaurus .....                  | 184, 195      |
| breviceps (Harpagolestes) .....      | 469           | amplus .....                        | 196           |
| breviceps (Hyomeryx) .....           | 779           | excelsus .....                      | 196           |
| breviceps (Ticholeptus) .....        | 790           | minimus .....                       | 195           |
| breviceps (Trachodon) .....          | 211           | validus .....                       | 721           |
| breviceps (Trilophodon) .....        | 635           | Brontotheridæ .....                 | 717           |
| brevicollis (Champsosaurus) .....    | 133           | Brontotheridæ .....                 | 717           |
| brevicollis (Crocodylus) .....       | 153           | Brontotherioidæ .....               | 711           |
| brevicornis (Triceratops) .....      | 228           | Brontotherioidæ .....               | 711           |
| brevicornus (Triceratops) .....      | 228           | Brontotherium .....                 | 721           |
| brevidens (Anchippus) .....          | 681           | bucco .....                         | 722           |
| brevidens (Glyptosaurus) .....       | 254           | curtum .....                        | 722           |



|                                  | Page     |                                 | Page     |
|----------------------------------|----------|---------------------------------|----------|
| Brontotherium— <i>Continued</i>  |          | bulbivorus (Thomomys) .....     | 878      |
| dolichoceras .....               | 722      | bullatum (Merycoidodon) .....   | 782      |
| gigas .....                      | 722      | bullatus (Agriochærus) .....    | 777      |
| hatcheri .....                   | 722      | bullatus (Eporeodon) .....      | 782      |
| hypoceras .....                  | 722      | bullatus (Ictops) .....         | 430      |
| ingens .....                     | 719      | bullatus (Merycoidodon) .....   | 782      |
| leidyi .....                     | 722      | bullatus (Oreodon) .....        | 782      |
| medium .....                     | 722      | bulverda (Terrapena) .....      | 98       |
| orphyras .....                   | 722      | Bunelurus .....                 | 525      |
| platyceras .....                 | 722      | infelix .....                   | 525      |
| ramosum .....                    | 723      | lagophagus .....                | 525      |
| robustum .....                   | 721      | Bunailurus .....                | 525      |
| selwynianum .....                | 721      | Bunodontia .....                | 752, 761 |
| tichoceras .....                 | 721      | Bunolophodon .....              | 634, 638 |
| Brontozoum .....                 | 11       | productus .....                 | 638      |
| approximatum .....               | 11       | Bunomastodontidæ .....          | 623      |
| divaricatum .....                | 11       | Bunomastodontinæ .....          | 623      |
| exsertum .....                   | 8        | Bunomeryx .....                 | 754      |
| expansum .....                   | 11       | elegans .....                   | 754      |
| giganteum .....                  | 11       | montanus .....                  | 754      |
| isodactylum .....                | 4        | Bunophorus .....                | 753      |
| leptodactylum .....              | 22       | etsagicus .....                 | 753      |
| minisculum .....                 | 8        | macropterus .....               | 753      |
| sillimanium .....                | 8        | Bunoselenodontia .....          | 752, 758 |
| tuberatum .....                  | 8        | Bunotheridæ .....               | 458      |
| validum .....                    | 8        | burneisteri (Esthonyx) .....    | 854      |
| browni (Camptosaurus) .....      | 205      | burneisterii (Esthonyx) .....   | 854      |
| browni (Eodelphus) .....         | 394      | bursarius (Geomys) .....        | 879      |
| browni (Esonodon) .....          | 382      | bursarius (Pseudostomus) .....  | 879      |
| browni (Eubrachiosaurus) .....   | 64       | Buteo .....                     | 316      |
| browni (Hypsodus) .....          | 444      | borealis .....                  | 316      |
| browni (Hypolagus) .....         | 366      | swainsoni .....                 | 316      |
| browni (Mylodymus) .....         | 774      | typhoius .....                  | 316      |
| browni (Porthochelys) .....      | 87       | Buteonidæ .....                 | 314      |
| browni (Teleorhinus) .....       | 147      | Buteoninæ .....                 | 314, 315 |
| brownianus (Eotitanops) .....    | 712      | buwaldi (Merycoidochærus) ..... | 785      |
| brownianus (Paleosynops) .....   | 712      | buwaldi (Mustela) .....         | 528      |
| brumbyi (Mosasaurus) .....       | 262      | byssinus (Axestemys) .....      | 110      |
| Bruta .....                      | 401      | byssinus (Axestus) .....        | 110      |
| Bubo .....                       | 349      | Bystira .....                   | 100      |
| leptosteus .....                 | 350      | Bystra .....                    | 100      |
| pacificus .....                  | 350      | nanus .....                     | 100      |
| saturatus .....                  | 350      | caballus (Equus) .....          | 703      |
| sinclairi .....                  | 350      | celticus (Equus) .....          | 703      |
| virginianus .....                | 350      | Cabassous .....                 | 410      |
| Bubonidæ .....                   | 349      | caboti (Rangifer) .....         | 824      |
| Buboninæ .....                   | 349      | cæata (Hoplochelys) .....       | 91       |
| buccatus (Paramys) .....         | 902      | cæata (Pseudomys) .....         | 97       |
| buccatus (Plesiartomys) .....    | 902      | cæatus (Glyptops) .....         | 70       |
| buccatus (Sciuravus) .....       | 902      | Cælogenys .....                 | 813      |
| buccatus (Tretulias) .....       | 573      | cælops (Eboroziphius) .....     | 583      |
| buccinator (Cygnus) .....        | 301      | Cælurus .....                   | 186      |
| buccinator (Olor) .....          | 301      | Cænopus .....                   | 740, 742 |
| bucco (Brontotherium) .....      | 722      | allus .....                     | 741      |
| bucco (Symborodon) .....         | 722      | annectens .....                 | 744      |
| buceros (Belodon) .....          | 144      | avus .....                      | 743      |
| buceros (Lophoprosopus) .....    | 144      | copei .....                     | 740, 742 |
| buceros (Lophosaurus) .....      | 144      | dakotensis .....                | 735, 742 |
| buceros (Machæroprosopus) .....  | 144      | exiguus .....                   | 742      |
| buceros (Metarhinus) .....       | 144      | metalophus .....                | 741      |
| buceros (Phytosaurus) .....      | 144, 145 | mite .....                      | 743      |
| bucklandi (Tetracaulodon) .....  | 625      | miti .....                      | 743      |
| buettneri (Trilophosaurus) ..... | 36       | mitis .....                     | 742      |
| buiei (Amyda) .....              | 110      | nanolophus .....                | 742      |
| buiei (Trionyx) .....            | 110      | occidentalis .....              | 741      |

|  | Page     |                                     | Page          |
|--|----------|-------------------------------------|---------------|
| <i>Cænopus—Continued</i>               |          | <i>californicus (Agelaius)</i>      | 358           |
| <i>pacificus</i>                       | 745      | <i>californicus (Camelops)</i>      | 803           |
| <i>persistens</i>                      | 742      | <i>californicus (Castor)</i>        | 887           |
| <i>platycephalus</i>                   | 742      | <i>californicus (Colymbus)</i>      | 286           |
| <i>premitis</i>                        | 742      | <i>californicus (Dytes)</i>         | 286           |
| <i>simplicoides</i>                    | 742      | <i>californicus (Haplodon)</i>      | 906           |
| <i>trigonodus</i>                      | 741      | <i>californicus (Hemicyon)</i>      | 512           |
| <i>tridactylus</i>                     | 741, 743 | <i>californicus (Hesperocetus)</i>  | 582           |
| <i>truquianus</i>                      | 745      | <i>californicus (Holomuscus)</i>    | 803           |
| <i>tubifer</i>                         | 743      | <i>californicus (Larus)</i>         | 341           |
| <i>Cænopus</i>                         | 740      | <i>californicus (Lepus)</i>         | 883           |
| <i>copei</i>                           | 740      | <i>californicus (Lophortyx)</i>     | 327           |
| <i>cærulescens (Chen)</i>              | 303      | <i>californicus (Lynx)</i>          | 555           |
| <i>cafer (Colaptes)</i>                | 353      | <i>californicus (Megalonyx)</i>     | 409           |
| <i>Camanoidea</i>                      | 158      | <i>californicus (Merychippus)</i>   | 684           |
| <i>prænasalis</i>                      | 158      | <i>californicus (Merychoeretus)</i> | 785           |
| <i>visheri</i>                         | 158      | <i>californicus (Microtus)</i>      | 897           |
| <i>Camanoideus</i>                     | 158      | <i>californicus (Parapavo)</i>      | 320           |
| <i>visheri</i>                         | 158      | <i>californicus (Pavo)</i>          | 320           |
| <i>Calamagrus</i>                      | 268      | <i>californicus (Perognathus)</i>   | 880           |
| <i>murivorus</i>                       | 268      | <i>californicus (Podiceps)</i>      | 280           |
| <i>calamarius (Hadrosaurus)</i>        | 211      | <i>californicus (Scapanus)</i>      | 430           |
| <i>calamarium (Hipparion)</i>          | 684      | <i>californicus (Sciurus)</i>       | 874           |
| <i>calamarium (Hippotherium)</i>       | 684      | <i>californicus (Smilodon)</i>      | 548           |
| <i>calamarium (Neohipparion)</i>       | 684      | <i>californicus (Tapius)</i>        | 731           |
| <i>calamarium (Stylonus)</i>           | 684      | <i>californicus (Tetrao)</i>        | 327           |
| <i>calamarius (Dielonius)</i>          | 211      | <i>californicus (Toretocnemus)</i>  | 125           |
| <i>calamarius (Merychippus)</i>        | 684, 686 | <i>californicus (Urocyon)</i>       | 503           |
| <i>calamarius (Trachodon)</i>          | 211      | <i>californiensis (Mancalla)</i>    | 344           |
| <i>propinquus (Merychippus)</i>        | 684      | <i>calamarium (Neohipparion)</i>    | 684           |
| <i>munani (Merychippus)</i>            | 686      | <i>calkinsi (Chærolon)</i>          | 766           |
| <i>Calamodon</i>                       | 400      | <i>calkinsi (Dæodon)</i>            | 766           |
| <i>arcæmus</i>                         | 400      | <i>calkinsi (Elotherium)</i>        | 766           |
| <i>novonchicanus</i>                   | 400      | <i>calkinsi (Entelodon)</i>         | 766           |
| <i>simplex</i>                         | 400      | <i>caliodonte (Hipparion)</i>       | 693           |
| <i>Calamodontide</i>                   | 399      | <i>callopyge (Echinotomys)</i>      | 95            |
| <i>calaverensis (Stylenys)</i>         | 101      | <i>callosa (Bañua)</i>              | 71            |
| <i>calcaratus (Felis)</i>              | 554      | <i>Callospermophilus</i>            | 860           |
| <i>calcaratus (Hypotrægulus)</i>       | 813      | <i>chrysoideus</i>                  | 869           |
| <i>calcaratus (Lynx)</i>               | 554      | <i>trepidus</i>                     | 870           |
| <i>calceicornis (Triceratops)</i>      | 228      | <i>calobatus (Asinus)</i>           | 703           |
| <i>calliculus (Heptodon)</i>           | 724      | <i>calobatus (Equus)</i>            | 703           |
| <i>calicornis (Triceratops)</i>        | 228      | <i>Calocephalus</i>                 | 563           |
| <i>calgariensis (Catopsalis)</i>       | 384      | <i>vitulinus</i>                    | 564           |
| <i>calicinus (Sciurus)</i>             | 874      | <i>Calops</i>                       | 814           |
| <i>california (Lama)</i>               | 808      | <i>consors</i>                      | 814           |
| <i>californiana (Saurothera)</i>       | 347      | <i>crinitatus</i>                   | 814           |
| <i>californianus (Geococcyx)</i>       | 347      | <i>calvertensis (Delphinus)</i>     | 587           |
| <i>californianus (Gymnogyps)</i>       | 312      | <i>calvertensis (Lophocetus)</i>    | 587           |
| <i>californianus (Pseudogryphus)</i>   | 312      | <i>calvertensis (Psephophorus)</i>  | 69            |
| <i>californianus (Vultur)</i>          | 312      | <i>calvertensis (Squalodon)</i>     | 581           |
| <i>californica (Aplodontia)</i>        | 906      | <i>calvini (Aftonius)</i>           | 843           |
| <i>californica (Arvicola)</i>          | 887      | <i>calycinus (Parasciurus)</i>      | 874           |
| <i>californica (Auchenia)</i>          | 803      | <i>calycinus (Sciurus)</i>          | 874           |
| <i>californica (Felis)</i>             | 555      | <i>Camarsasaurius</i>               | 189, 193      |
| <i>californica (Haplodontia)</i>       | 906      | <i>Camarsasaurine</i>               | 189           |
| <i>californica (Lama)</i>              | 808      | <i>Camarsasaurus</i>                | 189, 192, 195 |
| <i>californica (Lepus)</i>             | 363      | <i>agilis</i>                       | 191           |
| <i>californica (Lophortyx)</i>         | 327      | <i>excoelus</i>                     | 191           |
| <i>californica (Palauchenia)</i>       | 803      | <i>impar</i>                        | 191           |
| <i>californicum (Arototherium)</i>     | 521      | <i>lentus</i>                       | 191           |
| <i>californicum (Glaucidium)</i>       | 360      | <i>leptodirus</i>                   | 191           |
| <i>californicum (Promomotherium)</i>   | 785      | <i>robustus</i>                     | 191           |
| <i>californicum (Smilodon)</i>         | 548      | <i>supremus</i>                     | 191           |
| <i>californicum (Tremarctotherium)</i> | 521      | <i>Cainosaurus</i>                  | 190           |

|                                  | Page          |                                 | Page     |
|----------------------------------|---------------|---------------------------------|----------|
| Cameleontidae .....              | 248           | Camptosaurus— <i>Continued</i>  |          |
| Camelidae .....                  | 791           | browni .....                    | 205      |
| Camelinæ .....                   | 791, 803      | depressus .....                 | 205      |
| Camelini .....                   | 792, 803      | dispar .....                    | 205      |
| Camelodon .....                  | 793           | medius .....                    | 205      |
| araphovius .....                 | 793           | nanus .....                     | 205      |
| Cameloidæ .....                  | 791           | campylotes (Elephas) .....      | 648      |
| Cameloidea .....                 | 791           | canadensis (Anas) .....         | 302      |
| cameloides (Gomphotherium) ..... | 797           | canadensis (Ardea) .....        | 332      |
| cameloides (Ithygrammodon) ..... | 797           | canadensis (Bemicle) .....      | 302      |
| cameloides (Miolabis) .....      | 797           | canadensis (Branta) .....       | 302      |
| cameloides (Paratylopus) .....   | 797           | canadensis (Castor) .....       | 887      |
| cameloides (Protomeryx) .....    | 797           | canadensis (Ceratops) .....     | 221      |
| Camelomeryx .....                | 811           | canadensis (Cervus) .....       | 829      |
| longiceps .....                  | 811           | canadensis (Elaphus) .....      | 829      |
| Camelopardalidæ .....            | 834           | canadensis (Eocerotops) .....   | 221      |
| Camelopardalis .....             | 834           | canadensis (Felis) .....        | 554      |
| Camelops .....                   | 803           | canadensis (Grus) .....         | 332      |
| americanus .....                 | 807           | canadensis (Leidyosuchus) ..... | 155      |
| aransas .....                    | 803           | canadensis (Lutra) .....        | 537      |
| arenarum .....                   | 803           | canadensis (Lynx) .....         | 554      |
| californicus .....               | 803           | canadensis (Megalomys) .....    | 332      |
| dallasi .....                    | 804           | canadensis (Meriones) .....     | 919      |
| hesterius .....                  | 803           | canadensis (Monoclonius) .....  | 221      |
| huerfaniensis .....              | 804           | canadensis (Ovis) .....         | 842      |
| kansanus .....                   | 804           | canadensis (Palaeosaniwa) ..... | 252      |
| macrocephalus .....              | 804           | canadensis (Peromyscus) .....   | 804      |
| mimodæ .....                     | 804           | canadensis (Sitomys) .....      | 804      |
| nevadanus .....                  | 805           | canaliculata (Terrapene) .....  | 98       |
| niobrarensis .....               | 805           | canavus (Miacy) .....           | 480      |
| nitidus .....                    | 805           | canavus (Prodaphenus) .....     | 480      |
| sulcatus .....                   | 805           | canavus (Uintacyon) .....       | 480      |
| vacondæ .....                    | 805           | canavus (Vulpavus) .....        | 488      |
| virginiensis .....               | 805           | caniculata (Terrapena) .....    | 98       |
| vitakerianus .....               | 805           | caniculus (Mesodectes) .....    | 431      |
| Camelopsinae .....               | 796           | Canidæ .....                    | 488      |
| Camelus .....                    | 797, 803, 807 | Canimartes .....                | 530      |
| americanus .....                 | 807           | cummingsii .....                | 530      |
| arctoamericanus .....            | 807           | Canina .....                    | 488, 494 |
| maximus .....                    | 807           | Caninæ .....                    | 494      |
| occidentalis .....               | 799           | caninus (Chcerodon) .....       | 764      |
| campester (Bunolophodon) .....   | 635           | caninus (Homocamelus) .....     | 789      |
| campester (Gomphotherium) .....  | 635           | Canis .....                     | 492, 498 |
| campester (Lepus) .....          | 635           | anceps .....                    | 498      |
| campester (Mastodon) .....       | 635           | andersoni .....                 | 498      |
| campester (Protomeryx) .....     | 795           | armbrusteri .....               | 498      |
| campester (Testudo) .....        | 103           | ayersi .....                    | 501      |
| campester (Tetralophodon) .....  | 635           | brachypus .....                 | 491      |
| campestre (Mammut) .....         | 635           | cinereoargentatus .....         | 503      |
| campestris (Lepus) .....         | 635           | cinereoargenteus .....          | 503      |
| campestris (Merychippus) .....   | 635           | compressus .....                | 495      |
| campestris (Oxydactylus) .....   | 796           | davisii .....                   | 498      |
| campestris (Tetralophodon) ..... | 635           | dirus .....                     | 501      |
| campestris (Trilophodon) .....   | 635           | fulvus .....                    | 502      |
| Campsodelphis .....              | 580           | furlongi .....                  | 498      |
| Campsosaurus .....               | 132           | haydeni .....                   | 493      |
| Camptomus .....                  | 382           | indianensis .....               | 501      |
| amplus .....                     | 382           | latidens .....                  | 492      |
| Camptonotidæ .....               | 204           | latidentatus .....              | 503      |
| Camptonotus .....                | 204           | latrans .....                   | 498, 500 |
| Camptosauridæ .....              | 204           | lemur .....                     | 493      |
| Camptosaurinæ .....              | 204           | lestes .....                    | 499      |
| Camptosaurus .....               | 204           | lupus .....                     | 499      |
| amplus .....                     | 205           | lycaon .....                    | 499      |
|                                  |               | marshii .....                   | 714      |

|                                       | Page          |   | Page     |
|---------------------------------------|---------------|---|----------|
| <i>Canis—Continued</i>                |               | <i>caretta</i> (Chelonia) .....           | 83       |
| <i>mexicanus</i> .....                | 498           | <i>caretta</i> (Thalassochelus) .....     | 83       |
| <i>mülleri</i> .....                  | 501           | <i>carotta</i> (Thalassochelys) .....     | 83       |
| <i>mississippiensis</i> .....         | 501           | <i>caretti</i> (Scaldicetus) .....        | 598      |
| <i>nubilus</i> .....                  | 499           | <i>careyi</i> (Shastiasaurus) .....       | 126      |
| <i>occidentalis</i> .....             | 498, 499, 501 | <i>Cariacus</i> .....                     | 820      |
| <i>ochropus</i> .....                 | 500           | <i>americanus</i> .....                   | 822, 829 |
| <i>oeropus</i> .....                  | 500           | <i>ensifer</i> .....                      | 821      |
| <i>oreutti</i> .....                  | 500           | <i>lavicornis</i> .....                   | 821      |
| <i>pennsylvanicus</i> .....           | 502           | <i>osceola</i> .....                      | 821      |
| <i>priscotrans</i> .....              | 500           | <i>virginianus</i> .....                  | 822      |
| <i>riverans</i> .....                 | 500           | <i>caribou</i> (Cervus) .....             | 824      |
| <i>riveronis</i> .....                | 500           | <i>caribou</i> (Rangifer) .....           | 824      |
| <i>robustus</i> .....                 | 500           | <i>caribu</i> (Rangifer) .....            | 824      |
| <i>rurostris</i> .....                | 494           | <i>carinata</i> (Testudo) .....           | 98       |
| <i>sievis</i> .....                   | 498           | <i>Carinatae</i> .....                    | 280      |
| <i>shoshonensis</i> .....             | 506           | <i>Carnates</i> .....                     | 280      |
| <i>teimerarius</i> .....              | 494           | <i>carinatus</i> (Animasaurus) .....      | 36       |
| <i>texanus</i> .....                  | 500           | <i>carinacollis</i> (Crematosaurus) ..... | 255      |
| <i>urvinus</i> .....                  | 513           | <i>carinidens</i> (Catanthæus) .....      | 610      |
| <i>vafer</i> .....                    | 494           | <i>carinidens</i> (Periptychus) .....     | 610      |
| <i>wheelerianus</i> .....             | 498           | <i>cariosa</i> (Amyda) .....              | 110      |
| <i>Cacouana</i> .....                 | 82            | <i>cariosus</i> (Trionyx) .....           | 110      |
| <i>caretta</i> .....                  | 82            | <i>Carnaria</i> .....                     | 467      |
| <i>cayax</i> (Stylomys) .....         | 101           | <i>carnegie</i> (Diplodocus) .....        | 199      |
| <i>Capella</i> .....                  | 337           | <i>carnegiei</i> (Diplodocus) .....       | 199      |
| <i>caperatus</i> (Meniscoessus) ..... | 382           | <i>carnegii</i> (Diplodocus) .....        | 199      |
| <i>caperatus</i> (Tripiodon) .....    | 382           | <i>caruifex</i> (Disseus) .....           | 467      |
| <i>Capitorhinomorpha</i> .....        | 39            | <i>Carnivora</i> .....                    | 456, 488 |
| <i>Capra</i> .....                    | 841, 842      | <i>vera</i> .....                         | 488      |
| <i>columbiana</i> .....               | 842           | <i>Carnivora</i> .....                    | 487      |
| <i>Capridæ</i> .....                  | 841           | <i>Carnivori</i> .....                    | 456      |
| <i>Caprina</i> .....                  | 841           | <i>Carnosauria</i> .....                  | 168, 169 |
| <i>Capromeryx</i> .....               | 832           | <i>carolina</i> (Cistudo) .....           | 98       |
| <i>fureifer</i> .....                 | 832           | <i>carolina</i> (Ferrupene) .....         | 98       |
| <i>mexicana</i> .....                 | 832           | <i>carolinense</i> (Nettion) .....        | 305      |
| <i>minor</i> .....                    | 832           | <i>carolinensis</i> (Anas) .....          | 305      |
| <i>captans</i> (Charitemys) .....     | 73            | <i>carolinensis</i> (Belodon) .....       | 142      |
| <i>Captorhinidae</i> .....            | 39            | <i>carolinensis</i> (Blarina) .....       | 442      |
| <i>Captorhiniformes</i> .....         | 39            | <i>carolinensis</i> (Columba) .....       | 346      |
| <i>Captorhinina</i> .....             | 39            | <i>carolinensis</i> (Comuroopsis) .....   | 346      |
| <i>Captorhinus</i> .....              | 39, 42        | <i>carolinensis</i> (Comurus) .....       | 346      |
| <i>aduncus</i> .....                  | 39            | <i>carolinensis</i> (Dinoziphius) .....   | 598      |
| <i>aguti</i> .....                    | 40, 41        | <i>carolinensis</i> (Falco) .....         | 311      |
| <i>angusticeps</i> .....              | 40            | <i>carolinensis</i> (Mosasaurus) .....    | 262      |
| <i>illinoensis</i> .....              | 40            | <i>carolinensis</i> (Mystriomachus) ..... | 146      |
| <i>isolomus</i> .....                 | 40            | <i>carolinensis</i> (Neoschirus) .....    | 874      |
| <i>Captorhinomorpha</i> .....         | 39            | <i>carolinensis</i> (Pandon) .....        | 320      |
| <i>capus</i> (Otospermophilus) .....  | 872           | <i>carolinensis</i> (Physeter) .....      | 598      |
| <i>capybara</i> (Hydrochærus) .....   | 914           | <i>carolinensis</i> (Phytosaurus) .....   | 146      |
| <i>Carbo</i> .....                    | 292           | <i>carolinensis</i> (Rhytidodon) .....    | 146      |
| <i>Carcinodon</i> .....               | 461           | <i>carolinensis</i> (Rutiodon) .....      | 145, 172 |
| <i>filholianus</i> .....              | 461           | <i>carolinensis</i> (Rytiodon) .....      | 146      |
| <i>Cardiacephalus</i> .....           | 32            | <i>carolinensis</i> (Sciurus) .....       | 874      |
| <i>Cardicephalus</i> .....            | 32            | <i>carolinensis</i> (Zenaidura) .....     | 346      |
| <i>sternbergi</i> .....               | 32            | <i>Carolinodolys</i> .....                | 80       |
| <i>Cardiocephalus</i> .....           | 32            | <i>wilsoni</i> .....                      | 80       |
| <i>sternbergi</i> .....               | 32            | <i>Carpoclaptes</i> .....                 | 925      |
| <i>willoughbyi</i> .....              | 32            | <i>aulacodon</i> .....                    | 925      |
| <i>Carotta</i> .....                  | 82            | <i>Carpolestes</i> .....                  | 925      |
| <i>caretta</i> .....                  | 83            | <i>nigridens</i> .....                    | 925      |
| <i>carotta</i> (Cacouana) .....       | 83            | <i>carrikeri</i> (Promerycochærus) .....  | 784      |
| <i>carotta</i> (Caretta) .....        | 83            | <i>carteri</i> (Emys) .....               | 100      |
| <i>carotta</i> (Chelone) .....        | 83            | <i>carteri</i> (Omomys) .....             | 926      |
|                                       |               | <i>Caryoderma</i> .....                   | 104      |

|  | Page     |   | Page               |
|--|----------|---|--------------------|
| <i>Caryoderma</i> — <i>Continued</i>             |          | <i>Cathartes</i> — <i>Continued</i>             |                    |
| <i>snovianum</i> .....                           | 104      | <i>septentrionalis</i> .....                    | 311                |
| <i>casadensis</i> ( <i>Vulpes</i> ) .....        | 502      | <i>Cathartæ</i> .....                           | 310                |
| <i>Casea</i> .....                               | 59       | <i>Cathartidæ</i> .....                         | 310, 311           |
| <i>broilii</i> .....                             | 59       | <i>Cathartides</i> .....                        | 310                |
| <i>Caseasauria</i> .....                         | 59       | <i>Cathartidiformes</i> .....                   | 310                |
| <i>casei</i> ( <i>Ophiodeirus</i> ) .....        | 37       | <i>Cathartiformes</i> .....                     | 310                |
| <i>casei</i> ( <i>Tomiosaurus</i> ) .....        | 45       | <i>Cathartoidea</i> .....                       | 310                |
| <i>Caseidæ</i> .....                             | 59       | <i>Cathartornis</i> .....                       | 312                |
| <i>Caseiformes</i> .....                         | 59       | <i>gracilis</i> .....                           | 312                |
| <i>castelli</i> ( <i>Protohippus</i> ) .....     | 688      | <i>catocopis</i> ( <i>Heterofelis</i> ) .....   | 546                |
| <i>castillei</i> ( <i>Protohippus</i> ) .....    | 688      | <i>catocopis</i> ( <i>Hoplophoneus</i> ) .....  | 546                |
| <i>castilli</i> ( <i>Merychippus</i> ) .....     | 688      | <i>catocopis</i> ( <i>Macharodus</i> ) .....    | 546                |
| <i>castilli</i> ( <i>Procamelus</i> ) .....      | 797      | <i>catocopis</i> ( <i>Machairodus</i> ) .....   | 546                |
| <i>castilloi</i> ( <i>Protohippus</i> ) .....    | 688      | <i>Catodon</i> .....                            | 589                |
| <i>Castor</i> .....                              | 885      | <i>catodon</i> ( <i>Beluga</i> ) .....          | 583, 584           |
| <i>accessor</i> .....                            | 887      | <i>catodon</i> ( <i>Delphinapterus</i> ) .....  | 583, 584           |
| <i>americana</i> .....                           | 887      | <i>Catodontidæ</i> .....                        | 590                |
| <i>americanus</i> .....                          | 887      | <i>Catopsalis</i> .....                         | 384                |
| <i>californicus</i> .....                        | 887      | <i>californensis</i> .....                      | 384                |
| <i>canadensis</i> .....                          | 887      | <i>foliatus</i> .....                           | 384                |
| <i>fiber</i> .....                               | 887      | <i>pollux</i> .....                             | 384                |
| <i>ohioensis</i> .....                           | 888      | <i>caudata</i> ( <i>Helcura</i> ) .....         | 14                 |
| <i>peninsulatus</i> .....                        | 888      | <i>caudatum</i> ( <i>Gigantitherium</i> ) ..... | 13                 |
| <i>subauratus</i> .....                          | 887      | <i>caudatum</i> ( <i>Otozoum</i> ) .....        | 17                 |
| <i>tortus</i> .....                              | 884      | <i>caudatus</i> ( <i>Gigandipus</i> ) .....     | 12                 |
| <i>Castoridæ</i> .....                           | 884      | <i>caudatus</i> ( <i>Nanomeryx</i> ) .....      | 755                |
| <i>castoridens</i> ( <i>Trogosus</i> ) .....     | 855      | <i>caudatus</i> ( <i>Nanopus</i> ) .....        | 16                 |
| <i>Castorina</i> .....                           | 884      | <i>caudatus</i> ( <i>Tarsodactylus</i> ) .....  | 21                 |
| <i>Castorinæ</i> .....                           | 884      | <i>caudifer</i> ( <i>Asperipes</i> ) .....      | 6                  |
| <i>Castorini</i> .....                           | 884      | <i>caudifer</i> ( <i>Hylopus</i> ) .....        | 6                  |
| <i>Castoroidea</i> .....                         | 867, 884 | <i>Caulodon</i> .....                           | 192                |
| <i>Castoroidei</i> .....                         | 885      | <i>diversidens</i> .....                        | 192                |
| <i>Castoroides</i> .....                         | 888      | <i>leptogonus</i> .....                         | 193                |
| <i>kansensis</i> .....                           | 888, 889 | <i>caurina</i> ( <i>Martes</i> ) .....          | 527                |
| <i>ohioensis</i> .....                           | 888      | <i>cautus</i> ( <i>Microtus</i> ) .....         | 898                |
| <i>Castoroididæ</i> .....                        | 888      | <i>cavatus</i> ( <i>Allomys</i> ) .....         | 905                |
| <i>casuarius</i> ( <i>Corythosaurus</i> ) .....  | 218      | <i>cavatus</i> ( <i>Hadrosaurus</i> ) .....     | 209                |
| <i>casuarius</i> ( <i>Stephenosaurus</i> ) ..... | 218      | <i>cavatus</i> ( <i>Trachodon</i> ) .....       | 209                |
| <i>Catacritosauria</i> .....                     | 113      | <i>Cavia</i> .....                              | 913                |
| <i>Catapleura</i> .....                          | 76       | <i>Caviadæ</i> .....                            | 913                |
| <i>ponderosa</i> .....                           | 76       | <i>Cavicornia</i> .....                         | 333, 338, 847      |
| <i>repanda</i> .....                             | 76       | <i>Cavidæ</i> .....                             | 913                |
| <i>Cataractes</i> .....                          | 343      | <i>cavifrons</i> ( <i>Boötherium</i> ) .....    | 847                |
| <i>antiqua</i> .....                             | 343      | <i>cavifrons</i> ( <i>Bos</i> ) .....           | 847                |
| <i>Catarhactes</i> .....                         | 343      | <i>cavifrons</i> ( <i>Entoptychus</i> ) .....   | 876                |
| <i>Catarrhactes</i> .....                        | 343      | <i>cavifrons</i> ( <i>Ovibos</i> ) .....        | 847                |
| <i>Catarrhina</i> .....                          | 380      | <i>cavifrons</i> ( <i>Scaphoceros</i> ) .....   | 847                |
| <i>Catarrhini</i> .....                          | 380      | <i>cavifrons</i> ( <i>Symbus</i> ) .....        | 847                |
| <i>Catathleidæ</i> .....                         | 609      | <i>Caviidæ</i> .....                            | 913                |
| <i>Catathleina</i> .....                         | 610      | <i>Caviinæ</i> .....                            | 914                |
| <i>Catathleus</i> .....                          | 610      | <i>cavirictus</i> ( <i>Pantolambda</i> ) .....  | 613                |
| <i>carinidens</i> .....                          | 610      | <i>Ceomorphæ</i> .....                          | 284, 287, 339, 342 |
| <i>coarctatus</i> .....                          | 610      | <i>cedrensis</i> ( <i>Epoecodon</i> ) .....     | 782                |
| <i>ditrigonus</i> .....                          | 611      | <i>cedrensis</i> ( <i>Protomeryx</i> ) .....    | 795                |
| <i>rhabdodon</i> .....                           | 610      | <i>celatus</i> ( <i>Diacodon</i> ) .....        | 434                |
| <i>catenatus</i> ( <i>Plastomenus</i> ) .....    | 106      | <i>celatus</i> ( <i>Nyetitherium</i> ) .....    | 434                |
| <i>Catharista</i> .....                          | 311      | <i>Celeomorphæ</i> .....                        | 353                |
| <i>aura</i> .....                                | 311      | <i>celer</i> ( <i>Anchitherium</i> ) .....      | 674                |
| <i>occidentalis</i> .....                        | 311      | <i>celer</i> ( <i>Apatornis</i> ) .....         | 282                |
| <i>shastensis</i> .....                          | 312      | <i>celer</i> ( <i>Colonomys</i> ) .....         | 909                |
| <i>Cathartæ</i> .....                            | 310      | <i>celer</i> ( <i>Colonymys</i> ) .....         | 909                |
| <i>Cathartes</i> .....                           | 311      | <i>celer</i> ( <i>Dromilopus</i> ) .....        | 7                  |
| <i>aura</i> .....                                | 311      | <i>celer</i> ( <i>Dromopus</i> ) .....          | 7                  |
| <i>clarki</i> .....                              | 313      | <i>celer</i> ( <i>Ichthyornis</i> ) .....       | 282                |

|                                 | Page     |                                 | Page               |
|---------------------------------|----------|---------------------------------|--------------------|
| celer (Laosaurus) .....         | 206      | Cerorhinca— <i>Continued</i>    |                    |
| celer (Melengris) .....         | 330      | dubia .....                     | 343                |
| celer (Mesolippus) .....        | 674      | Cervalces .....                 | 825                |
| celer (Miohippus) .....         | 674      | americanus .....                | 826                |
| celer (Protoceras) .....        | 841      | borcalis .....                  | 825                |
| cellulosa (Amyda) .....         | 111      | roosevelti .....                | 825                |
| cellulosus (Trionyx) .....      | 111      | scotti .....                    | 825, 826           |
| celticus (Equus) .....          | 703      | sinclairi .....                 | 819                |
| Cenacotheria .....              | 397      | Cervavus .....                  | 818                |
| cenopus (Merycochærus) .....    | 785      | Cervicornia .....               | 810                |
| Centemodon .....                | 145      | Cervicornia .....               | 815                |
| sulcatus .....                  | 145      | Cervide .....                   | 816                |
| Centetes .....                  | 427      | cervina (Ovis) .....            | 842                |
| Centetidae .....                | 427      | Cervinae .....                  | 816, 820           |
| Centetina .....                 | 427      | Cervini .....                   | 817                |
| Centetina .....                 | 428      | Cervoidæ .....                  | 815                |
| Centetini .....                 | 428      | Cervulinae .....                | 815, 817           |
| Centetodon .....                | 435      | Cervus .....                    | 820, 823, 827, 828 |
| altidens .....                  | 435      | americanus .....                | 826, 827           |
| pulcher .....                   | 435      | alces .....                     | 827                |
| Centetoides .....               | 428      | auritus .....                   | 821                |
| Centracodon .....               | 428      | canadensis .....                | 829                |
| delicatulus .....               | 428      | caribou .....                   | 824                |
| centralis (Felis) .....         | 552      | columbiana .....                | 821                |
| Centrocereus .....              | 326      | claphus .....                   | 829                |
| urophasianus .....              | 326      | fortis .....                    | 830                |
| Centrosaurine .....             | 220      | fossilis .....                  | 830                |
| Centrosaurus .....              | 224      | hemionus .....                  | 821                |
| apertus .....                   | 224      | lucasi .....                    | 830                |
| cutleri .....                   | 222      | macrotis .....                  | 821                |
| cephalica (Bafina) .....        | 72       | mongolia .....                  | 830                |
| cephalica (Eubliena) .....      | 72       | muscutinensis .....             | 825                |
| Cephalotropis .....             | 573      | tarandus .....                  | 823, 824, 825      |
| coronatus .....                 | 573      | virginianus .....               | 822                |
| Cephalotropus .....             | 573      | warreni .....                   | 831, 832           |
| coronatus .....                 | 573      | Cetacea .....                   | 566                |
| cephalum (Cetotherium) .....    | 572      | Cetaceæ .....                   | 566                |
| cephalus (Eschrichtius) .....   | 572      | Cetacei .....                   | 567                |
| Ceratogaulus .....              | 908      | Cetæ .....                      | 566                |
| rhinoceros .....                | 908      | Cetæ .....                      | 565                |
| Ceratops .....                  | 222, 223 | Cetosauria .....                | 189                |
| alticornis .....                | 223      | Cetosaurida .....               | 189                |
| belli .....                     | 223      | Ceterhinops .....               | 591                |
| canadensis .....                | 221      | longifrons .....                | 591                |
| horridus .....                  | 229      | cetiformis (Uronautes) .....    | 121                |
| montanus .....                  | 224      | Cetiosaurs .....                | 167                |
| paucidens .....                 | 224      | Cetiosaurs .....                | 189                |
| paucidus .....                  | 224      | Cetoides (Basilosaurus) .....   | 570                |
| recurvicornis .....             | 222      | Cetoides (Zeuglodon) .....      | 570                |
| Ceratopsia .....                | 219      | Cetophis .....                  | 581                |
| Ceratopsida .....               | 220      | heteroclitus .....              | 581                |
| Ceratopsidae .....              | 220      | Cetotheriidae .....             | 571                |
| Ceratopsina .....               | 219      | Cetotherium .....               | 572                |
| Ceratopsoides .....             | 219      | cephalum .....                  | 572                |
| Ceratopsoides .....             | 219      | davidsoni .....                 | 572                |
| Ceratophina .....               | 543      | furlongi .....                  | 572                |
| ceratorhinus (Aphalops) .....   | 747      | leptocentrum .....              | 573, 591           |
| ceratorhinus (Aphelops) .....   | 746      | megalocephalus .....            | 573                |
| Ceratosaurs .....               | 175      | myricetoides .....              | 576                |
| Ceratosaurs .....               | 175      | parvum .....                    | 573                |
| nasicornis .....                | 176      | polyporum .....                 | 575                |
| Cercomys .....                  | 873      | chacensis (Dinecodexis) .....   | 786                |
| ludovicianus .....              | 873      | chacensis (Trigonomictes) ..... | 788                |
| cerchialis (Hopliophonus) ..... | 544      | Chanochyus .....                | 769                |
| Cerorhinca .....                | 343      | deccensis .....                 | 769                |

|                                 | Page     |                                 | Page       |
|---------------------------------|----------|---------------------------------|------------|
| Chalicomyidæ .....              | 882      | Champsosaurus— <i>Continued</i> |            |
| Chalicomys .....                | 882      | saponensis .....                | 183        |
| baibouri .....                  | 882      | vaccinsulensis .....            | 116        |
| brachyceph .....                | 882      | chaneyi (Bison) .....           | 850        |
| complexus .....                 | 882      | chapmani (Gomphotherium) .....  | 635        |
| fossor .....                    | 883      | chapmani (Mammut) .....         | 635        |
| gradatus .....                  | 883      | chapmani (Mastodon) .....       | 635        |
| hesperus .....                  | 883      | Charadriacæ .....               | 336        |
| montanus .....                  | 883      | Charadriadæ .....               | 336        |
| pansus .....                    | 883      | Charadrias .....                | 336        |
| peninsulatus .....              | 883      | Charadrinë .....                | 335        |
| sciuroides .....                | 883      | Charadrii .....                 | 335        |
| simplicidens .....              | 883      | Charadriidæ .....               | 335        |
| Chalicotheridæ .....            | 661      | Charadruides .....              | 335        |
| Chalicotheridæ .....            | 661      | Charadriiformes .....           | 335        |
| Chalicotheriini .....           | 661      | Charadriinæ .....               | 336        |
| Chalicotherioidæ .....          | 660      | Charadrinë .....                | 336        |
| Chalicotherioidæ .....          | 660      | Charadrioidæ .....              | 335        |
| Chalicotherium .....            | 661      | Charadriomorphæ .....           | 335        |
| bilobatum .....                 | 661      | Charadriornithes .....          | 335        |
| Chamæleo .....                  | 247      | Charadrius .....                | 336        |
| pristinus .....                 | 248      | sheppardianus .....             | 336        |
| Chamæleon .....                 | 247      | vociferus .....                 | 336        |
| pristinus .....                 | 248      | Charitemys .....                | 73         |
| Chamæleonida .....              | 247      | captans .....                   | 73         |
| Chamæleonidæ .....              | 247      | Charitonetta .....              | 307        |
| Chamæleonii .....               | 247      | albeola .....                   | 307        |
| Chamæleonina .....              | 248      | Chasmaporthetes .....           | 539        |
| Chamæleontes .....              | 247      | ossifragus .....                | 539        |
| Chamæleontia .....              | 247      | Chasmops .....                  | 246        |
| Chamæleontidæ .....             | 247      | Chasmosaurina .....             | 220        |
| Chamasaurus .....               | 45       | Chasmosaurus .....              | 223        |
| dolichognathus .....            | 45       | belli .....                     | 223        |
| Chameleo .....                  | 247, 248 | chastense (Nothrotherium) ..... | 406        |
| pristinus .....                 | 248      | Chaulelasmus .....              | 305        |
| Chameleon .....                 | 248      | streperus .....                 | 305        |
| chamense (Meniscotherium) ..... | 607      | Cheiroptera .....               | 452        |
| chamensis (Alligator) .....     | 153      | Cheirotherium .....             | 9          |
| chamensis (Crocodilus) .....    | 153      | Cheirotheroides .....           | 8          |
| chamensis (Crocodylus) .....    | 153      | pilulatus .....                 | 8          |
| Chamops .....                   | 246      | Chelichnus .....                | 9          |
| denticulatus .....              | 246      | wymanianus .....                | 9          |
| segnis .....                    | 246      | Chelidridæ .....                | 84         |
| seguis .....                    | 246      | Chelodactyla .....              | 664        |
| Champsosaurus .....             | 132      | Chelodina .....                 | 80         |
| laramiensis .....               | 133      | Chelolma .....                  | 79         |
| Champsä .....                   | 157      | Chelon .....                    | 79         |
| mississippiensis .....          | 157      | ischyros .....                  | 79         |
| Champsodelphis .....            | 590      | Chelone .....                   | 81         |
| acutidens .....                 | 590      | caretta .....                   | 82         |
| Champsosauri .....              | 132      | grandævus .....                 | 80         |
| Champsosauria .....             | 132      | midas .....                     | 82         |
| Champsosauridæ .....            | 132      | mydas .....                     | 82         |
| Champsosauriformes .....        | 131      | Chelonadæ .....                 | 79         |
| Champsosaurus .....             | 132      | Chelonea .....                  | 79         |
| albertensis .....               | 133      | Chelonemydidæ .....             | 75         |
| ambulator .....                 | 133      | Chelonia .....                  | 84, 81, 99 |
| annectens .....                 | 133      | mydas .....                     | 82         |
| australis .....                 | 133      | parvitecta .....                | 82         |
| brevicollis .....               | 133      | Chelonidæ .....                 | 79         |
| laramiensis .....               | 133      | Chelonii .....                  | 84         |
| laramiensis .....               | 133      | Cheloniidæ .....                | 75, 79     |
| occiduus .....                  | 133      | Chelonidea .....                | 77         |
| profundus .....                 | 133      | Cheloninæ .....                 | 79         |
| puercensis .....                | 133      | Chelonina .....                 | 79, 80     |

|                                   | Page       |  | Page     |
|-----------------------------------|------------|--|----------|
| Cheloninae .....                  | 80         | Chisternon—Continued .....             |          |
| Chelonioide .....                 | 77, 83     | interpositum .....                     | 73       |
| Chelonioidea .....                | 77         | undatum .....                          | 73       |
| Chelonocephalus .....             | 790, 791   | Chisternum .....                       | 72       |
| schucherti .....                  | 791        | Chlamydothoridae .....                 | 416      |
| Chelonioidea .....                | 77         | Chlamydotherinae .....                 | 417      |
| Chelonoides .....                 | 9          | Chlamydotherinae .....                 | 417      |
| moedens .....                     | 9          | Chlamydotherium .....                  | 418      |
| Chelonura .....                   | 85         | Chlamytheriinae .....                  | 417      |
| temminckii .....                  | 85, 86     | Chlamytherium .....                    | 418      |
| chelonys (Mesoreodon) .....       | 783        | humboldtii .....                       | 418      |
| Chelydroidae .....                | 74         | septentriona .....                     | 414      |
| Chelydosaurus .....               | 29, 30, 33 | Chlidonias .....                       | 342      |
| Chelydia .....                    | 84         | nigra .....                            | 342      |
| crassa .....                      | 91         | surinamensis .....                     | 342      |
| laticarinata .....                | 85         | Chlorocnas .....                       | 345      |
| sculpta .....                     | 85         | micula .....                           | 345      |
| serpentina .....                  | 85         | Chomohyus .....                        | 769      |
| temminckii (Chelydra) .....       | 80         | Chorodon .....                         | 764      |
| chelydra (Merycochoerus) .....    | 784        | calkinsi .....                         | 766      |
| chelydra (Promerycochoerus) ..... | 784        | caninus .....                          | 764      |
| Chelydridae .....                 | 84         | Choromorphia .....                     | 752      |
| Chelydridae .....                 | 84         | Choropotamidae .....                   | 760      |
| chelydrinus (Osteopygis) .....    | 76         | Chonospondylus .....                   | 124      |
| Chelydrops .....                  | 86         | grandis .....                          | 126      |
| stricta .....                     | 86         | Choneziphus .....                      | 533      |
| Chen .....                        | 303        | colops .....                           | 533      |
| caeruleus .....                   | 303        | liops .....                            | 533      |
| caeruleus .....                   | 303        | packardii .....                        | 533      |
| hyperborea .....                  | 303        | planirostris .....                     | 533      |
| hyperboreus .....                 | 303        | trachops .....                         | 533      |
| nivalis .....                     | 303        | chonops (Proroziphus) .....            | 533, 535 |
| Chenosaurus .....                 | 217        | Choristodera .....                     | 131      |
| tolmanensis .....                 | 217        | Chriacide .....                        | 460      |
| Chenomorpha .....                 | 299        | Chriacus .....                         | 440, 461 |
| Chenomorphus .....                | 299        | angulatus .....                        | 440      |
| Cheritheroidea .....              | 8          | baldwini .....                         | 461      |
| cheriway (Falco) .....            | 321        | gallinae .....                         | 461      |
| cheriway (Polyborus) .....        | 321        | pelvidens .....                        | 461      |
| Chersomyidae .....                | 90         | schlosserianus .....                   | 461      |
| Chilonix .....                    | 35         | stenops .....                          | 461      |
| Chilonyx .....                    | 35         | truncatus .....                        | 461      |
| rapidus .....                     | 35         | chrisaetus (Aquila) .....              | 318      |
| Chilotae .....                    | 105        | Chroicocephalus .....                  | 340      |
| Chimærichnus .....                | 20         | philadelphia .....                     | 340      |
| ingens .....                      | 20         | chrotodinus (Microtus) .....           | 397      |
| Chincha .....                     | 532        | chrysaetos (Aquila) .....              | 318      |
| avia .....                        | 533        | chrysaetos (Falco) .....               | 318      |
| mesomelas .....                   | 533        | Chrysomys .....                        | 96, 97   |
| occidentalis .....                | 533        | belli .....                            | 96       |
| putida .....                      | 533        | cinerea .....                          | 96       |
| Chirogidae .....                  | 377        | inornata .....                         | 96       |
| Chiroptera .....                  | 452        | marginata .....                        | 96       |
| Chiropteri .....                  | 452        | timida .....                           | 96       |
| Chirostenotes .....               | 186        | wyomingensis .....                     | 96       |
| pergracilis .....                 | 186        | Chrysochloridae .....                  | 423      |
| Chirotherium .....                | 9          | Chrysochloridini .....                 | 423      |
| heterodaetylum .....              | 9          | Chrysochloroidea .....                 | 423      |
| parvum .....                      | 9          | Chrysochloris .....                    | 423      |
| reiteri .....                     | 9          | chrysodeirus (Callospermophilus) ..... | 899      |
| Chirox .....                      | 379        | chrysodeirus (Spermophilus) .....      | 899      |
| plicatus .....                    | 379        | chrysodeirus (Tamias) .....            | 899      |
| Chisternon .....                  | 72         | chrysodon (Gymnoptychus) .....         | 890      |
| hebraicum .....                   | 73         | chrysodon (Ischyromys) .....           | 890      |
|                                   |            | cibollensis (Echmatomys) .....         | 95       |



|                                  | Page     |                                 | Page          |
|----------------------------------|----------|---------------------------------|---------------|
| cibollensis (Emys) .....         | 95       | cingulatus (Colodon) .....      | 725           |
| cicognani (Putorius) .....       | 528      | cingulatus (Notharctus) .....   | 449           |
| cicognanii (Mustela) .....       | 528      | Cinodon .....                   | 214           |
| Ciconia .....                    | 296      | Cinosternidae .....             | 93            |
| malta .....                      | 293      | Cinosterninae .....             | 93            |
| maltha .....                     | 296      | Cinosternoidae .....            | 93            |
| Ciconiæ .....                    | 293, 295 | Cinosternon .....               | 93            |
| Ciconiidae .....                 | 296      | Cinosternum .....               | 93            |
| Ciconi .....                     | 295      | arizonæ .....                   | 93            |
| Ciconiidae .....                 | 296      | Cionodon .....                  | 214           |
| Ciconiiformes .....              | 293      | arctatus .....                  | 214           |
| Ciconinæ .....                   | 296      | stenopsis .....                 | 214           |
| Ciconioidæ .....                 | 295      | Circinæ .....                   | 319           |
| cimarronis (Gomphotherium) ..... | 636      | circulosus (Embaphias) .....    | 120           |
| cimarronis (Serridentinus) ..... | 636      | circumagens (Apatichnus) .....  | 5             |
| cimarronis (Tetrabelodon) .....  | 636      | Circus .....                    | 319           |
| cimarronis (Trilophodon) .....   | 636      | cyaneus .....                   | 320           |
| Cimolestes .....                 | 391      | hudsonius .....                 | 320           |
| curtus .....                     | 392      | cismontanus (Pogonodon) .....   | 542           |
| cutleri .....                    | 394      | Cistudo .....                   | 98            |
| incisus .....                    | 392      | carinata .....                  | 98            |
| Cimolestidae .....               | 391      | carolina .....                  | 98            |
| Cimolestinae .....               | 391      | clausa .....                    | 98            |
| Cimoliasaurus .....              | 119      | eurypygia .....                 | 97            |
| grandis .....                    | 119      | marnochii .....                 | 99            |
| laramiensis .....                | 119      | cisulcatus (Geomys) .....       | 879           |
| magnus .....                     | 120      | citatus (Phenacolemur) .....    | 446           |
| planior .....                    | 120      | Citellus .....                  | 868           |
| snowii .....                     | 120      | beecheyi .....                  | 871           |
| vetustus .....                   | 120      | hensoni .....                   | 869           |
| Cimoliosaurus .....              | 119      | cochisei .....                  | 869           |
| Cimolodon .....                  | 381      | douglasi .....                  | 871           |
| agilis .....                     | 381      | fisheri .....                   | 871           |
| nitidus .....                    | 381      | grammurus .....                 | 872           |
| parvus .....                     | 381      | taylori .....                   | 869           |
| Cimolomys .....                  | 381      | tridecemlineatus .....          | 869           |
| agilis .....                     | 381      | tuitus .....                    | 869           |
| bellus .....                     | 381      | Cladyodon .....                 | 168           |
| digona .....                     | 381      | Clanodon .....                  | 464           |
| formosus .....                   | 380      | corrugatus .....                | 464           |
| gracilis .....                   | 381      | ferox .....                     | 464           |
| minutus .....                    | 381      | protogonioides .....            | 464           |
| nitidus .....                    | 381      | Clangocienus .....              | 301           |
| parvus .....                     | 381      | Clangula .....                  | 307           |
| serratus .....                   | 380      | albeola .....                   | 307           |
| Cimolopteryx .....               | 359      | hyemalis .....                  | 307           |
| rara .....                       | 359      | islandica .....                 | 308           |
| rarus .....                      | 359      | Clasorhynchus .....             | 216           |
| retusa .....                     | 359      | trihedrus .....                 | 216           |
| retusus .....                    | 359      | Clasosauridae .....             | 208           |
| cinctus (Coryphodon) .....       | 615      | Clasosaurus .....               | 210, 212, 215 |
| cinctus (Oligotomus) .....       | 671      | affinis .....                   | 215           |
| cinctus (Orohippus) .....        | 671      | agilis .....                    | 215           |
| cinerascens (Sylvilagus) .....   | 864      | annectens .....                 | 212, 216      |
| cinerea (Chrysemys) .....        | 90       | clara (Baena) .....             | 71            |
| cinerea (Mus) .....              | 893      | clarki (Palamopus) .....        | 12            |
| cinerea (Neotoma) .....          | 895      | clarki (Sarcorhamphus) .....    | 313           |
| cinerea (Teonoma) .....          | 895      | clarki (Vultur) .....           | 313           |
| cinerearum (Clidastes) .....     | 263      | clarkianus (Siphonocetus) ..... | 572           |
| cinereargenteus (Canis) .....    | 503      | clarkii (Palamopus) .....       | 12            |
| cinereargenteus (Urocyon) .....  | 503      | clausa (Cistudo) .....          | 98            |
| cinereargentatus (Canis) .....   | 503      | clausa (Terrapene) .....        | 98            |
| cinereargentatus (Urocyon) ..... | 503      | claviger (Edaphosaurus) .....   | 58            |
| cinerianus (Clidastes) .....     | 263      | claviger (Nasosaurus) .....     | 68            |
| Cingulati .....                  | 415      | clavipes (Glyptodon) .....      | 421           |

|                            | Page     |                            | Page     |
|----------------------------|----------|----------------------------|----------|
| clavistris (Sphenosaurus)  | 150      | conlescens (Plastomennus)  | 108      |
| clavis (Crocodilus)        | 158      | conlescens (Trionyx)       | 108      |
| clavis (Crocodilus)        | 158      | coalingensis (Merychippus) | 684      |
| clavum (Archæotherium)     | 763      | coalingensis (Pliohippus)  | 696      |
| clavum (Elotherium)        | 763      | coalingensis (Protohippus) | 696      |
| clavus (Archæotherium)     | 763      | coarctatum (Archæotherium) | 763      |
| clavus (Entelodon)         | 763      | coarctatum (Elotherium)    | 763      |
| clodensis (Thinoceon)      | 474      | coarctatus (Catathlax)     | 610      |
| Clemmys                    | 94       | coarctatus (Entelodon)     | 763      |
| hesperia                   | 94       | coarctatus (Peripitychus)  | 610      |
| insculpta                  | 94       | cocinarum (Typothorax)     | 138      |
| morrisie                   | 94       | Coccyges                   | 347      |
| pererassa                  | 94       | Coccygiformes              | 346      |
| saxa                       | 94       | Coccygomorphæ              | 346      |
| Cleusaurus                 | 215      | cochisei (Citellus)        | 869      |
| Clepsydropis               | 51       | cocconinensis (Baropus)    | 7        |
| Clepsosaurus               | 172      | cocconinensis (Procaninus) | 798      |
| pennsylvanicus             | 172      | ceclatus (Meniscoessus)    | 382      |
| Clepsosaurus               | 172      | ceclatus (Tripridon)       | 382      |
| pennsylvanicus             | 172      | Celodon                    | 400      |
| Clepsydropide              | 52, 57   | Celodus                    | 400      |
| Clepsydropina              | 52       | Celogenus                  | 913      |
| Clepsydrops                | 50, 53   | Celogenus                  | 913      |
| colletti                   | 53       | Celogenys                  | 913      |
| leptocephalus              | 50       | paca                       | 913      |
| leptocubalus               | 50       | Celophysina                | 187      |
| limbatus                   | 53       | Celophysis                 | 186      |
| macropondylus              | 50       | bauri                      | 186      |
| natalis                    | 53       | longicollis                | 186      |
| pedunculatus               | 53       | willistoni                 | 186      |
| vinlovi                    | 53       | celops (Choneziphus)       | 583      |
| Clepsyosaurus              | 142, 172 | Celouria                   | 184      |
| fraserianus                | 172      | Celosaurus                 | 181      |
| leali                      | 142      | anticus                    | 181      |
| pennsylvanicus             | 172      | celospondylus (Isacanthus) | 592      |
| ventrianus                 | 172      | celospondylus (Xacanthus)  | 592      |
| Clidastes                  | 262      | Celosuchus                 | 147      |
| affinis                    | 263      | reedi                      | 147      |
| cinereus                   | 263      | Celuria                    | 184      |
| cinerianus                 | 263      | Celuridae                  | 184      |
| canodon                    | 263      | Celuroidea                 | 184      |
| dispar                     | 263      | Celurosauria               | 184      |
| ignavus                    | 263      | Celurosauroides            | 184      |
| intermedius                | 263      | Celurus                    | 181, 185 |
| liodontus                  | 263      | affinis                    | 181      |
| propylus                   | 263      | agilis                     | 185      |
| pumilis                    | 263      | anticus                    | 181      |
| pumilus                    | 263      | fragilis                   | 185      |
| rex                        | 263      | gracilis                   | 181      |
| stenops                    | 263      | hermanni                   | 186      |
| sterlbergii                | 263      | medius                     | 531      |
| torator                    | 263      | celurus (Anchisaurus)      | 171      |
| validus                    | 264      | Cemide                     | 911      |
| velox                      | 263, 264 | Cenopus                    | 743      |
| westii                     | 264      | mitis                      | 743      |
| wynni                      | 264      | cenopus (Merycochetus)     | 785      |
| clidastoides (Lestocaurus) | 260      | ceruleus (Chen)            | 808      |
| clidastoides (Platycarpus) | 260      | cognatum (Anchitherium)    | 681      |
| clonema (Anaptogenia)      | 899      | cognatum (Merychippus)     | 681      |
| clonema (Syrina)           | 899      | cognatum (Parahippus)      | 681      |
| clonema (Erethizon)        | 913      | coiledus (Pantylus)        | 44       |
| clonema (Thomomys)         | 878      | Cadapton                   | 353      |
| clypsea (Anas)             | 306      | cafer                      | 353      |
| clypsea (Spatula)          | 306      | collaris                   | 353      |
| conlescens (Aspaderetes)   | 108      | Calinus                    | 337      |

|                                     | Page     |                                     | Page          |
|-------------------------------------|----------|-------------------------------------|---------------|
| <i>Colinus—Continued</i>            |          | <i>Columba</i>                      | 345           |
| <i>eatonii</i>                      | 327      | <i>carolinensis</i>                 | 344           |
| <i>virginianus</i>                  | 327      | <i>fasciata</i>                     | 345           |
| <i>collaris</i> (Anas)              | 307      | <i>macroura</i>                     | 344           |
| <i>collaris</i> (Marila)            | 307      | <i>micula</i>                       | 345           |
| <i>collettii</i> (Clepsydrops)      | 53       | <i>Columbe</i>                      | 344, 345      |
| <i>Collettosaurus</i>               | 9        | <i>columbarius</i> (Falco)          | 321           |
| <i>indianaensis</i>                 | 9        | <i>columbi</i> (Arkidiscodon)       | 646           |
| <i>magnus</i>                       | 9        | <i>columbi</i> (Elephas)            | 643, 644, 647 |
| <i>missouriensis</i>                | 9        | <i>columbi</i> (Euelephas)          | 648           |
| <i>pentadactylus</i>                | 9        | <i>columbiana</i> (Odocoileus)      | 821           |
| <i>collinsonii</i> (Mastodon)       | 625      | <i>columbianus</i> (Anas)           | 301           |
| <i>collinum</i> (Euceratherium)     | 344      | <i>columbianus</i> (Cygnus)         | 301           |
| <i>Colodon</i>                      | 725      | <i>columbianus</i> (Elephas)        | 644           |
| <i>angulatus</i>                    | 725      | <i>columbianus</i> (Odocoileus)     | 821           |
| <i>cingulatus</i>                   | 725      | <i>columbianus</i> (Olor)           | 301           |
| <i>copei</i>                        | 725      | <i>columbianus</i> (Pediocetes)     | 326           |
| <i>dakotensis</i>                   | 725      | <i>columbianus</i> (Pediocetes)     | 326           |
| <i>longipes</i>                     | 726      | <i>columbianus</i> (Pediocetes)     | 326           |
| <i>luxatus</i>                      | 725      | <i>Columbidae</i>                   | 345           |
| <i>occidentalis</i>                 | 725      | <i>Columbiformes</i>                | 344           |
| <i>proscupidatus</i>                | 725      | <i>Columbinae</i>                   | 344           |
| <i>Colonoceras</i>                  | 734      | <i>Columbin</i>                     | 344           |
| <i>agrestis</i>                     | 734      | <i>Cumboidae</i>                    | 345           |
| <i>Colonomys</i>                    | 909      | <i>colurus</i> (Anchisaurus)        | 171           |
| <i>celer</i>                        | 909      | <i>Colymbi</i>                      | 284           |
| <i>Colonosaurus</i>                 | 282      | <i>Colymbidae</i>                   | 284, 285      |
| <i>mudgei</i>                       | 282      | <i>Colymbiformes</i>                | 284           |
| <i>Colonymys</i>                    | 909      | <i>Colymbinae</i>                   | 284           |
| <i>celer</i>                        | 909      | <i>Colymboides</i>                  | 284           |
| <i>Colophonodon</i>                 | 581      | <i>Colymbomorpha</i>                | 284           |
| <i>holmesii</i>                     | 581      | <i>Colymbo-Podiceps</i>             | 285           |
| <i>coloradense</i> (Hipparion)      | 692      | <i>Colymbo-Podicipitiformes</i>     | 285           |
| <i>coloradensis</i> (Ambloctonus)   | 473      | <i>Colymbus</i>                     | 284, 285      |
| <i>coloradensis</i> (Heterofelis)   | 546      | <i>auritus</i>                      | 285           |
| <i>coloradensis</i> (Kopolestes)    | 374      | <i>californicus</i>                 | 286           |
| <i>coloradensis</i> (Laoporus)      | 15       | <i>holbælii</i>                     | 283           |
| <i>coloradensis</i> (Limnopus)      | 15       | <i>imner</i>                        | 284           |
| <i>coloradensis</i> (Machærodus)    | 546      | <i>nigricollis</i>                  | 286           |
| <i>coloradensis</i> (Megacerops)    | 720      | <i>oligocænus</i>                   | 286           |
| <i>coloradensis</i> (Megapezia)     | 18       | <i>oligocænus</i>                   | 286           |
| <i>coloradensis</i> (Oreodon)       | 780      | <i>parvus</i>                       | 286           |
| <i>coloradensis</i> (Parabarropus)  | 18       | <i>torquatus</i>                    | 284           |
| <i>coloradensis</i> (Parahippus)    | 681      | <i>comma</i> (Conoryctes)           | 398           |
| <i>coloradensis</i> (Patriofelis)   | 473      | <i>communis</i> (Plastomimus)       | 106           |
| <i>coloradensis</i> (Platyrhachis)  | 260      | <i>comensis</i> (Aploconodon)       | 370           |
| <i>coloradoensis</i> (Laoporus)     | 15       | <i>compactus</i> (Ognophis)         | 268           |
| <i>coloradoensis</i> (Megaceratops) | 720      | <i>completus</i> (Vulpavus)         | 486           |
| <i>coloradoensis</i> (Nothocyon)    | 403      | <i>complexus</i> (Chalicomys)       | 882           |
| <i>coloradoensis</i> (Platyrhachis) | 250      | <i>complexus</i> (Steneofiber)      | 882           |
| <i>coloradoensis</i> (Rhineura)     | 250      | <i>complicatus</i> (Equus)          | 703, 704      |
| <i>Coloreodon</i>                   | 777      | <i>complicatus</i> (Neohippus)      | 703           |
| <i>ferox</i>                        | 777      | <i>compressidens</i> (Ischyrotomus) | 903           |
| <i>macrocephalus</i>                | 777      | <i>compressidens</i> (Merycochærus) | 783           |
| <i>ryderanus</i>                    | 773      | <i>compressidens</i> (Paramys)      | 903           |
| <i>Colotaxis</i>                    | 890      | <i>compressus</i> (Æliurodon)       | 495           |
| <i>cristatus</i>                    | 890      | <i>compressus</i> (Belemnoziphius)  | 583           |
| <i>Coluber</i>                      | 269, 270 | <i>compressus</i> (Canis)           | 406           |
| <i>abacura</i>                      | 269      | <i>compressus</i> (Dicotyles)       | 772           |
| <i>acuminatus</i>                   | 269      | <i>compressus</i> (Elliptomodon)    | 264           |
| <i>constrictor</i>                  | 269      | <i>compressus</i> (Haplodeutes)     | 469           |
| <i>sirtalis</i>                     | 270      | <i>compressus</i> (Lanceosaurus)    | 256           |
| <i>Colubridæ</i>                    | 269      | <i>compressus</i> (Lynx)            | 555           |
| <i>Colubrina</i>                    | 269      | <i>compressus</i> (Manimontus)      | 630           |
| <i>Colubrinae</i>                   | 269      | <i>compressus</i> (Platigonus)      | 772           |

|                                 | Page     |                                 | Page     |
|---------------------------------|----------|---------------------------------|----------|
| compressus (Platygonus) .....   | 772      | Conodectes— <i>Continued</i>    |          |
| Compsenys .....                 | 70, 88   | favosus .....                   | 31       |
| imbricarius .....               | 88       | Conodectide .....               | 30       |
| lineolatus .....                | 90       | Conodectiformes .....           | 30       |
| ognius .....                    | 88       | conodon (Clidastes) .....       | 263      |
| obscurus .....                  | 88       | conodon (Gomphotherium) .....   | 636      |
| parva .....                     | 89       | conodon (Mastodon) .....        | 636      |
| parvus .....                    | 89       | Conoryetes .....                | 398      |
| plicatulus .....                | 70, 89   | coma .....                      | 398      |
| puercensis .....                | 89       | Conoryetide .....               | 398      |
| torrejonensis .....             | 89       | Conoryetina .....               | 398      |
| vafer .....                     | 89       | Conoryetini .....               | 398      |
| victa .....                     | 89       | conquistus (Meniscoëssus) ..... | 382      |
| victus .....                    | 89       | conradi (Belosphys) .....       | 590      |
| Compsognatha .....              | 184      | conradi (Ixaanthus) .....       | 590      |
| Compsognathide .....            | 184      | conradi (Priscodelphinus) ..... | 590      |
| Compsosoma .....                | 269      | conradi (Puffinus) .....        | 288      |
| corais .....                    | 269, 270 | consors (Calops) .....          | 814      |
| couperii .....                  | 269      | consors (Laosaurus) .....       | 206      |
| Comptichnus .....               | 10       | consperta (Stylenys) .....      | 101      |
| obesus .....                    | 10       | constrictor (Bascanion) .....   | 269      |
| comptus (Didelphodon) .....     | 362      | constrictor (Coluber) .....     | 269      |
| comptus (Didelphops) .....      | 362      | constrictor (Zamenis) .....     | 269      |
| comptus (Entomodon) .....       | 439      | conternunus (Geranonetus) ..... | 317      |
| comptus (Protoceras) .....      | 814      | contortus (Geranonetus) .....   | 317      |
| comptus (Pteranodon) .....      | 162      | contusor (Crocodylus) .....     | 153      |
| comptus (Sarcelenur) .....      | 439      | contusor (Thecachampsia) .....  | 153      |
| comstocki (Didelphis) .....     | 593      | conulus (Oracodon) .....        | 381      |
| comstocki (Didelphys) .....     | 593      | Conurina .....                  | 546      |
| comstocki (Peratherium) .....   | 593      | Conuropsis .....                | 346      |
| Conacodon .....                 | 612      | carolinensis .....              | 346      |
| cophater .....                  | 612      | fratereula .....                | 346      |
| entocoonum .....                | 612      | conversidens (Equus) .....      | 704      |
| entocoonus .....                | 612      | cooki (Diceratherium) .....     | 745      |
| conardi (Smilodontopsis) .....  | 547      | cooki (Menoceras) .....         | 745      |
| concinerata (Platypterna) ..... | 18       | cooki (Moropus) .....           | 662      |
| concentrica (Amyda) .....       | 111      | cooki (Syndyceras) .....        | 814      |
| concentricus (Trionyx) .....    | 111      | cooki (Bothreonyx) .....        | 74       |
| conceptus (Procamelus) .....    | 798      | cooperi (Acipiter) .....        | 315      |
| Conchochelys .....              | 110      | cooperi (Fulco) .....           | 514      |
| admirabilis .....               | 110      | cooperi (Shoshonius) .....      | 927      |
| concolor (Felix) .....          | 552      | cooperi (Synaptomys) .....      | 899      |
| concolor (Phoca) .....          | 564      | copeanus (Mokasaurus) .....     | 262      |
| condoni (Anser) .....           | 303      | copei (Aceratherium) .....      | 740      |
| condoni (Dicotyles) .....       | 772      | copei (Acerotherium) .....      | 740      |
| condoni (Eporeodon) .....       | 782      | copei (Cenopus) .....           | 740      |
| condoni (Hipparion) .....       | 692      | copei (Cenovus) .....           | 740      |
| condoni (Meschippus) .....      | 676      | copei (Colodon) .....           | 725      |
| condoni (Miohippus) .....       | 676      | copei (Eosaurus) .....          | 32       |
| condoni (Philotrox) .....       | 508      | copei (Isodectes) .....         | 32       |
| condoni (Platygonus) .....      | 772      | copei (Meschippus) .....        | 676, 725 |
| Condylarthra .....              | 601      | copei (Miohippus) .....         | 725      |
| Condylarthri .....              | 601      | copei (Mixodectes) .....        | 448      |
| confertus (Nimravus) .....      | 543      | copei (Olbodotes) .....         | 448      |
| confertus (Tephrocyon) .....    | 510      | copei (Olbots) .....            | 448      |
| confertus (Tomarctus) .....     | 510      | copei (Palaeosyops) .....       | 712      |
| confusus (Barillopus) .....     | 6        | copei (Paramys) .....           | 902      |
| congruus (Tylosaurus) .....     | 259      | copei (Phenacodus) .....        | 605      |
| confidens (Eschatus) .....      | 806      | copei (Phocnicopterus) .....    | 298      |
| confidens (Eschatus) .....      | 806      | copei (Protostegus) .....       | 78       |
| confiferus (Haploconus) .....   | 612      | copei (Subhyracodon) .....      | 740      |
| Coniophis .....                 | 271      | copei (Symborodon) .....        | 718      |
| precedens .....                 | 271      | cophater (Conacodon) .....      | 612      |
| Coniornis .....                 | 279      | cophater (Haploconus) .....     | 612      |
| altus .....                     | 280      | Coracomorphæ .....              | 353      |
| Conodectes .....                | 30, 43   | Coragyps .....                  | 311      |

|                                   | Page     |                                      | Page          |
|-----------------------------------|----------|--------------------------------------|---------------|
| <i>Coragyps—Continued</i>         |          | <i>Coryphodon—Continued</i>          |               |
| occidentalis .....                | 311      | hamatus .....                        | 615           |
| corais (Coluber) .....            | 269      | latidens .....                       | 615           |
| corais (Comptosoma) .....         | 269      | latipes .....                        | 616           |
| corais (Drymarchon) .....         | 269      | lobatus .....                        | 615           |
| corax (Corvus) .....              | 356      | lomas .....                          | 616           |
| cordatus (Crocodylus) .....       | 149      | marginatus .....                     | 616           |
| cordatus (Holops) .....           | 149      | molestus .....                       | 616           |
| cordatus (Pantylus) .....         | 44       | obliquus .....                       | 616           |
| cordatus (Thoracosaurus) .....    | 149      | pachypus .....                       | 615           |
| cordiformis (Euthlastes) .....    | 374      | radians .....                        | 616           |
| cordillarum (Mammut) .....        | 632      | repandus .....                       | 616           |
| cordillerarum (Dibelodon) .....   | 632      | semicinctus .....                    | 616           |
| Cordillerion .....                | 630      | simus .....                          | 616           |
| gratum .....                      | 631      | singularis .....                     | 616           |
| oligobunis .....                  | 632      | subquadratus .....                   | 616           |
| cordillerum (Mastodon) .....      | 632      | teste .....                          | 616           |
| coriacea (Dermochelys) .....      | 68       | testis .....                         | 616           |
| Corphagus .....                   | 451      | ventanus .....                       | 616           |
| montanus .....                    | 451      | worimani .....                       | 616           |
| corniculatus (Haploconus) .....   | 611      | Coryphodontide .....                 | 614           |
| corniculatus (Hemithlaeus) .....  | 611      | Coryphodontiformes .....             | 613           |
| cornutidens (Orycterocetus) ..... | 597      | Coryphodontini .....                 | 614           |
| cornutum (Telmatotherium) .....   | 715      | Corythosaurus .....                  | 213, 218      |
| cornutum (Telmatotherium) .....   | 715      | casuaris .....                       | 218           |
| cornutum (Tinoceras) .....        | 620      | excavatus .....                      | 218           |
| cornutum (Uintatherium) .....     | 620      | intermedius .....                    | 218           |
| cornutus (Dolichorhinus) .....    | 715      | Cosoryx .....                        | 816, 830, 831 |
| cornutus (Eobasilus) .....        | 620      | furcatus .....                       | 831           |
| Cornwallius .....                 | 654      | teres .....                          | 816           |
| sookensis .....                   | 654      | costatus (Palaeoscincus) .....       | 237           |
| coronatus (Cephalotropis) .....   | 573      | costatus (Plastomenus) .....         | 106           |
| coronatus (Cephalotropus) .....   | 573      | costilata (Kallistira) .....         | 92            |
| coronatus (Merycodus) .....       | 331      | costilatus (Bartenmys) .....         | 92            |
| corrugatus (Clanodon) .....       | 464      | costilatus (Dermatemys) .....        | 92            |
| corrugatus (Plastomenus) .....    | 106      | Cotylosauria .....                   | 28, 30, 37    |
| corsoni (Hadrianus) .....         | 100      | Cotylosauridae .....                 | 38            |
| corticata (Thalassochelys) .....  | 83       | coudoni (Philothrox) .....           | 508           |
| Corvide .....                     | 355      | cougar (Felis) .....                 | 552           |
| Corvine .....                     | 355      | couguar (Felis) .....                | 552           |
| Corvipes .....                    | 10       | couguor (Felis) .....                | 554           |
| lacertoideus .....                | 10       | couperi (Coluber) .....              | 269           |
| Corvus .....                      | 355      | couperi (Comptosoma) .....           | 269           |
| americanus .....                  | 356      | couperi (Drymarchon) .....           | 269           |
| annectens .....                   | 356      | couperi (Georgia) .....              | 269           |
| brachyrhynchos .....              | 356      | couperi (Mosasaurus) .....           | 262           |
| corax .....                       | 356      | Cracidae .....                       | 324           |
| shufeldti .....                   | 356      | Cracina .....                        | 324           |
| sinuatus .....                    | 356      | cragini (Hipparion) .....            | 602           |
| stelleri .....                    | 355      | crampianus (Bison) .....             | 849           |
| corypheus (Eoconodon) .....       | 466      | Cranioceras .....                    | 840           |
| corypheus (Hypotemnodon) .....    | 466      | unicornis .....                      | 840           |
| corypheus (Lestosaurus) .....     | 466      | craspedotum (Hyacotherium) .....     | 668           |
| corypheus (Mesocyon) .....        | 466      | craspedotus (Echippus) .....         | 668           |
| corypheus (Platecarpus) .....     | 260      | crassa (Amyda) .....                 | 111           |
| corypheus (Sarcotheraustes) ..... | 466      | crassa (Chelydra) .....              | 91            |
| corypheus (Temnoceyon) .....      | 466      | crassa (Hoplocheilus) .....          | 91            |
| Coryphodon .....                  | 614, 617 | crassa (Palaeoboa) .....             | 248           |
| anax .....                        | 615      | crassa (Saniwa) .....                | 252           |
| anax .....                        | 615      | crassangulum (Cetotherium) .....     | 591           |
| armatus .....                     | 615      | crassangulum (Cyrtodelphis) .....    | 591           |
| cinctus .....                     | 615      | crassangulum (Priscodelphinus) ..... | 591           |
| curviciotis .....                 | 615      | crassangulum (Schizodelphis) .....   | 591           |
| curviciotis .....                 | 615      | crassartus (Lestosaurus) .....       | 260           |
| cuspidatus .....                  | 615, 616 | crassartus (Platecarpus) .....       | 260           |
| elephantopus .....                | 615      | crassicauda (Hypsibema) .....        | 215           |

| Page                                  | Page                    |
|---------------------------------------|-------------------------|
| crassicolldens (Tricentes) .....      | 462                     |
| crassicornis (Allops) .....           | 720                     |
| crassicornis (Bison) .....            | 850                     |
| crassicornis (Mogacerops) .....       | 720                     |
| crassiscuspis (Miohippus) .....       | 676                     |
| crassiss (Enhydriocyon) .....         | 509                     |
| crassidens (Hoplophoneus) .....       | 547                     |
| crassidens (Hyrachyus) .....          | 734                     |
| crassidens (Machairodus) .....        | 547                     |
| crassidens (Machairodus) .....        | 547                     |
| crassidens (Mosasaurus) .....         | 262                     |
| Crassidentata .....                   | 488                     |
| Crassidentia .....                    | 487                     |
| crassifrons (Tinoceras) .....         | 618                     |
| crassifrons (Uintatherium) .....      | 618                     |
| crassigenis (Domina) .....            | 436                     |
| crassigenis (Macrogenis) .....        | 771                     |
| crassigenis (Prosthennops) .....      | 771                     |
| crassigenis (Prosthenops) .....       | 771                     |
| crassigenis (Prosthenops) .....       | 771                     |
| crassipes (Hesperornis) .....         | 270                     |
| crassipes (Stenomylus) .....          | 808                     |
| crassiramus (Entoptychus) .....       | 876                     |
| crassirostris (Prionodelphinus) ..... | 691                     |
| crassiscutata (Testudo) .....         | 103                     |
| crassiscutellus (Mixodectes) .....    | 448                     |
| crassivultus (Mixodectes) .....       | 448                     |
| crassivultus (Oligobunus) .....       | 525                     |
| crassum (Archæotherium) .....         | 763                     |
| crassum (Elotherium) .....            | 763                     |
| crassus (Anonaeus) .....              | 4                       |
| crassus (Apatichnus) .....            | 4                       |
| crassus (Aphelops) .....              | 747                     |
| crassus (Dinellurus) .....            | 545                     |
| crassus (Dryptodon) .....             | 400                     |
| crassus (Ennacodon) .....             | 375                     |
| crassus (Ennacodon) .....             | 375                     |
| crassus (Ennelodon) .....             | 763                     |
| crassus (Harpedactylus) .....         | 13                      |
| crassus (Leptoplia) .....             | 268                     |
| crassus (Monoclonius) .....           | 222, 225                |
| crassus (Notharctus) .....            | 922                     |
| crassus (Prionodon) .....             | 236                     |
| crassus (Protomeryx) .....            | 440                     |
| crassus (Rhinceros) .....             | 747                     |
| crassus (Sarcolemur) .....            | 735                     |
| crassus (Squalodon) .....             | 581                     |
| crassus (Teloceras) .....             | 747                     |
| crassus (Telmalestes) .....           | 928                     |
| crassus (Thinosaurus) .....           | 250                     |
| crassus (Triceratops) .....           | 228                     |
| crassus (Trionyx) .....               | 111                     |
| Cratogeomys .....                     | 880                     |
| benoni .....                          | 880                     |
| Crecooides .....                      | 334                     |
| osbornii .....                        | 334                     |
| Crecooides .....                      | 334                     |
| osbornii .....                        | 334                     |
| Crematosaurus .....                   | 255                     |
| carinicolis .....                     | 255                     |
| orendens .....                        | 704                     |
| rhambastes .....                      | 255                     |
| unipetalis .....                      | 255                     |
| erendens (Dermatippus) .....          | 681                     |
| erendens (Equus) .....                | 704, 705, 708           |
| euendens (Parahippus) .....           | 681                     |
| Creodontia .....                      | 458                     |
| Creodontia .....                      | 458                     |
| Creodontidae .....                    | 770                     |
| Creosaurus .....                      | 174, 178                |
| atrox .....                           | 175                     |
| potens .....                          | 178                     |
| Creotarsidae .....                    | 487                     |
| Creotarsus .....                      | 487                     |
| lepidus .....                         | 487                     |
| cretin (Diadectoides) .....           | 36                      |
| Cricetidae .....                      | 891                     |
| Cricetinae .....                      | 891, 892                |
| Cricetodipus .....                    | 881                     |
| agilis .....                          | 881                     |
| Cricetus .....                        | 878                     |
| talpoides .....                       | 878                     |
| cripatus (Syllomus) .....             | 80                      |
| cristata (Cystophora) .....           | 562                     |
| cristata (Phoca) .....                | 663                     |
| cristatum (Hyracotherium) .....       | 668                     |
| cristatus (Aublysodon) .....          | 180                     |
| cristatus (Calops) .....              | 814                     |
| cristatus (Colotaxis) .....           | 890                     |
| cristatus (Deinodon) .....            | 180                     |
| cristatus (Dicoelyles) .....          | 773                     |
| cristatus (Dromæosaurus) .....        | 180                     |
| cristatus (Dryptosaurus) .....        | 180                     |
| cristatus (Eohippus) .....            | 668                     |
| cristatus (Ischyromys) .....          | 890                     |
| cristatus (Mutarhinus) .....          | 717                     |
| cristatus (Stenmatopus) .....         | 662                     |
| cristonense (Eohippus) .....          | 668                     |
| cristonensis (Eohippus) .....         | 668                     |
| cristonensis (Orotherium) .....       | 668                     |
| cristonensis (Pliolophus) .....       | 668                     |
| Crocodyla .....                       | 137                     |
| Crocodylei .....                      | 136, 136                |
| Crocodyli .....                       | 136, 136                |
| Crocodylin .....                      | 135, 136, 137, 145, 150 |
| Crocodylida .....                     | 150                     |
| Crocodylidae .....                    | 150                     |
| Crocodylii .....                      | 135                     |
| Crocodylina .....                     | 135                     |
| crocodylinus (Orycterocetus) .....    | 597                     |
| Crocodylomorphi .....                 | 145                     |
| Crocodylus .....                      | 149, 151                |
| acer .....                            | 153                     |
| affinis .....                         | 153                     |
| antiquus .....                        | 153                     |
| aptus .....                           | 153                     |
| basifissus .....                      | 149                     |
| chamensis .....                       | 153                     |
| claris .....                          | 153                     |
| clavirostris .....                    | 150                     |
| dekayi .....                          | 150                     |
| elliotti .....                        | 153                     |
| grinnellii .....                      | 153                     |
| herpichanus .....                     | 153                     |
| grypus .....                          | 153                     |
| harlani .....                         | 153                     |
| humilis .....                         | 153, 154                |
| lodon .....                           | 154                     |
| lucius .....                          | 157                     |
| obscurus .....                        | 150                     |

|   | Page |   | Page     |
|---|------|---|----------|
| <i>Crocodylus—Continued</i>                     |      | <i>Cryptodira</i> .....                             | 83       |
| polyodon .....                                  | 155  | <i>Cryptodiri</i> .....                             | 83       |
| prenasalis .....                                | 158  | <i>Cryptotis</i> .....                              | 442      |
| salaris .....                                   | 154  | <i>floridana</i> .....                              | 442      |
| tenebrosus .....                                | 149  | <i>Ctenacodon</i> .....                             | 377      |
| sericodon .....                                 | 153  | <i>laticeps</i> .....                               | 377      |
| subulatus .....                                 | 154  | <i>nanus</i> .....                                  | 378      |
| sulciferus .....                                | 154  | <i>potens</i> .....                                 | 378      |
| vorax .....                                     | 154  | <i>serratus</i> .....                               | 378      |
| <i>Crocodyliformes</i> .....                    | 150  | <i>Cteniogenys</i> .....                            | 256      |
| <i>Crocodylidae</i> .....                       | 150  | <i>antiquus</i> .....                               | 256      |
| <i>Crocodylus</i> .....                         | 151  | <i>cubitalis</i> ( <i>Triplopus</i> ) .....         | 735      |
| <i>acer</i> .....                               | 153  | <i>Cuculi</i> .....                                 | 346, 347 |
| <i>affinis</i> .....                            | 153  | <i>Cuculidae</i> .....                              | 347      |
| <i>aptus</i> .....                              | 153  | <i>Cuculiformes</i> .....                           | 346, 347 |
| <i>antiquus</i> .....                           | 153  | <i>Cuculinae</i> .....                              | 347      |
| <i>brevicollis</i> .....                        | 153  | <i>cucullatus</i> ( <i>Lophodytes</i> ) .....       | 309      |
| <i>chamensis</i> .....                          | 153  | <i>cucullatus</i> ( <i>Mergus</i> ) .....           | 309      |
| <i>clavis</i> .....                             | 153  | <i>Cuculoidae</i> .....                             | 347      |
| <i>contusor</i> .....                           | 153  | <i>Cuculoideae</i> .....                            | 347      |
| <i>elliotti</i> .....                           | 153  | <i>culbertsoni</i> ( <i>Merycoidodon</i> ) .....    | 780      |
| <i>fastigiatus</i> .....                        | 153  | <i>culbertsoni</i> ( <i>Oreodon</i> ) .....         | 780      |
| <i>grinnellii</i> .....                         | 153  | <i>culbertsonii</i> ( <i>Anomæpus</i> ) .....       | 4        |
| <i>grypus</i> .....                             | 153  | <i>culbertsonii</i> ( <i>Merycoidodon</i> ) .....   | 780      |
| <i>herpichanus</i> .....                        | 153  | <i>culbertsonii</i> ( <i>Oreodon</i> ) .....        | 780      |
| <i>heterodon</i> .....                          | 155  | <i>culbertsonii</i> ( <i>Ornithichnites</i> ) ..... | 4        |
| <i>humilis</i> .....                            | 153  | <i>cultrata</i> ( <i>Testudo</i> ) .....            | 103      |
| <i>liodon</i> .....                             | 153  | <i>cultridens</i> ( <i>Anacodon</i> ) .....         | 464      |
| <i>marylandicus</i> .....                       | 154  | <i>cultridens</i> ( <i>Telmatherium</i> ) .....     | 714      |
| <i>parvus</i> .....                             | 154  | <i>cumberlandensis</i> ( <i>Platygonus</i> ) .....  | 773      |
| <i>polyodon</i> .....                           | 155  | <i>cumminsu</i> ( <i>Canimartes</i> ) .....         | 530      |
| <i>prenasalis</i> .....                         | 158  | <i>cumminsii</i> ( <i>Equus</i> ) .....             | 696      |
| <i>rugosus</i> .....                            | 154  | <i>cumminsii</i> ( <i>Merychippus</i> ) .....       | 696      |
| <i>sericodon</i> .....                          | 154  | <i>cumminsu</i> ( <i>Pliohippus</i> ) .....         | 696      |
| <i>serratus</i> .....                           | 154  | <i>cumminsu</i> ( <i>Protohippus</i> ) .....        | 696      |
| <i>sicarius</i> .....                           | 154  | <i>cuneatus</i> ( <i>Anomæpus</i> ) .....           | 4        |
| <i>solaris</i> .....                            | 154  | <i>cuneatus</i> ( <i>Grallator</i> ) .....          | 13       |
| <i>squankensis</i> .....                        | 154  | <i>cuneatus</i> ( <i>Merychippus</i> ) .....        | 674      |
| <i>stavelianus</i> .....                        | 154  | <i>cuneatus</i> ( <i>Miohippus</i> ) .....          | 674      |
| <i>subulatus</i> .....                          | 154  | <i>cuneum</i> ( <i>Dimoceras</i> ) .....            | 618      |
| <i>sulciferus</i> .....                         | 154  | <i>cuneum</i> ( <i>Uintatherium</i> ) .....         | 618      |
| <i>vorax</i> .....                              | 154  | <i>Cunichnoides</i> .....                           | 10       |
| <i>wheelerii</i> .....                          | 154  | <i>marcupialoides</i> .....                         | 30       |
| <i>crobsiensis</i> ( <i>Leptosuchus</i> ) ..... | 143  | <i>cunicularia</i> ( <i>Speotyto</i> ) .....        | 351      |
| <i>crobyiensis</i> ( <i>Leptosuchus</i> ) ..... | 143  | <i>Cuniculus</i> .....                              | 899, 913 |
| <i>Crotalidae</i> .....                         | 270  | <i>hudsonius</i> .....                              | 899      |
| <i>Crotalinae</i> .....                         | 270  | <i>nelsoni</i> .....                                | 913      |
| <i>Crotalus</i> .....                           | 270  | <i>paca</i> .....                                   | 913      |
| <i>adamanteus</i> .....                         | 271  | <i>Cuon</i> .....                                   | 504      |
| <i>atrox</i> .....                              | 271  | <i>Cupidonia</i> .....                              | 326      |
| <i>horridus</i> .....                           | 271  | <i>cupido</i> .....                                 | 326      |
| <i>Crotaphytus</i> .....                        | 247  | <i>pallidicinctus</i> .....                         | 326      |
| <i>crucians</i> ( <i>Hymenodon</i> ) .....      | 480  | <i>Cursipes</i> .....                               | 10       |
| <i>crucians</i> ( <i>Sinopa</i> ) .....         | 480  | <i>dawsoni</i> .....                                | 10       |
| <i>crucidens</i> ( <i>Cynarctus</i> ) .....     | 509  | <i>levis</i> .....                                  | 10       |
| <i>crucifer</i> ( <i>Edaphosaurus</i> ) .....   | 58   | <i>cursor</i> ( <i>Merycoides</i> ) .....           | 787      |
| <i>cruciger</i> ( <i>Dimetrodon</i> ) .....     | 58   | <i>cursorius</i> ( <i>Grallator</i> ) .....         | 13       |
| <i>cruciger</i> ( <i>Edaphosaurus</i> ) .....   | 58   | <i>curtidens</i> ( <i>Didymictis</i> ) .....        | 482      |
| <i>cruciger</i> ( <i>Naosaurus</i> ) .....      | 58   | <i>curtidens</i> ( <i>Nyctitherium</i> ) .....      | 434      |
| <i>Crucipes</i> .....                           | 10   | <i>curtidens</i> ( <i>Viverravus</i> ) .....        | 482      |
| <i>parva</i> .....                              | 10   | <i>curtirostris</i> ( <i>Lestosaurus</i> ) .....    | 280      |
| <i>parvus</i> .....                             | 10   | <i>curtirostris</i> ( <i>Platecarpus</i> ) .....    | 280      |
| <i>cruentus</i> ( <i>Hymenodon</i> ) .....      | 480  | <i>curtisi</i> ( <i>Sigmodon</i> ) .....            | 894      |
| <i>cruentus</i> ( <i>Hyracodon</i> ) .....      | 480  | <i>curtum</i> ( <i>Anthrocotherium</i> ) .....      | 759      |
| <i>Cryptodira</i> .....                         | 83   | <i>curtum</i> ( <i>Brontotherium</i> ) .....        | 722      |

|                                     | Page     |                               | Page     |
|-------------------------------------|----------|-------------------------------|----------|
| curtus (Cimolestes) .....           | 392      | cymatias (Desmostylus) .....  | 655      |
| curtus (Diaphorodon) .....          | 392      | Cymbospondylus .....          | 124      |
| curtus (Dipoides) .....             | 584      | grandis .....                 | 125      |
| curtus (Entoptychus) .....          | 876      | natans .....                  | 125      |
| curtus (Heptacodon) .....           | 759      | nevadanus .....               | 125      |
| curtus (Meirychius) .....           | 787      | petrinus .....                | 125      |
| curvatus (Anomæpus) .....           | 4        | piscosus .....                | 125      |
| curvatus (Stenodactylus) .....      | 21       | Cynaretus .....               | 509      |
| curvatus (Sustenodactylus) .....    | 21       | acridens .....                | 509      |
| Curvicornis .....                   | 838      | crucidens .....               | 509      |
| curvicornis (Bison) .....           | 859      | saxatilis .....               | 509      |
| curvieristis (Coryphodon) .....     | 615      | Cynocercus .....              | 86, 87   |
| curvieristus (Coryphodon) .....     | 615      | meisus .....                  | 86, 87   |
| curvidens (Desmatochærus) .....     | 784      | Cynodesmus .....              | 491      |
| curvidens (Equus) .....             | 703      | brachypus .....               | 491      |
| curvidens (Megalonyx) .....         | 408      | cuspidatus .....              | 491      |
| curvidens (Promerycochærus) .....   | 784      | minor .....                   | 491      |
| cuspidatum (Diceratherium) .....    | 744      | thomsoni .....                | 492      |
| cuspidatus (Coryphodon) .....       | 615, 616 | thoëides .....                | 492      |
| cuspidatus (Cynodesmus) .....       | 491      | Cynodictina .....             | 490, 494 |
| cuspidatus (Eohippus) .....         | 668      | Cynodictis .....              | 490      |
| cuspidatus (Microsus) .....         | 756      | angustidens .....             | 490      |
| cuspidatus (Orohippus) .....        | 668, 669 | gusmanianus .....             | 493      |
| cuspidatus (Oxyelæmus) .....        | 460      | gregarius .....               | 490      |
| cuspidens (Schizolophodon) .....    | 727      | hylactor .....                | 491      |
| cuspidigerus (Amphicyon) .....      | 506      | lippincottianus .....         | 491      |
| cuspidigerus (Paradaphænus) .....   | 506      | oregonensis .....             | 491      |
| cutleri (Centrosaurus) .....        | 222      | patereulus .....              | 491      |
| cutleri (Cimolestes) .....          | 394      | tennodon .....                | 491      |
| cutleri (Eodelphis) .....           | 394      | Cynodon .....                 | 491      |
| cutleri (Monoclonius) .....         | 222      | Cynodontia .....              | 61       |
| cuvieri (Mastodon) .....            | 625      | Cynodontina .....             | 490      |
| Cuvieronius .....                   | 630      | Cynodontomys .....            | 449      |
| cyane (Echmatomys) .....            | 95       | angulatus .....               | 449      |
| cyaneus (Circus) .....              | 320      | angustidens .....             | 449      |
| cyanocephalus (Euphagus) .....      | 358      | latidens .....                | 449      |
| cyanocephalus (Psarocolius) .....   | 358      | scottianus .....              | 449      |
| cyanocephalus (Scolecephagus) ..... | 358      | Cynoidea .....                | 488, 489 |
| Cyanoitta .....                     | 355      | cyonoides (Hyænomathus) ..... | 509      |
| stelleri .....                      | 355      | Cynoidei .....                | 488      |
| cyanoptera (Anas) .....             | 306      | Cynomys .....                 | 872      |
| cyanoptera (Querquedula) .....      | 306      | ludovicianus .....            | 872      |
| Cyclopidius .....                   | 790      | lupovicianus .....            | 872      |
| brevifacies .....                   | 790      | niobrarius .....              | 872      |
| decedens .....                      | 790      | Cyon .....                    | 504      |
| emydinus .....                      | 790      | Cynorea .....                 | 770, 776 |
| heterodon .....                     | 790      | proterva .....                | 770, 776 |
| incisivus .....                     | 790      | cyphodon (Suchoprion) .....   | 172      |
| hullianus .....                     | 790      | Cyphornis .....               | 290      |
| schucherti .....                    | 791      | magnus .....                  | 290      |
| simus .....                         | 790, 791 | Cyrtodelphis .....            | 590      |
| cyclops (Deinictis) .....           | 541      | crassangulum .....            | 591      |
| cyclops (Diniictis) .....           | 541      | depressus .....               | 591      |
| cyclopygia (Testudo) .....          | 104      | schizodelphis .....           | 590      |
| Cygnina .....                       | 300      | Cystophora .....              | 561      |
| Cygnus .....                        | 300      | cristata .....                | 562      |
| buccinator .....                    | 301      | proboscidea .....             | 562      |
| columbianus .....                   | 301      | Cystophorina .....            | 561      |
| matthewi .....                      | 301      | Dædon .....                   | 786, 786 |
| paloregonus .....                   | 301      | calkinsi .....                | 786      |
| cylindricus (Brachyostrakon) .....  | 421      | humerosus .....               | 786      |
| cylindrifer (Stylindon) .....       | 401      | shoshonensis .....            | 786      |
| Cylindrodon .....                   | 907      | Dafila .....                  | 305      |
| fontis .....                        | 907      | acuta .....                   | 305      |
| Cylindrodontida .....               | 907      | daggetti (Felis) .....        | 558      |



|                                 | Page     |                                 | Page     |
|---------------------------------|----------|---------------------------------|----------|
| daggetti (Morphnus) .....       | 317      | Dasyproctidæ .....              | 913      |
| daggetti (Wetmoregyps) .....    | 317      | Dasyproctina .....              | 913      |
| dakotensis (Agriochærus) .....  | 777      | Dasyproctini .....              | 913      |
| dakotensis (Cænopus) .....      | 725, 742 | Dasyprus .....                  | 416      |
| dakotensis (Colodon) .....      | 725      | dasyprus (Metacheiromys) .....  | 422      |
| dakotensis (Eusmilus) .....     | 545      | Datheosauridæ .....             | 31       |
| dakotensis (Hoplophoneus) ..... | 545      | Datheosaurus .....              | 31       |
| dakotensis (Ictops) .....       | 430      | davidsoni (Eschrichtius) .....  | 572      |
| dakotensis (Mesonyx) .....      | 468      | davidsoni (Eschrichtius) .....  | 572      |
| dakotensis (Pseudolabis) .....  | 795      | davidsonii (Cetotherium) .....  | 572      |
| dakotensis (Pseudolobis) .....  | 795      | davisi (Canis) .....            | 498      |
| dallasi (Camelops) .....        | 804      | davisi (Hoplophoneus) .....     | 542      |
| dalli (Ovis) .....              | 843      | davisi (Pogonodon) .....        | 542      |
| Dama .....                      | 820      | dawkinsianus (Viverravus) ..... | 483      |
| dolichopsis .....               | 821      | dawsoni (Brachyceratops) .....  | 222      |
| ensifer .....                   | 821      | dawsoni (Cursipes) .....        | 10       |
| lævicornis .....                | 821      | dawsoni (Monoclonius) .....     | 222, 224 |
| virginiana .....                | 811      | Deanea .....                    | 4        |
| whitneyi .....                  | 821      | fulvicoides .....               | 4        |
| danæ (Ornithichnites) .....     | 21       | fulviculoides .....             | 4        |
| danæ (Pelargides) .....         | 21       | deaniana (Platypterna) .....    | 18       |
| danana (Aquila) .....           | 317      | deanu (Platypterna) .....       | 18       |
| dananus (Anchisauripus) .....   | 3        | debile (Amblotherium) .....     | 373      |
| dananus (Eubrontes) .....       | 8        | debilis (Archælurus) .....      | 543      |
| dananus (Eupalamopus) .....     | 12       | debilis (Delphinodon) .....     | 587      |
| dananus (Geranoaëtus) .....     | 317      | debilis (Nimravus) .....        | 543      |
| Daphænodon .....                | 508      | debilis (Phoca) .....           | 587      |
| superbus .....                  | 508      | debilis (Phocodon) .....        | 587      |
| Daphænus .....                  | 504      | debilis (Squalodon) .....       | 587      |
| dodgei .....                    | 505      | decedens (Chænohyus) .....      | 769      |
| felinus .....                   | 505      | decedens (Cyclopidius) .....    | 790      |
| hartshornianus .....            | 505      | decedens (Pitheciastes) .....   | 790      |
| nebrascensis .....              | 505      | decedens (Thinohyus) .....      | 790      |
| robustus .....                  | 505      | decipiens (Hyopsodus) .....     | 443      |
| superbus .....                  | 509      | decoia (Leptauchenia) .....     | 789      |
| vetus .....                     | 505      | deflectus (Æpinacodon) .....    | 760      |
| Daphænodon .....                | 508      | deflectus (Hyopotamus) .....    | 760      |
| perculosus .....                | 508      | deflocatus (Anancus) .....      | 631      |
| superbus .....                  | 508      | dehiscens (Arachnichnus) .....  | 5        |
| supurbus .....                  | 508      | Deinictis .....                 | 541      |
| Daphænus .....                  | 504, 508 | bombifrons .....                | 541      |
| angustidens .....               | 490      | brachyops .....                 | 542      |
| dodgei .....                    | 505      | cyclops .....                   | 541      |
| felinus .....                   | 505      | felina .....                    | 541      |
| hartshornianus .....            | 505      | fortis .....                    | 542      |
| inflatus .....                  | 505      | major .....                     | 541      |
| nebrascensis .....              | 505      | paucidens .....                 | 542      |
| robustus .....                  | 505      | platycopsis .....               | 542      |
| vetus .....                     | 505      | squalidens .....                | 542      |
| vitus .....                     | 505      | Deinodon .....                  | 176, 179 |
| Daptophylus .....               | 542      | amplus .....                    | 180      |
| squalidens .....                | 542      | cristatus .....                 | 180      |
| darbyi (Archæotherium) .....    | 763      | explanatus .....                | 181      |
| darbyi (Oligobunis) .....       | 525      | falcus .....                    | 177      |
| dares (Taphrosphys) .....       | 74       | hazenianus .....                | 177      |
| Dasypidæ .....                  | 415      | horridus .....                  | 177, 183 |
| dasypelix (Myolestes) .....     | 435      | incrassatus .....               | 177, 179 |
| Dasypidæ .....                  | 415      | lævifrons .....                 | 181      |
| Dasypoda .....                  | 415      | lateralis .....                 | 177      |
| Dasypodidæ .....                | 415      | Deinodontidæ .....              | 176      |
| Dasypodididæ .....              | 415      | Deinodontinæ .....              | 176      |
| Dasypodinæ .....                | 416      | Deinosauria .....               | 164      |
| Dasypodini .....                | 416      | Deinosuchus .....               | 156      |
| Dasypodoidæ .....               | 415      | hatcheri .....                  | 160      |
| Dasyprocta .....                | 913      | Deiopetus .....                 | 60       |

|                                       | Page          |                                 | Page     |
|---------------------------------------|---------------|---------------------------------|----------|
| Deiopeus— <i>Continued</i>            |               | depressus (Cyrtodelphis) .....  | 501      |
| leptocephalus .....                   | 50            | depressus (Glyptops) .....      | 70       |
| Dermochelys .....                     | 97            | depressus (Mosasaurus) .....    | 262      |
| floridana .....                       | 97            | depressus (Schizodelphis) ..... | 501      |
| dekayi (Mosasaurus) .....             | 262           | depressus (Scuravus) .....      | 909      |
| dekayi (Thoracosaurus) .....          | 150           | Dermatemydidae .....            | 87       |
| delicata (Trachemys) .....            | 97            | Dermatemydinae .....            | 87       |
| delicatior (Paramys) .....            | 902           | Dermatemys .....                | 87       |
| delicator (Plesiarctomys) .....       | 903           | costulata .....                 | 92       |
| delicatissimus (Paramys) .....        | 903           | tricarinata .....               | 92       |
| delicatissimus (Plesiarctomys) .....  | 903           | Dermatochelys .....             | 68       |
| delicatissimus (Reithroparamys) ..... | 903           | Dermochelyidae .....            | 68       |
| delicatula (Platypterna) .....        | 18            | Dermochelyidae .....            | 68       |
| delicatulus (Batrachichnus) .....     | 7             | Dermochelyidae .....            | 68       |
| delicatus (Centracodon) .....         | 423           | Dermochelyidae .....            | 67       |
| delicatus (Merychius) .....           | 737           | Dermochelyinae .....            | 68       |
| delicatus (Paramys) .....             | 902           | Dermochelys .....               | 68       |
| Delphinapteridae .....                | 593           | coriacea .....                  | 68       |
| Delphinapterinae .....                | 593           | Dermodactylus .....             | 161      |
| Delphinapterus .....                  | 593           | montanus .....                  | 161      |
| eatonian .....                        | 593           | Desmathyus .....                | 770      |
| leucas .....                          | 594           | ferus .....                     | 770      |
| orcina .....                          | 594           | pinensis .....                  | 770      |
| ruschenbergeri .....                  | 594           | siouxensis .....                | 770      |
| vermontanus .....                     | 594           | subaequans .....                | 769      |
| Delphinavus .....                     | 588           | Desmatippus .....               | 680      |
| newhalli .....                        | 588           | orenidens .....                 | 681      |
| Delphini .....                        | 588           | Desmatochelyclinae .....        | 77       |
| Delphinida .....                      | 588           | Desmatochelyidae .....          | 77       |
| Delphinidae .....                     | 588           | Desmatochelys .....             | 77       |
| Delphinina .....                      | 588           | lowii .....                     | 77       |
| Delphininae .....                     | 588           | Desmatochorus .....             | 784      |
| Delphinocete .....                    | 578           | curvidens .....                 | 784      |
| Delphinoceti .....                    | 578           | Desmatodon .....                | 36       |
| Delphinodon .....                     | 587           | hollandi .....                  | 36       |
| debilis .....                         | 587           | Desmatognathus .....            | 557      |
| dividum .....                         | 588           | oregonensis .....               | 557      |
| leidydividum .....                    | 588           | Desmatophoca .....              | 557      |
| leidy .....                           | 588           | oregonensis .....               | 557      |
| mento .....                           | 588           | Desmatophoridae .....           | 557      |
| venustus .....                        | 588           | Desmatosuchia .....             | 139      |
| wymani .....                          | 588           | Desmatosuchidae .....           | 139      |
| Delphinoida .....                     | 579, 586      | Desmatosuchiiformes .....       | 139      |
| Delphinosaurus .....                  | 126           | Desmatosuchus .....             | 140      |
| perrini .....                         | 126           | spurensis .....                 | 140      |
| Delphinurus .....                     | 588           | Desmatotherium .....            | 725      |
| newhalli .....                        | 588           | guyoti .....                    | 725      |
| Delphinus .....                       | 588, 588, 583 | Desmodielys .....               | 77       |
| leucas .....                          | 584           | Desmognathus .....              | 280      |
| occiduum .....                        | 589, 593      | Desmospondylus .....            | 80, 81   |
| Delphodon .....                       | 392           | anomalous .....                 | 81       |
| comptus .....                         | 392           | Desmostylidae .....             | 654      |
| Deltatherium .....                    | 462           | Desmostyliiformes .....         | 654      |
| fundaminiis .....                     | 462           | Desmostylus .....               | 655      |
| interruptum .....                     | 462           | californicus .....              | 655      |
| Dendrocygna .....                     | 304           | cymatias .....                  | 655      |
| oversa .....                          | 304           | hesperus .....                  | 655      |
| Dendrocygninae .....                  | 304           | sookensis .....                 | 655      |
| denaa (Leptauchenia) .....            | 789           | Desmotippus .....               | 681      |
| Denticete .....                       | 578           | despicens (Hyopsodus) .....     | 443      |
| denticulatus (Chamops) .....          | 246           | deweyanus (Anisopus) .....      | 8        |
| depressa (Echmaternys) .....          | 95            | deweyanus (Batrachopus) .....   | 8        |
| depressidens (Paromomys) .....        | 929           | deweyi (Batrachopus) .....      | 8        |
| depressifrons (Idicostyles) .....     | 778           | dextratus (Amblypus) .....      | 2        |
| depressus (Camptosaurus) .....        | 205           | Diacium .....                   | 255, 256 |

|                                      | Page          |  | Page               |
|--------------------------------------|---------------|--|--------------------|
| <i>Diacium—Continued</i>             |               | <i>Dibelodon—Continued</i>                 |                    |
| <del>quunquepedale</del> .....       | 256           | <del>præcursor</del> .....                 | 638                |
| <del>unipedale</del> .....           | 255           | <del>tropicus</del> .....                  | 638                |
| <i>Diacodexis</i> .....              | 444, 756      | <i>Dibunodon</i> .....                     | 630                |
| <del>brachystomus</del> .....        | 756           | <i>Diceratheriinae</i> .....               | 743                |
| <del>chacensis</del> .....           | 756           | <i>Diceratherinae</i> .....                | 743                |
| <del>latiuncus</del> .....           | 756           | <i>Diceratherium</i> .....                 | 743                |
| <del>metisiacus</del> .....          | 756           | <del>aberrans</del> .....                  | 745                |
| <del>nuptus</del> .....              | 756           | <del>advenum</del> .....                   | 737                |
| <del>olseni</del> .....              | 756           | <del>annectens</del> .....                 | 744                |
| <del>robustus</del> .....            | 757           | <del>arikarense</del> .....                | 745                |
| <del>secans</del> .....              | 757           | <del>armatum</del> .....                   | 744                |
| <i>Diacodon</i> .....                | 431           | <del>arrikarense</del> .....               | 745                |
| <del>alticuspis</del> .....          | 431           | <del>avum</del> .....                      | 743                |
| <del>bicuspidis</del> .....          | 431           | <del>brachyodus</del> .....                | 746                |
| <del>celatus</del> .....             | 434           | <del>cooki</del> .....                     | 745                |
| <del>puercensis</del> .....          | 431           | <del>cuspidatum</del> .....                | 744                |
| <i>diaconus (Limnohyops)</i> .....   | 713           | <del>gregorii</del> .....                  | 744                |
| <i>diaconus (Palæosyps)</i> .....    | 713           | <del>hesperium</del> .....                 | 744                |
| <i>Diadectes</i> .....               | 33            | <del>lobatum</del> .....                   | 744                |
| <del>biculminatus</del> .....        | 34            | <del>loomisi</del> .....                   | 745                |
| <del>fissus</del> .....              | 34            | <del>nanum</del> .....                     | 744                |
| <del>huenei</del> .....              | 34            | <del>niobrarense</del> .....               | 744                |
| <del>latibuccatus</del> .....        | 34            | <del>niobrarensis</del> .....              | 744                |
| <del>lentus</del> .....              | 34            | <del>oregonense</del> .....                | 745                |
| <del>maximus</del> .....             | 34            | <del>pacificum</del> .....                 | 745                |
| <del>molaris</del> .....             | 34            | <del>petersoni</del> .....                 | 745                |
| <del>phaseolinus</del> .....         | 34            | <del>proavium</del> .....                  | 743                |
| <del>sideropelicus</del> .....       | 35            | <del>schiffi</del> .....                   | 745                |
| <i>Diadectidae</i> .....             | 33            | <del>tridactylum</del> .....               | 743                |
| <i>Diadectiformes</i> .....          | 33            | <del>truquianum</del> .....                | 745                |
| <i>Diadectoides</i> .....            | 36            | <i>Diceratops</i> .....                    | 226                |
| <del>oretin</del> .....              | 36            | <del>hatcheri</del> .....                  | 226                |
| <i>Diadectomorpha</i> .....          | 33            | <i>Dichobune</i> .....                     | 753                |
| <i>Diadectosauria</i> .....          | 33            | <i>Dichobuniæ</i> .....                    | 753                |
| <i>Diaphorocetus</i> .....           | 597           | <i>Dichobunidae</i> .....                  | 753                |
| <del>mediatlanticus</del> .....      | 597           | <i>Dichobuninae</i> .....                  | 753                |
| <i>Diaphorodon</i> .....             | 392           | <i>Dichobunoidæ</i> .....                  | 752                |
| <del>curtus</del> .....              | 392           | <i>Dichobunoidea</i> .....                 | 752                |
| <i>Diapsida</i> .....                | 129           | <i>dieksenonensis (Eporeodon)</i> .....    | 781                |
| <i>Diaptosauria</i> .....            | 130, 131      | <i>diekeyi (Branta)</i> .....              | 302                |
| <i>Diaparsactus</i> .....            | 36            | <i>diekinsonensis (Euerothaphus)</i> ..... | 781                |
| <del>xenos</del> .....               | 36            | <i>Diclonius</i> .....                     | 209, 210           |
| <del>zenos</del> .....               | 36            | <del>calamarius</del> .....                | 211                |
| <i>diatomaticus (Puffinus)</i> ..... | 288           | <del>mirabilis</del> .....                 | 211                |
| <i>Diatrimidæ</i> .....              | 283           | <del>pentagonus</del> .....                | 211                |
| <i>Diatryma</i> .....                | 283           | <del>perangulatus</del> .....              | 211                |
| <del>ajax</del> .....                | 283           | <i>Dicotyles</i> .....                     | 770, 772, 774, 775 |
| <del>filifera</del> .....            | 283           | <del>condoni</del> .....                   | 772                |
| <del>filiferum</del> .....           | 283           | <del>compressus</del> .....                | 772                |
| <del>gigantea</del> .....            | 283           | <del>cristatus</del> .....                 | 772                |
| <del>giganteum</del> .....           | 283           | <del>depressifrons</del> .....             | 772                |
| <del>regens</del> .....              | 283           | <del>leptorhinus</del> .....               | 772                |
| <del>steini</del> .....              | 283           | <del>pennsylvanicus</del> .....            | 774                |
| <i>Diatrymæ</i> .....                | 283           | <i>Dicotylidæ</i> .....                    | 769                |
| <i>Diatrymatidæ</i> .....            | 283           | <i>Dicotylinae</i> .....                   | 769                |
| <i>Diatrymatiformes</i> .....        | 283           | <i>Dicotylini</i> .....                    | 777                |
| <i>Diatrymidæ</i> .....              | 283           | <i>Dicranoceros</i> .....                  | 835                |
| <i>Dibelodon</i> .....               | 624, 630, 634 | <i>Dicroceras</i> .....                    | 830                |
| <del>andium</del> .....              | 632           | <i>Dicrocerus</i> .....                    | 816                |
| <del>cordillerarum</del> .....       | 632           | <del>furcatus</del> .....                  | 831                |
| <del>edensis</del> .....             | 631           | <del>gemmifer</del> .....                  | 818                |
| <del>humboldtii</del> .....          | 631           | <del>necatus</del> .....                   | 831                |
| <del>mirificus</del> .....           | 633           | <del>teres</del> .....                     | 816                |
| <del>obscurum</del> .....            | 637           | <del>tehuanus</del> .....                  | 832                |

|                                   | Page     |                                 | Page       |
|-----------------------------------|----------|---------------------------------|------------|
| <i>Dicrocerus—Continued</i>       |          | <i>Didymictis—Continued</i>     |            |
| trilateralis .....                | 316      | curtidens .....                 | 482        |
| Dicrocyonodon .....               | 374      | haydenianus .....               | 482        |
| victor .....                      | 375      | leptomylus .....                | 482        |
| Dicrocyonodontidae .....          | 374      | lystensis .....                 | 483        |
| Dicrostonyx .....                 | 399      | massetericus .....              | 484        |
| groenlandicus .....               | 399      | pretenus .....                  | 483        |
| hudsonius .....                   | 399      | primus .....                    | 482        |
| torquatus .....                   | 399      | protenus .....                  | 482        |
| Dierynodon .....                  | 63       | Digitigrada .....               | 488        |
| rosmarinus .....                  | 63       | digitigrada (Platypterna) ..... | 18         |
| rosmarus .....                    | 63       | Digitigrades .....              | 488        |
| Dierynodontia .....               | 62, 63   | digona (Cimolomys) .....        | 381        |
| Dierynodontidae .....             | 62       | Dilambdodonta .....             | 460        |
| Dierynodontiformes .....          | 62       | dilatatus (Habrosaurus) .....   | 256        |
| Didanodon .....                   | 211      | Dilophodon .....                | 724        |
| altidens .....                    | 211      | minuscule .....                 | 724        |
| Didelphia .....                   | 385, 389 | diluviana (Mustela) .....       | 528        |
| Didelphida .....                  | 385      | diluvianus (Microtus) .....     | 897        |
| Didelphidae .....                 | 389      | Dimetrodon .....                | 49, 53, 54 |
| Didelphi .....                    | 385      | cruciger .....                  | 68         |
| Didelphiidae .....                | 389      | dollovianus .....               | 55         |
| Didelphinæ .....                  | 392      | gigantohomogenes .....          | 55         |
| Didelphis .....                   | 392, 394 | gigas .....                     | 55         |
| alternans .....                   | 393      | incisivus .....                 | 55, 56     |
| comstocki .....                   | 393      | longiramus .....                | 56         |
| fugax .....                       | 393      | macrospendylus .....            | 56         |
| humbli .....                      | 393      | navajoicus .....                | 49         |
| marginalis .....                  | 393      | navijoiicus .....               | 49         |
| marsupialis .....                 | 395      | obtusidens .....                | 56         |
| pygmaea .....                     | 393      | platycentrus .....              | 56         |
| scalaris .....                    | 393      | rectiformis .....               | 56         |
| tricuspid .....                   | 393      | seminadientus .....             | 56         |
| valens .....                      | 394      | Dimetrodontiæ .....             | 62         |
| virginiana .....                  | 394      | Dimetrodontoidea .....          | 61         |
| Didelphodon .....                 | 397, 432 | Dinailurus .....                | 545        |
| comptus .....                     | 392      | crassus .....                   | 545        |
| ferox .....                       | 390      | Dinamosaurus .....              | 179, 180   |
| vorax .....                       | 391      | imperiosus .....                | 180        |
| Didelphodontiæ .....              | 432      | Dinaretotherium .....           | 523        |
| Didelphodus .....                 | 390      | merriami .....                  | 523        |
| absarokæ .....                    | 432      | Diniotis .....                  | 541        |
| secundus .....                    | 432      | hombifrons .....                | 541        |
| ventanus .....                    | 432      | brachyops .....                 | 542        |
| Didelphoidea .....                | 389      | cyclops .....                   | 541        |
| Didelphoidea .....                | 389      | felina .....                    | 506, 541   |
| didelphoides (Ictops) .....       | 425      | fortis .....                    | 542        |
| didelphoides (Palaeosinopa) ..... | 425      | major .....                     | 543        |
| Didelphops .....                  | 390      | paucidens .....                 | 542        |
| comptus .....                     | 392      | platycopsis .....               | 542        |
| ferox .....                       | 390      | squalidens .....                | 542        |
| vorax .....                       | 391      | Dinobastis .....                | 547        |
| Didelphydæ .....                  | 389      | ischyrus .....                  | 546        |
| Didelphyidae .....                | 389      | serus .....                     | 547        |
| Didelphys .....                   | 394      | Dinoceras .....                 | 617        |
| comstocki .....                   | 393      | agreste .....                   | 618        |
| marsupialis .....                 | 395      | cuneum .....                    | 618        |
| pygmaea .....                     | 393      | distans .....                   | 618        |
| valens .....                      | 394      | ingens .....                    | 618        |
| virginiana .....                  | 395      | laticeps .....                  | 619        |
| vorax .....                       | 391      | lucare .....                    | 619        |
| didelta (Microtus) .....          | 397      | mirabile .....                  | 619        |
| dideltus (Microtus) .....         | 397      | reflexum .....                  | 619        |
| Didymictis .....                  | 482      | Dinocerata .....                | 618        |
| altidens .....                    | 482      | Dinoceratidæ .....              | 617        |

|                                 | Page     |                           | Page     |
|---------------------------------|----------|---------------------------|----------|
| Dinocerea                       | 613      | Diplodocidæ               | 197      |
| Dinochærus                      | 764      | Diplodocus                | 197, 199 |
| hollandi                        | 765      | carnegiei                 | 199      |
| Dinocyon                        | 511      | carnegii                  | 199      |
| diversidens                     | 512      | hayi                      | 199      |
| gidleyi                         | 508      | lacustris                 | 199      |
| meandrinus                      | 508      | longus                    | 199      |
| ossifragus                      | 512      | Diplolophus               | 873      |
| ursinus                         | 513      | insolens                  | 873      |
| Dinodon                         | 176, 177 | parvus                    | 880      |
| horridus                        | 177      | diplophysus (Pleurolicus) | 877      |
| Dinodontidæ                     | 176      | Diplosaurus               | 146      |
| Dinohyus                        | 764      | felix                     | 146      |
| hollandi                        | 765      | nanus                     | 146      |
| mento                           | 765      | Diplotherium              | 656      |
| Dinophis                        | 287      | manigaulti                | 656      |
| grandis                         | 287      | Diplotomodon              | 264      |
| Dinosauria                      | 164      | horrificus                | 264      |
| Dinotherioiden                  | 631      | Diplotrernata             | 129      |
| dinotherioides (Gomphotherium)  | 636      | Dipodida                  | 910      |
| dinotherioides (Mastodon)       | 636      | Dipodidæ                  | 910      |
| dinotherioides (Rhynchotherium) | 636      | Dipodoideæ                | 901      |
| dinotherioides (Tetrabelodon)   | 636, 638 | Dipodoidea                | 901      |
| Dinoziphius                     | 598      | Dipodomys                 | 881      |
| carolinensis                    | 598      | agilis                    | 881      |
| Diomeda                         | 287      | minor                     | 881      |
| Diomedea                        | 287      | dipodus (Oxyænodon)       | 475      |
| nigripes                        | 288      | Dipoides                  | 883      |
| Diomedidæ                       | 287      | brevis                    | 883      |
| Diomedeinæ                      | 287      | curtus                    | 884      |
| Diomedidæ                       | 287      | lecontei                  | 884      |
| Diomedinæ                       | 287      | tortus                    | 884      |
| Diopeus                         | 50       | Dipriodon                 | 362, 384 |
| leptocephalus                   | 50       | lunatus                   | 384      |
| Diopeus                         | 50       | robustus                  | 384      |
| leptocephalus                   | 50       | Diprionomys               | 881      |
| Dioplon                         | 584      | magnus                    | 881      |
| prorops                         | 585      | parvus                    | 881      |
| Dioplosaurus                    | 236, 535 | Diprotodonta              | 875      |
| acutosquameus                   | 236      | Dipsalidictis             | 474      |
| Dioplotherium                   | 655      | platypus                  | 474      |
| manigaulti                      | 656      | Dipus                     | 910      |
| Diplacodon                      | 714, 715 | americanus                | 910      |
| elatus                          | 714      | Diracodon                 | 234, 235 |
| emarginatus                     | 715      | laticeps                  | 234, 235 |
| Diplacodus                      | 720      | Diracondon                | 235      |
| avus                            | 720      | laticeps                  | 235      |
| Diplarthra                      | 800, 864 | direptor (Hyænogonathus)  | 509      |
| Diplobunops                     | 757      | dirus (Ænocyon)           | 501      |
| matthewi                        | 757      | dirus (Canis)             | 501      |
| Diplobunopsinæ                  | 757      | discoirs (Anas)           | 306      |
| Diploceras                      | 716      | discoirs (Querquedula)    | 306      |
| osborni                         | 716      | Discoosaurus              | 120      |
| Diploclonus                     | 720      | planior                   | 120      |
| amplus                          | 720      | vetustus                  | 120      |
| diploconum (Telmatherium)       | 717      | discurus (Stegosaurus)    | 234      |
| diploconus (Rhadinorhinus)      | 717      | discus (Baptanodon)       | 127      |
| Diplocynodon                    | 155, 374 | dispar (Batrachopus)      | 8        |
| sphenops                        | 156      | dispar (Brontops)         | 721      |
| victor                          | 375      | dispar (Camptosaurus)     | 265      |
| Diplocynodontinæ                | 374      | dispar (Clidastes)        | 263      |
| Diplocynodus                    | 155, 166 | dispar (Edestosaurus)     | 813      |
| polyodon                        | 165      | dispar (Heteromeryx)      | 813      |
| sphenops                        | 166      | dispar (Ichthyornis)      | 282      |
| Diplodocia                      | 189      | dispar (Megacerops)       | 720      |

|                                     | Page     |                                    | Page     |
|-------------------------------------|----------|------------------------------------|----------|
| dispar (Titanotherium) .....        | 721      | Dolichorhynchops—Continued         |          |
| dispar (Tylosaurus) .....           | 263      | osborni .....                      | 117      |
| Disparactis .....                   | 36       | Dolichorhynchops .....             | 117      |
| disparidigitatum (Argozoum) .....   | 6        | Dolichorhynchus .....              | 117      |
| Disporomorphæ .....                 | 289, 293 | dolloverianus (Embolophorus) ..... | 55       |
| Dissacus .....                      | 467      | dollovianus (Dinetrodon) .....     | 55       |
| carnifex .....                      | 467      | dollovianus (Embolophorus) .....   | 55       |
| leptognathus .....                  | 470      | Domina .....                       | 436      |
| longævus .....                      | 467      | crassigenis .....                  | 436      |
| navajovius .....                    | 467      | gradata .....                      | 436      |
| navijovius .....                    | 467      | Dorcaphus .....                    | 820      |
| prænantius .....                    | 467      | hemionus .....                     | 821      |
| saurogathus .....                   | 467      | virginianus .....                  | 822      |
| dissimilis (Megalonyx) .....        | 408      | dorsalis (Neurodromicus) .....     | 271      |
| distans (Dinoceras) .....           | 618      | dorsatum (Brethizon) .....         | 912      |
| distans (Eolysus) .....             | 604      | dorsatus (Brethizon) .....         | 912      |
| distans (Hyposodus) .....           | 444      | dorseyana (Wasatchia) .....        | 753      |
| distans (Leinuravus) .....          | 444      | Dorudon .....                      | 568      |
| distans (Moropus) .....             | 662      | serratus .....                     | 568      |
| distans (Testudo) .....             | 103      | Dorudontidae .....                 | 568      |
| distans (Tinoceras) .....           | 618      | Dorudon .....                      | 568      |
| distans (Uintatherium) .....        | 618      | Doryodon .....                     | 568, 579 |
| distincta (Helopanoplia) .....      | 108      | pygmaeus .....                     | 579      |
| Distrophæus .....                   | 201      | doughtei (Phytosaurus) .....       | 142      |
| ditrigonus (Catalithus) .....       | 611      | doughtyi (Phytosaurus) .....       | 142      |
| ditrigonus (Ketocetus) .....        | 611      | doughtyi (Machæroprosopus) .....   | 142      |
| Diungulati .....                    | 751      | douglasi (Citellus) .....          | 871      |
| divaricans (Macropterna) .....      | 18       | douglasi (Spermophilus) .....      | 871      |
| divaricans (Palaniopus) .....       | 18       | douglasi (Arctomys) .....          | 871      |
| divaricatum (Brontozoum) .....      | 11       | douglasi (Citellus) .....          | 871      |
| divaricatus (Eubrontes) .....       | 11       | douglasi (Echmatomys) .....        | 95       |
| divaricatus (Steropoides) .....     | 21       | douglasi (Limnocyon) .....         | 474      |
| divergens (Odobenus) .....          | 560      | douglasi (Uintasaurus) .....       | 192      |
| divergens (Trichechus) .....        | 560      | douglasi (Otospermophilus) .....   | 871      |
| diversidens (Borophagus) .....      | 512      | douglasi (Sciurus) .....           | 874      |
| diversidens (Canlodon) .....        | 192      | Drepanomeryx .....                 | 815      |
| diversidens (Dinocyon) .....        | 612      | falciiformis .....                 | 815      |
| diversus (Steropoides) .....        | 21       | Drosteus .....                     | 872      |
| dividum (Delphinodon) .....         | 588      | Dromæognathus .....                | 280      |
| Docodon .....                       | 375      | Dromæognathi .....                 | 277      |
| striatus .....                      | 375      | Dromæosaurus .....                 | 180      |
| dodgei (Daphænus) .....             | 505      | albertensis .....                  | 180      |
| dodgei (Daphænus) .....             | 505      | cristatus .....                    | 180      |
| Dolichobrachium .....               | 60       | explanatus .....                   | 181      |
| gracile .....                       | 60       | gracilis .....                     | 181      |
| dolichoceras (Brontotherium) .....  | 722      | lævifrons .....                    | 181      |
| dolichognathus (Chamaesaurus) ..... | 45       | Dromæosaurinae .....               | 176, 180 |
| Dolichopodus .....                  | 10       | Dromatherida .....                 | 367      |
| tetradaetylus .....                 | 10       | Dromatherida .....                 | 367      |
| dolichops (Hipparion) .....         | 692      | Dromatheriidae .....               | 367      |
| dolichops (Neohipparion) .....      | 692      | Dromatherium .....                 | 368      |
| dolichops (Sthenictis) .....        | 536      | silvestre .....                    | 368      |
| dolichopsis (Dama) .....            | 821      | sylvestre .....                    | 368      |
| dolichopsis (Odocoileus) .....      | 821      | Dromicinus .....                   | 289      |
| dolichopus (Polycotylus) .....      | 116      | Dromilopus .....                   | 7, 10    |
| Dolichorhinus .....                 | 711      | celer .....                        | 7        |
| Dolichorhinus .....                 | 715      | obtusus .....                      | 10       |
| cornutus .....                      | 715      | parvus .....                       | 11       |
| fluminialis .....                   | 716      | quadratus .....                    | 11       |
| heterodon .....                     | 716      | quadrifidus .....                  | 11       |
| hyognathus .....                    | 716      | Dromocyon .....                    | 468      |
| intermedius .....                   | 716      | uintensis .....                    | 468      |
| longiceps .....                     | 716      | velox .....                        | 468      |
| superior .....                      | 716      | vorax .....                        | 469      |
| Dolichorhynchops .....              | 117      | Dromomeryx .....                   | 816, 819 |

|                                   | Page          |                                | Page     |
|-----------------------------------|---------------|--------------------------------|----------|
| <i>Dromomeryx—Continued</i>       |               | <i>durinatus</i> (Metopocetus) | 573      |
| <i>americanus</i>                 | 816           | <i>Dusignathus</i>             | 558      |
| <i>angustidens</i>                | 819           | <i>santacruzensis</i>          | 558      |
| <i>antlopinus</i>                 | 819           | <i>Dyceratherium</i>           | 743      |
| <i>borealis</i>                   | 819           | <i>Dynamosaurus</i>            | 180      |
| <i>madisonius</i>                 | 820           | <i>imperiosus</i>              | 180      |
| <i>parvus</i>                     | 820           | <i>dysclerus</i> (Limnocyon)   | 475      |
| <i>texanus</i>                    | 820           | <i>dysclerus</i> (Oxyænodon)   | 475      |
| <i>vigoratus</i>                  | 819           | <i>Dyseomeryx</i>              | 819      |
| <i>whitfordi</i>                  | 820           | <i>marshi</i>                  | 818      |
| <i>whithordi</i>                  | 820           | <i>riparius</i>                | 819      |
| <i>Dromopus</i>                   | 7, 11         | <i>sinclairi</i>               | 819      |
| <i>aduncus</i>                    | 11            | <i>Dysganus</i>                | 215      |
| <i>agilis</i>                     | 11            | <i>bicarinatus</i>             | 215      |
| <i>celer</i>                      | 7             | <i>encaustus</i>               | 216      |
| <i>quadridens</i>                 | 11            | <i>haydenianus</i>             | 216      |
| <i>velox</i>                      | 11            | <i>peiganus</i>                | 216      |
| <i>woodworthi</i>                 | 11            | <i>dysodus</i> (Limnocyon)     | 475      |
| <i>Dromotherium</i>               | 368           | <i>dysodus</i> (Oxyænodon)     | 475      |
| <i>sylvestre</i>                  | 368           | <i>dysotus</i> (Limnocyon)     | 475      |
| <i>drummondianus</i> (Leptomeryx) | 810           | <i>dyspelor</i> (Liodon)       | 259      |
| <i>drummondianus</i> (Mesocyon)   | 493           | <i>dyspelor</i> (Tylosaurus)   | 259      |
| <i>Drymarchon</i>                 | 269           | <i>Dysporomorphæ</i>           | 287, 289 |
| <i>corais</i>                     | 269           | <i>dyssodus</i> (Oxyænodon)    | 475      |
| <i>couperi</i>                    | 269           | <i>Dystropheus</i>             | 201      |
| <i>Drymohippus</i>                | 678, 679      | <i>viæmalæ</i>                 | 201      |
| <i>nevadensis</i>                 | 679           | <i>viænale</i>                 | 201      |
| <i>Dryolestes</i>                 | 372           | <i>Dystropheus</i>             | 201      |
| <i>arcuatus</i>                   | 373           | <i>Dytes</i>                   | 286      |
| <i>gracilis</i>                   | 373           | <i>californicus</i>            | 286      |
| <i>obtusius</i>                   | 372           | <i>eakini</i> (Baropezia)      | 7        |
| <i>priscus</i>                    | 373           | <i>earlei</i> (Metarhinus)     | 717      |
| <i>tenax</i>                      | 373           | <i>eatoni</i> (Colinus)        | 326      |
| <i>vorax</i>                      | 373           | <i>Elboroziphus</i>            | 583      |
| <i>Dryolestidae</i>               | 372           | <i>cælops</i>                  | 583      |
| <i>Dryosaurus</i>                 | 181, 206      | <i>cælops</i>                  | 583      |
| <i>altus</i>                      | 206           | <i>Echinatemyx</i>             | 95       |
| <i>grandis</i>                    | 181           | <i>Echmatemyx</i>              | 95       |
| <i>Dryptodon</i>                  | 400           | <i>Echmatemyx</i>              | 95       |
| <i>crassus</i>                    | 400           | <i>ægle</i>                    | 95       |
| <i>Dryptosauridae</i>             | 176           | <i>arethusa</i>                | 95       |
| <i>Dryptosaurus</i>               | 174, 177, 181 | <i>callopyge</i>               | 95       |
| <i>aquilunguis</i>                | 178           | <i>cibollensis</i>             | 95       |
| <i>cristatus</i>                  | 180           | <i>cyane</i>                   | 95       |
| <i>explanatus</i>                 | 181           | <i>depressa</i>                | 95       |
| <i>falcus</i>                     | 177           | <i>douglassi</i>               | 95       |
| <i>hazenianus</i>                 | 177           | <i>eutheta</i>                 | 95       |
| <i>incrassatus</i>                | 177, 179      | <i>haydeni</i>                 | 95       |
| <i>kenabekides</i>                | 177           | <i>hollandi</i>                | 95       |
| <i>lævifrons</i>                  | 181           | <i>latilabiatæ</i>             | 95       |
| <i>macropus</i>                   | 181           | <i>lativertebralis</i>         | 95       |
| <i>medius</i>                     | 178           | <i>megaulax</i>                | 95       |
| <i>potens</i>                     | 178           | <i>naomi</i>                   | 95       |
| <i>trihedron</i>                  | 174           | <i>obscura</i>                 | 95       |
| <i>dubia</i> (Cerrohinca)         | 343           | <i>ocyrrhoe</i>                | 95       |
| <i>dubius</i> (Hyænognathus)      | 509           | <i>pusilla</i>                 | 95       |
| <i>dubius</i> (Nothodectes)       | 446           | <i>rivalis</i>                 | 95       |
| <i>dubius</i> (Pelioopsis)        | 374           | <i>septaria</i>                | 95       |
| <i>dubius</i> (Plesiodapis)       | 448           | <i>shaughnessiana</i>          | 96       |
| <i>dubius</i> (Porthocyon)        | 509           | <i>stevensonian</i>            | 96       |
| <i>dumblianus</i> (Palæoctonus)   | 171           | <i>testudinea</i>              | 96       |
| <i>Duovestigia</i>                | 11            | <i>uintensis</i>               | 96       |
| <i>scala</i>                      | 11            | <i>wyomingensis</i>            | 96       |
| <i>duplex</i> (Stegosaurus)       | 234           | <i>Ectacodon</i>               | 613      |
| <i>Duplicidentata</i>             | 858           | <i>Ectagonus</i>               | 400      |

|                                   | Page     |   | Page     |
|-----------------------------------|----------|---|----------|
| Ectagonus— <i>Continued</i>       |          | egregius ( <i>Metacænopus</i> )         | 744      |
| <i>novomehicanus</i>              | 400      | egregius ( <i>Trionyx</i> )             | 111      |
| Ectocion                          | 606      | egregius ( <i>Aceratherium</i> )        | 744      |
| <i>osbornianum</i>                | 606      | egretta ( <i>Herodias</i> )             | 295      |
| <i>parvum</i>                     | 606      | ehlersi ( <i>Promystrius</i> )          | 144      |
| <i>ralstonense</i>                | 606      | eira ( <i>Felis</i> )                   | 553      |
| <i>superstes</i>                  | 606      | Elachoceras                             | 620      |
| Ectoconodon                       | 391      | <i>parvum</i>                           | 620      |
| <i>petersoni</i>                  | 391      | Elani                                   | 314      |
| Ectoconus                         | 610      | Elaninae                                | 314      |
| <i>ditrigonus</i>                 | 611      | Elanus                                  | 314      |
| Ectocynodon                       | 43       | <i>glaucus</i>                          | 314      |
| <i>ordinatus</i>                  | 43       | <i>leucurus</i>                         | 314      |
| Ectocyon                          | 606      | Elaphus                                 | 829      |
| <i>osbornianum</i>                | 606      | <i>canadensis</i>                       | 829      |
| Ectogonus                         | 400, 401 | <i>elaphus</i> ( <i>Cervus</i> )        | 829      |
| <i>gliriformis</i>                | 401      | Elasmosauridae                          | 117      |
| <i>novomehicanus</i>              | 400      | Elasmosaurinae                          | 117      |
| Ectypodus                         | 381      | Elasmosaurus                            | 117      |
| <i>musculus</i>                   | 381      | <i>intermedius</i>                      | 118      |
| edæ ( <i>Testudo</i> )            | 103      | <i>ischiadicus</i>                      | 118      |
| Edaphosauria                      | 57       | <i>marschi</i>                          | 118      |
| Edaphosauridae                    | 57       | <i>marshi</i>                           | 118      |
| Edaphosauriformes                 | 57       | <i>nobilis</i>                          | 118      |
| Edaphosauroides                   | 57       | <i>orientalis</i>                       | 118      |
| Edaphosaurus                      | 57, 58   | <i>platurus</i>                         | 118      |
| <i>claviger</i>                   | 58       | <i>platyrus</i>                         | 118      |
| <i>cruciger</i>                   | 58       | <i>serpentinus</i>                      | 118      |
| <i>microdus</i>                   | 58       | <i>snowi</i>                            | 118      |
| <i>novomexicanus</i>              | 58       | <i>snowii</i>                           | 118      |
| <i>pogonias</i>                   | 58       | <i>sternbergi</i>                       | 118      |
| <i>raymondi</i>                   | 59       | Elasmotheriinae                         | 740      |
| edux ( <i>Uintacyon</i> )         | 484      | elatum ( <i>Titanotherium</i> )         | 722      |
| edensis ( <i>Anancus</i> )        | 631      | elatus ( <i>Moropus</i> )               | 682      |
| edensis ( <i>Cordillerion</i> )   | 631      | elatus ( <i>Titanops</i> )              | 722      |
| edensis ( <i>Dibelodon</i> )      | 631      | elatus ( <i>Diplacodon</i> )            | 714      |
| edensis ( <i>Gomphotherium</i> )  | 631      | elatus ( <i>Triceratops</i> )           | 228      |
| edensis ( <i>Hypolagus</i> )      | 666      | Elcabrasaurus                           | 50       |
| edensis ( <i>Plihippus</i> )      | 696      | <i>baldwini</i>                         | 51       |
| edensis ( <i>Pliomacetus</i> )    | 518      | Elcobresaurus                           | 50       |
| edensis ( <i>Prosthennops</i> )   | 771      | <i>baldwini</i>                         | 51       |
| edensis ( <i>Protocamelus</i> )   | 798      | Elcobrosaurus                           | 50       |
| edensis ( <i>Rhynchotherium</i> ) | 631      | <i>elefantidae</i>                      | 622      |
| edensis ( <i>Tetrabelodon</i> )   | 631      | <i>elegans</i> ( <i>Anisacodon</i> )    | 426      |
| edensis ( <i>Trilophodon</i> )    | 631      | <i>elegans</i> ( <i>Blastomeryx</i> )   | 818      |
| Edentata                          | 401      | <i>elegans</i> ( <i>Bunomeryx</i> )     | 754      |
| Edentati                          | 403      | <i>elegans</i> ( <i>Elpidophorus</i> )  | 463      |
| Edentula                          | 402      | <i>elegans</i> ( <i>Eumys</i> )         | 892      |
| Edestosaurus                      | 282      | <i>elegans</i> ( <i>Gomphotherium</i> ) | 630, 633 |
| <i>dispar</i>                     | 263      | <i>elegans</i> ( <i>Merychyns</i> )     | 787      |
| <i>velox</i>                      | 264      | <i>elegans</i> ( <i>Microsops</i> )     | 450      |
| <i>wyrnani</i>                    | 264      | <i>elegans</i> ( <i>Mionictis</i> )     | 536      |
| edim' ( <i>Testudo</i> )          | 103      | <i>elegans</i> ( <i>Notharctus</i> )    | 450      |
| edmontoni ( <i>Thepesius</i> )    | 212      | <i>elegans</i> ( <i>Pantolestes</i> )   | 426      |
| Edmontonia                        | 237      | <i>elegans</i> ( <i>Pediomys</i> )      | 390      |
| <i>longiceps</i>                  | 237      | <i>elegans</i> ( <i>Peradectes</i> )    | 393      |
| Edmontosaurus                     | 213      | <i>elegans</i> ( <i>Plectropterna</i> ) | 19       |
| <i>regalis</i>                    | 213      | <i>elegans</i> ( <i>Stegomastodon</i> ) | 633      |
| edwardsianus ( <i>Laornis</i> )   | 301      | <i>elegans</i> ( <i>Sterna</i> )        | 342      |
| edisi ( <i>Elaphas</i> )          | 646      | <i>elegans</i> ( <i>Steropoides</i> )   | 21       |
| effera ( <i>Proietinia</i> )      | 314      | <i>elegans</i> ( <i>Tarsoplectrus</i> ) | 19       |
| effodiens ( <i>Hemicaulodon</i> ) | 657      | <i>elegans</i> ( <i>Thalasseus</i> )    | 342      |
| egregia ( <i>Amysa</i> )          | 111      | <i>elegans</i> ( <i>Triamus</i> )       | 23       |
| egregium ( <i>Aceratherium</i> )  | 744      | Elephantidae                            | 622, 640 |
| egregius ( <i>Metacænopus</i> )   | 744, 745 | Elephantina                             | 622      |



|                             | Page                    |                                | Page     |
|-----------------------------|-------------------------|--------------------------------|----------|
| Elephantinae                | 622, 640                | Elosaurus— <i>Continued</i>    |          |
| Elephantini                 | 623                     | parvus                         | 193      |
| Elephantioidea              | 621, 622                | Elotheridae                    | 762      |
| elephantopus (Coryphodon)   | 615, 616                | Elotheriidae                   | 761, 762 |
| Elephas                     | 623, 640                | Elotherium                     | 762, 763 |
| americana                   | 647                     | bathrodon                      | 765      |
| americanus                  | 629, 643, 644, 650, 651 | calkinsi                       | 766      |
| beresovskius                | 649                     | clavum                         | 763      |
| boreus                      | 642, 643, 644           | coarctatum                     | 763      |
| campylotes                  | 648                     | ciassum                        | 763      |
| colombi                     | 645, 651                | humerosum                      | 765      |
| columbi                     | 643, 644, 649, 650      | imperator                      | 762      |
| columbianus                 | 644                     | ingens                         | 764      |
| eellsii                     | 646                     | inortoni                       | 764      |
| exilis                      | 646                     | mortonii                       | 764      |
| falconeri                   | 646                     | ramosum                        | 765      |
| felicitis                   | 646                     | superbum                       | 762      |
| francisi                    | 646                     | umtense                        | 761      |
| haroldcooki                 | 646                     | Elphidotarsius                 | 920      |
| hayi                        | 646                     | florence                       | 920      |
| imperator                   | 646                     | Elpidophorus                   | 463      |
| imperialis                  | 647                     | elegans                        | 463      |
| indianapolis                | 644, 651                | Elpidosauria                   | 46       |
| jacksoni                    | 643, 644, 650, 651      | elrodi (Meiyaochcerus)         | 785      |
| jeffersonii                 | 642, 643, 646, 650      | elrodi (Procnemus)             | 798      |
| maibeni                     | 648                     | elucus (Procyon)               | 515      |
| mammonteus                  | 648                     | emarginatus (Protitanotherium) | 715      |
| mamonteus                   | 648                     | emarginatus (Diplacodon)       | 715      |
| mastodonta                  | 629                     | emarginatus (Osteopygis)       | 76       |
| mastodonteus                | 629                     | Embaphias                      | 120      |
| mastodontus                 | 625                     | circulosus                     | 120      |
| mississippiensis            | 644                     | Embolobus                      | 60       |
| ohioticus                   | 625                     | fritillus                      | 60       |
| paniscus                    | 648                     | Embolophorus                   | 64, 60   |
| peribolotes                 | 648                     | dolloverianus                  | 55       |
| primigenius                 | 645, 648, 649, 650      | dollovianus                    | 55       |
| primogenius                 | 645, 646                | fritillus                      | 60       |
| primordialis                | 650                     | emiliae (Bañua)                | 72       |
| progressus                  | 644                     | emiliae (Testudo)              | 103      |
| pygmaeus                    | 648                     | eminens (Laolestes)            | 373      |
| roosevelti                  | 650                     | emmonsi (Gomphotherium)        | 636      |
| rupertianus                 | 651                     | emmonsi (Ontocetus)            | 598      |
| scotti                      | 650                     | Empedias                       | 34, 35   |
| silvestris                  | 646                     | alatus                         | 35       |
| texianus                    | 647                     | fissus                         | 34       |
| washingtonii                | 650                     | molaris                        | 34       |
| Eligmodontia                | 893                     | Empedocles                     | 33, 34   |
| arizonæ                     | 893                     | molaris                        | 34       |
| elkader (Toxochelys)        | 86                      | empetra (Arctonius)            | 871      |
| ellangowensis (Anthracopus) | 5                       | Empidens                       | 34       |
| elliotti (Crocodilus)       | 153                     | fissus                         | 34       |
| elliotti (Crocodylus)       | 153                     | Emyda                          | 93       |
| Ellipsodon                  | 607                     | Emyda                          | 93       |
| inæquidens                  | 608                     | Emydea                         | 77       |
| ellipticus (Aspideretes)    | 103                     | monimopolyca                   | 74       |
| Elliptonodon                | 264                     | Emydidæ                        | 93, 99   |
| compressus                  | 264                     | Emydinæ                        | 93, 94   |
| cloisæ (Amyda)              | 111                     | emydinus (Cyclopidius)         | 790      |
| Elomeryx                    | 759                     | Emydoidæ                       | 83       |
| angustus                    | 759                     | Emydosauri                     | 136, 160 |
| armatus                     | 759                     | Emydosauria                    | 160      |
| mitis                       | 759                     | Emys                           | 88, 93   |
| elongata (Hoplochelys)      | 91                      | beata                          | 89       |
| elongata (Mephitis)         | 532                     | belli                          | 96       |
| Elosaurus                   | 193                     | carteri                        | 100      |

|  | Page     |  | Page |
|--|----------|--|------|
| <i>Emys</i> — <i>Continued</i>                 |          | <i>Eutamias</i> — <i>Continued</i>           |      |
| <i>cibollensis</i> .....                       | 95       | <i>angustidens</i> .....                     | 435  |
| <i>euglypha</i> .....                          | 97       | <i>minutus</i> .....                         | 435  |
| <i>eutheta</i> .....                           | 95       | <i>Eutamias</i> .....                        | 439  |
| <i>haydeni</i> .....                           | 95       | <i>comptus</i> .....                         | 439  |
| <i>hemisphaerica</i> .....                     | 101      | <i>Entomolestes</i> .....                    | 451  |
| <i>jeanesi</i> .....                           | 96       | <i>grangeri</i> .....                        | 451  |
| <i>latilabata</i> .....                        | 95       | <i>nitens</i> .....                          | 451  |
| <i>lativertebralis</i> .....                   | 95       | <i>entoptychi</i> ( <i>Amphicyon</i> ) ..... | 508  |
| <i>megaulax</i> .....                          | 95       | <i>Entoptychinae</i> .....                   | 876  |
| <i>obscurus</i> .....                          | 88       | <i>Entoptychus</i> .....                     | 876  |
| <i>pachylomus</i> .....                        | 95       | <i>cavifrons</i> .....                       | 876  |
| <i>petrolei</i> .....                          | 97       | <i>crassiramus</i> .....                     | 876  |
| <i>polycephala</i> .....                       | 96       | <i>curtus</i> .....                          | 876  |
| <i>septaria</i> .....                          | 95, 96   | <i>formosus</i> .....                        | 876  |
| <i>shaughnessiana</i> .....                    | 96       | <i>lambdoideus</i> .....                     | 876  |
| <i>stevensonensis</i> .....                    | 96       | <i>minimus</i> .....                         | 876  |
| <i>stevensonianus</i> .....                    | 95       | <i>minor</i> .....                           | 877  |
| <i>terrestris</i> .....                        | 96       | <i>planifrons</i> .....                      | 877  |
| <i>testudinea</i> .....                        | 96       | <i>rostratus</i> .....                       | 877  |
| <i>wyomingensis</i> .....                      | 95, 96   | <i>sperryi</i> .....                         | 877  |
| <i>Emysaura</i> .....                          | 84       | <i>Eobasiliscus</i> .....                    | 617  |
| <i>Emysaurus</i> .....                         | 85       | <i>Eobasiliscus</i> .....                    | 620  |
| <i>serpentinus</i> .....                       | 85       | <i>cornutus</i> .....                        | 620  |
| <i>Enaliosauria</i> .....                      | 114, 123 | <i>furcatus</i> .....                        | 620  |
| <i>encastus</i> ( <i>Dysganus</i> ) .....      | 215      | <i>galeatus</i> .....                        | 620  |
| <i>encinensis</i> ( <i>Mixoclenus</i> ) .....  | 463      | <i>pressicornis</i> .....                    | 620  |
| <i>eneta</i> ( <i>Uruitinga</i> ) .....        | 318      | <i>Eocornis</i> .....                        | 295  |
| <i>Enhydrocyon</i> .....                       | 507      | <i>ardetta</i> .....                         | 295  |
| <i>basilatus</i> .....                         | 507      | <i>Eocornops</i> .....                       | 221  |
| <i>crassidens</i> .....                        | 507      | <i>canadensis</i> .....                      | 221  |
| <i>oregonensis</i> .....                       | 507      | <i>Eoceratopsinae</i> .....                  | 220  |
| <i>sectorius</i> .....                         | 507      | <i>Eocoronodon</i> .....                     | 466  |
| <i>stenocephalus</i> .....                     | 507      | <i>coryphaeus</i> .....                      | 466  |
| <i>Ennacodon</i> .....                         | 375      | <i>Eodelphis</i> .....                       | 393  |
| <i>affinis</i> .....                           | 375      | <i>browni</i> .....                          | 393  |
| <i>crassus</i> .....                           | 375      | <i>eutleri</i> .....                         | 393  |
| <i>Enneodon</i> .....                          | 375      | <i>Eodelphys</i> .....                       | 394  |
| <i>affinis</i> .....                           | 375      | <i>Eodidelphis</i> .....                     | 394  |
| <i>crassus</i> .....                           | 375      | <i>Eoditremata</i> .....                     | 180  |
| <i>enimianus</i> ( <i>Lepus</i> ) .....        | 808      | <i>Eohippus</i> ( <i>Merychippus</i> ) ..... | 684  |
| <i>enimianus</i> ( <i>Archaeolagus</i> ) ..... | 808      | <i>Eohippus</i> .....                        | 687  |
| <i>enimianus</i> ( <i>Palaolagus</i> ) .....   | 808      | <i>angustidens</i> .....                     | 688  |
| <i>ensidens</i> ( <i>Saniwa</i> ) .....        | 821      | <i>borealis</i> .....                        | 688  |
| <i>ensidens</i> ( <i>Saniwa</i> ) .....        | 821      | <i>craspedotus</i> .....                     | 688  |
| <i>ensifer</i> ( <i>Cariacus</i> ) .....       | 821      | <i>craspedotus</i> .....                     | 688  |
| <i>ensifer</i> ( <i>Dama</i> ) .....           | 821      | <i>eristatus</i> .....                       | 688  |
| <i>ensifer</i> ( <i>Odocoileus</i> ) .....     | 821      | <i>eristonense</i> .....                     | 688  |
| <i>Entelodon</i> .....                         | 768, 769 | <i>eristonensis</i> .....                    | 688  |
| <i>bothrodon</i> .....                         | 768      | <i>euspidatus</i> .....                      | 688  |
| <i>calikini</i> .....                          | 768      | <i>etsagicus</i> .....                       | 689  |
| <i>clavus</i> .....                            | 768      | <i>index</i> .....                           | 689  |
| <i>coarctatus</i> .....                        | 768      | <i>kraspidotus</i> .....                     | 688  |
| <i>crassus</i> .....                           | 768      | <i>montanus</i> .....                        | 689  |
| <i>imperator</i> .....                         | 768      | <i>pernix</i> .....                          | 689  |
| <i>mortoni</i> .....                           | 764      | <i>resartus</i> .....                        | 689  |
| <i>Entelodontidae</i> .....                    | 761, 762 | <i>tapirinus</i> .....                       | 689  |
| <i>Entelodontinae</i> .....                    | 762      | <i>validus</i> .....                         | 689  |
| <i>Entelodontini</i> .....                     | 761      | <i>vasaociensis</i> .....                    | 689  |
| <i>Entelonychia</i> .....                      | 680      | <i>venticolus</i> .....                      | 689  |
| <i>entellus</i> ( <i>Amblypeza</i> ) .....     | 75       | <i>Eohyids</i> .....                         | 604  |
| <i>entoconurus</i> ( <i>Connacodon</i> ) ..... | 612      | <i>Eohyus</i> .....                          | 604  |
| <i>entoconus</i> ( <i>Connacodon</i> ) .....   | 612      | <i>distans</i> .....                         | 604  |
| <i>entoconus</i> ( <i>Haploconus</i> ) .....   | 612      | <i>robustus</i> .....                        | 604  |
| <i>Eutamias</i> .....                          | 428, 435 | <i>Eomeryx</i> .....                         | 778  |

|  | Page     |                              | Page          |
|--|----------|------------------------------|---------------|
| <i>Eomeryx—Continued</i>               |          | <i>Eporeodon—Continued</i>   |               |
| pumilis .....                          | 778      | pacificus .....              | 782           |
| <i>Eometarhinus</i> .....              | 717      | parvus .....                 | 783           |
| huerfanensis .....                     | 717      | perbullatus .....            | 782           |
| <i>Eomoropus</i> .....                 | 725      | relictus .....               | 782           |
| amarorum .....                         | 725      | socialis .....               | 783           |
| annectens .....                        | 725      | trigonocephalus .....        | 783           |
| <i>eo placidus (Merychippus)</i> ..... | 684      | <i>Eptesicus</i> .....       | 455           |
| <i>Eopteryx</i> .....                  | 360      | fuscus .....                 | 455           |
| mississippiensis .....                 | 360      | grandis .....                | 455           |
| <i>Eosauravus</i> .....                | 32       | melanops .....               | 455           |
| copei .....                            | 32       | equiceps (Meshippus) .....   | 676           |
| <i>eother (Machæroides)</i> .....      | 475      | equiceps (Miohippus) .....   | 676           |
| <i>Eotitanops</i> .....                | 711      | equicomus (Testudo) .....    | 103           |
| borealis .....                         | 712      | Equidæ .....                 | 664           |
| brownianus .....                       | 712      | Equinæ .....                 | 680           |
| gregoryi .....                         | 712      | equinatus (Miohippus) .....  | 676           |
| major .....                            | 712      | Equini .....                 | 666           |
| minimus .....                          | 712      | equinum (Anchitherium) ..... | 670           |
| princeps .....                         | 712      | equinus (Hypolippus) .....   | 679           |
| <i>Eotitanotherium</i> .....           | 712      | Equoidæ .....                | 664           |
| osborni .....                          | 716      | Equoidea .....               | 664           |
| <i>Eotrigonias</i> .....               | 739      | Equus .....                  | 699           |
| petersoni .....                        | 739      | alaskæ .....                 | 707           |
| rhinocerinus .....                     | 739      | americanus .....             | 703           |
| <i>Eotylopus</i> .....                 | 793      | asinus .....                 | 709           |
| reedi .....                            | 793      | barcenæi .....               | 703           |
| <i>Epanterias</i> .....                | 192      | barcenai .....               | 709           |
| amplexus .....                         | 192      | bautistensis .....           | 703           |
| <i>Ephippus</i> .....                  | 671, 672 | caballus .....               | 703, 710      |
| <i>Epiaphelops</i> .....               | 746      | calobatus .....              | 710           |
| virgasectus .....                      | 746      | celticus .....               | 703           |
| <i>Epichnæus</i> .....                 | 461      | complicatus .....            | 703           |
| schlosserianus .....                   | 461      | conversidens .....           | 704           |
| <i>Epicyon</i> .....                   | 467      | crenidens .....              | 704, 705, 708 |
| <i>Epigæus</i> .....                   | 909      | cumminsi .....               | 696           |
| hatcheri .....                         | 909      | curvidens .....              | 703, 708      |
| <i>Epigaulus</i> .....                 | 909      | euristylus .....             | 692           |
| hatcheri .....                         | 909      | eurystylus .....             | 692           |
| <i>Epihippus</i> .....                 | 671, 672 | excelsior .....              | 704           |
| gracilis .....                         | 672      | excelsis .....               | 705           |
| parvus .....                           | 672      | excelsus .....               | 704, 707, 709 |
| uintensis .....                        | 672      | francisci .....              | 705           |
| <i>Episcoposaurus</i> .....            | 144, 145 | fraternus .....              | 703, 704, 708 |
| haplocerus .....                       | 144      | giganteus .....              | 705           |
| horridus .....                         | 144      | hatcheri .....               | 705           |
| <i>Epitriplopus</i> .....              | 735      | holnæsi .....                | 705           |
| uintensis .....                        | 735      | idahoenis .....              | 705           |
| <i>epixanthum (Erethizon)</i> .....    | 912      | intermedius .....            | 708           |
| <i>epixanthus (Erethizon)</i> .....    | 912      | jubatus .....                | 705           |
| <i>Epoicotheriæ</i> .....              | 422      | lambei .....                 | 706           |
| <i>Epoicotherium</i> .....             | 422      | laurentinus .....            | 703           |
| unicum .....                           | 422      | laurentius .....             | 705           |
| <i>Eporeodon</i> .....                 | 781, 781 | leidyi .....                 | 706, 708      |
| bullatus .....                         | 782      | littoralis .....             | 706           |
| cedrensis .....                        | 782      | major .....                  | 708           |
| condoni .....                          | 783      | minutus .....                | 694           |
| dickinsonensis .....                   | 781      | montezumæ .....              | 693           |
| helenæ .....                           | 781      | nevadanus .....              | 706           |
| hybridus .....                         | 781      | niobrarensis .....           | 706           |
| leptacanthus .....                     | 782      | occidentalis .....           | 707, 708      |
| longifrons .....                       | 782      | pacificus .....              | 707           |
| major .....                            | 782      | pectinatus .....             | 708           |
| montanus .....                         | 781      | perditus .....               | 699           |
| occidentalis .....                     | 782      | phlægon .....                | 694           |

|   | Page          |   | Page     |
|---|---------------|---|----------|
| <i>Equus—Continued</i>                            |               | <i>Eschrichtius—Continued</i>                   |          |
| <i>princeps</i> .....                             | 708           | <i>davidsoni</i> .....                          | 572      |
| <i>pyrdalskii</i> .....                           | 708           | <i>davodsonii</i> .....                         | 572      |
| <i>proversus</i> .....                            | 699           | <i>Essonodon</i> .....                          | 382      |
| <i>scotti</i> .....                               | 704, 708      | <i>browni</i> .....                             | 382      |
| <i>semiplicatus</i> .....                         | 703, 708      | <i>Esthonychidae</i> .....                      | 854      |
| <i>simplicidens</i> .....                         | 699           | <i>Esthonychme</i> .....                        | 854      |
| <i>tau</i> .....                                  | 708, 709, 709 | <i>Esthonychini</i> .....                       | 854      |
| <i>typicus</i> .....                              | 708           | <i>Esthonyx</i> .....                           | 854      |
| <i>equus</i> ( <i>Hoplichnus</i> ) .....          | 14            | <i>acer</i> .....                               | 854      |
| <i>erectus</i> ( <i>Amynodon</i> ) .....          | 737           | <i>aotidens</i> .....                           | 854      |
| <i>Eremophila</i> .....                           | 354           | <i>bisulcatus</i> .....                         | 854      |
| <i>alpestris</i> .....                            | 354           | <i>burneisteri</i> .....                        | 854      |
| <i>Eremophilus</i> .....                          | 354           | <i>burneisterii</i> .....                       | 854      |
| <i>alpestris</i> .....                            | 354           | <i>spatularia</i> .....                         | 855      |
| <i>Ereptodon</i> .....                            | 411           | <i>spatularius</i> .....                        | 855      |
| <i>priscus</i> .....                              | 411           | <i>esulcatus</i> ( <i>Leptomeryx</i> ) .....    | 810      |
| <i>Erethizon</i> .....                            | 885, 912      | <i>etsagicus</i> ( <i>Bunophorus</i> ) .....    | 753      |
| <i>cloacinus</i> .....                            | 912           | <i>etsagicus</i> ( <i>Echippus</i> ) .....      | 669      |
| <i>dorsatum</i> .....                             | 912           | <i>etsagicus</i> ( <i>Helohyus</i> ) .....      | 669, 753 |
| <i>dorsatus</i> .....                             | 912           | <i>etsagicus</i> ( <i>Systemodon</i> ) .....    | 669      |
| <i>opixanthum</i> .....                           | 912           | <i>etsagicus</i> ( <i>Trigonolestes</i> ) ..... | 753      |
| <i>opixanthus</i> .....                           | 912           | <i>Euapsis</i> .....                            | 885      |
| <i>godfreyi</i> .....                             | 912           | <i>Euaetetes</i> .....                          | 520      |
| <i>venustus</i> .....                             | 885           | <i>americanus</i> .....                         | 520      |
| <i>Erethizontidae</i> .....                       | 911           | <i>floridanus</i> .....                         | 520      |
| <i>Erethizontinae</i> .....                       | 911           | <i>vitabilis</i> .....                          | 519      |
| <i>Erigonathus</i> .....                          | 585           | <i>Eubaena</i> .....                            | 72       |
| <i>barbatus</i> .....                             | 585           | <i>cephalica</i> .....                          | 72       |
| <i>Erinacei</i> .....                             | 433           | <i>latifrons</i> .....                          | 72       |
| <i>Erinaceidae</i> .....                          | 433           | <i>Eubelodon</i> .....                          | 634, 637 |
| <i>Erinaceinae</i> .....                          | 433           | <i>morrilli</i> .....                           | 637      |
| <i>Erinaceini</i> .....                           | 434           | <i>morrilli</i> .....                           | 637      |
| <i>Erinaceoidae</i> .....                         | 429           | <i>Eubrachiosaurus</i> .....                    | 64       |
| <i>Erinaceoidea</i> .....                         | 429           | <i>browni</i> .....                             | 64       |
| <i>Erinaceomorpha</i> .....                       | 429           | <i>Eubrontes</i> .....                          | 2, 11    |
| <i>Erinaceus</i> .....                            | 433           | <i>approximatus</i> .....                       | 11       |
| <i>Erinacidae</i> .....                           | 433           | <i>dananus</i> .....                            | 3        |
| <i>Eriamatura</i> .....                           | 308           | <i>divaricatus</i> .....                        | 11       |
| <i>jamaicensis</i> .....                          | 308           | <i>expansus</i> .....                           | 11       |
| <i>rubida</i> .....                               | 308           | <i>exsertus</i> .....                           | 3        |
| <i>Eriamaturinae</i> .....                        | 308           | <i>giganteus</i> .....                          | 11       |
| <i>Eriamaturus</i> .....                          | 308           | <i>minusculeus</i> .....                        | 3        |
| <i>jamaicensis</i> .....                          | 308           | <i>platypus</i> .....                           | 12       |
| <i>rubida</i> .....                               | 308           | <i>titanopelopatidus</i> .....                  | 12       |
| <i>erminea</i> ( <i>Putorius</i> ) .....          | 529           | <i>tuberatus</i> .....                          | 3        |
| <i>ermineus</i> ( <i>Putorius</i> ) .....         | 529           | <i>tuberosus</i> .....                          | 3        |
| <i>erminius</i> ( <i>Putorius</i> ) .....         | 529           | <i>Eubrontidae</i> .....                        | 1        |
| <i>erosa</i> ( <i>Propleura</i> ) .....           | 76            | <i>Eucastor</i> .....                           | 884      |
| <i>erosus</i> ( <i>Osteopygia</i> ) .....         | 76            | <i>lecontei</i> .....                           | 884      |
| <i>Erquellinnesia</i> .....                       | 77            | <i>tortus</i> .....                             | 884      |
| <i>molaria</i> .....                              | 77            | <i>Eucatherium</i> .....                        | 844      |
| <i>errans</i> ( <i>Neogypsa</i> ) .....           | 323           | <i>collinum</i> .....                           | 844      |
| <i>Erythron</i> .....                             | 912           | <i>Eucastes</i> .....                           | 76, 77   |
| <i>erythrorhynchus</i> ( <i>Pelecanus</i> ) ..... | 290           | <i>platypus</i> .....                           | 77       |
| <i>erythrorhynchus</i> ( <i>Pelecanus</i> ) ..... | 290           | <i>Eucosmodon</i> .....                         | 379      |
| <i>escavada</i> ( <i>Baena</i> ) .....            | 72            | <i>americanus</i> .....                         | 379      |
| <i>Echatus</i> .....                              | 806           | <i>molestus</i> .....                           | 379      |
| <i>condens</i> .....                              | 806           | <i>ultimus</i> .....                            | 379      |
| <i>condens</i> .....                              | 806           | <i>Eucrodi</i> .....                            | 481      |
| <i>longirostris</i> .....                         | 806           | <i>Eucrotaphus</i> .....                        | 781      |
| <i>Eschrichtius</i> .....                         | 572           | <i>dickinsonensis</i> .....                     | 781      |
| <i>davidsonii</i> .....                           | 572           | <i>helena</i> .....                             | 781      |
| <i>Eschrichtius</i> .....                         | 572           | <i>jacksoni</i> .....                           | 781      |
| <i>cephalus</i> .....                             | 572           | <i>jacksoni</i> .....                           | 781, 782 |

|   | Page     |  | Page     |
|---|----------|--|----------|
| <i>Eucrotaphus—Continued</i>            |          | <i>euristylus</i> (Equus) .....        | 692      |
| <i>major</i> .....                      | 782      | <i>Europlocephalus</i> .....           | 238      |
| <i>montanus</i> .....                   | 781      | <i>tutus</i> .....                     | 238      |
| <i>occidentalis</i> .....               | 781      | <i>Euryacodon</i> .....                | 928      |
| <i>Eucrotaphus</i> .....                | 781      | <i>homunculus</i> .....                | 929      |
| <i>jacksoni</i> .....                   | 781      | <i>lepidus</i> .....                   | 928      |
| <i>Euelphantinae</i> .....              | 640      | <i>Eurydorus</i> .....                 | 145      |
| <i>Euelephas</i> .....                  | 641      | <i>serridens</i> .....                 | 145      |
| <i>columbi</i> .....                    | 643      | <i>Eurypterygius</i> .....             | 129      |
| <i>imperator</i> .....                  | 643      | <i>eurypygia</i> (Cistudo) .....       | 99       |
| <i>jacksoni</i> .....                   | 643, 644 | <i>eurypyga</i> (Terrapene) .....      | 98       |
| <i>primgenius</i> .....                 | 643, 649 | <i>eurystyle</i> (Hipparion) .....     | 692      |
| <i>euglypha</i> (Emys) .....            | 97       | <i>eurystylum</i> (Hipparion) .....    | 692      |
| <i>euglypha</i> (Trachemys) .....       | 97       | <i>eurystylum</i> (Neohipparion) ..... | 692      |
| <i>Euhapsis</i> .....                   | 885      | <i>eurystylus</i> (Equus) .....        | 692      |
| <i>brachyiceps</i> .....                | 885      | <i>Eusmilus</i> .....                  | 545      |
| <i>gaulodon</i> .....                   | 885      | <i>dakotensis</i> .....                | 545      |
| <i>platyceps</i> .....                  | 885      | <i>sicarius</i> .....                  | 545      |
| <i>euhypodon</i> (Gomphotherium) .....  | 636      | <i>whitfordi</i> .....                 | 545      |
| <i>euhypodon</i> (Mammut) .....         | 636      | <i>Eusuchia</i> .....                  | 160      |
| <i>euhypodon</i> (Mastodon) .....       | 636      | <i>Eusydodon</i> .....                 | 749      |
| <i>euhypodon</i> (Rhynchotherium) ..... | 636      | <i>fossiger</i> .....                  | 749      |
| <i>euhypodon</i> (Tetrabelodon) .....   | 636      | <i>maximus</i> .....                   | 760      |
| <i>euhypodon</i> (Tetralophodon) .....  | 636      | <i>Eutania</i> .....                   | 270      |
| <i>euhypodon</i> (Trilophodon) .....    | 636      | <i>sirtalis</i> .....                  | 270      |
| <i>eulophus</i> (Meschippus) .....      | 674      | <i>Eutamias</i> .....                  | 868, 873 |
| <i>Eumeces</i> .....                    | 249      | <i>levidens</i> .....                  | 873      |
| <i>anthracinus</i> .....                | 249      | <i>Eutheria</i> .....                  | 385, 396 |
| <i>Eumetopias</i> .....                 | 558      | <i>Euthlastes</i> .....                | 374      |
| <i>jubata</i> .....                     | 558      | <i>cordiformis</i> .....               | 374      |
| <i>stelleri</i> .....                   | 558      | <i>euthneta</i> (Behmatemys) .....     | 95       |
| <i>Eumys</i> .....                      | 892      | <i>euthneta</i> (Emys) .....           | 95       |
| <i>elegans</i> .....                    | 892      | <i>Eutypomyidae</i> .....              | 882      |
| <i>loxodon</i> .....                    | 893      | <i>Eutypomys</i> .....                 | 882      |
| <i>minor</i> .....                      | 892      | <i>parvus</i> .....                    | 882      |
| <i>Eumotosauria</i> .....               | 67       | <i>thomsoni</i> .....                  | 882      |
| <i>Euplocephalus</i> .....              | 238      | <i>evansi</i> (Leptomeryx) .....       | 810      |
| <i>tutus</i> .....                      | 238      | <i>eversa</i> (Dendrocygna) .....      | 304      |
| <i>Euplocyon</i> .....                  | 507      | <i>Evotomys</i> .....                  | 899      |
| <i>magnus</i> .....                     | 507      | <i>gapperi</i> .....                   | 899      |
| <i>predator</i> .....                   | 507      | <i>excavatus</i> (Corythosaurus) ..... | 218      |
| <i>Euornithes</i> .....                 | 277, 280 | <i>excavatus</i> (Paramys) .....       | 903      |
| <i>Eupachemys</i> .....                 | 101      | <i>excedens</i> (Harpagosaurus) .....  | 256      |
| <i>obtusa</i> .....                     | 104      | <i>excelsior</i> (Equus) .....         | 704      |
| <i>Eupalamopus</i> .....                | 12       | <i>excelesis</i> (Equus) .....         | 705      |
| <i>dananus</i> .....                    | 12       | <i>excelesus</i> (Apatosaurus) .....   | 196      |
| <i>Euphagus</i> .....                   | 358      | <i>excelesus</i> (Brontosaurus) .....  | 196      |
| <i>affinis</i> .....                    | 358      | <i>excelesus</i> (Equus) .....         | 704, 709 |
| <i>cyanocephalus</i> .....              | 358      | <i>exiguus</i> (Aceratherium) .....    | 745      |
| <i>euphractus</i> (Glyptodon) .....     | 420      | <i>exiguus</i> (Cænopus) .....         | 742      |
| <i>euphractus</i> (Hoplophorus) .....   | 420      | <i>exiguus</i> (Miacis) .....          | 485      |
| <i>euphyodon</i> (Trilophodon) .....    | 636      | <i>exilis</i> (Elephas) .....          | 646      |
| <i>Euplocephalus</i> .....              | 238      | <i>eximia</i> (Prosinopa) .....        | 924      |
| <i>tutus</i> .....                      | 238      | <i>eximia</i> (Sinopa) .....           | 924      |
| <i>Euprotogonia</i> .....               | 662, 603 | <i>eximium</i> (Pœbrotherium) .....    | 794      |
| <i>minor</i> .....                      | 603      | <i>eximius</i> (Hyrachyus) .....       | 733      |
| <i>puercensis</i> .....                 | 603      | <i>eximius</i> (Neurankylus) .....     | 70       |
| <i>Eurhinodelphidae</i> .....           | 591      | <i>Exocampe</i> .....                  | 7, 12    |
| <i>Eurhinodelphinae</i> .....           | 591      | <i>arcta</i> .....                     | 12       |
| <i>Eurhinodelphis</i> .....             | 591      | <i>delicatula</i> .....                | 7        |
| <i>bossi</i> .....                      | 592      | <i>minima</i> .....                    | 12       |
| <i>Eurhinosaurus</i> .....              | 129      | <i>ornata</i> .....                    | 12       |
| <i>Eurhipidura</i> .....                | 277      | <i>exoletus</i> (Meschippus) .....     | 674      |
| <i>Eurhipidurae</i> .....               | 277      | <i>exoletus</i> (Michippus) .....      | 674      |
| <i>Eurhinodelphidae</i> .....           | 591      | <i>exornata</i> (Testudo) .....        | 103      |

|                                  | Page     |                              | Page     |
|----------------------------------|----------|------------------------------|----------|
| exortivus (Mylohyus) .....       | 774      | fatalis (Smilodon) .....     | 549      |
| Exostinus .....                  | 246      | fatalis (Trucifelis) .....   | 549      |
| lancensis .....                  | 246      | favosus (Conodectes) .....   | 31       |
| serratus .....                   | 246      | favosus (Seymouria) .....    | 31       |
| expansum (Brontozoum) .....      | 11       | fax (Palaeocrex) .....       | 335      |
| expansus (Anchisauripus) .....   | 11       | feliceps (Brachymeryx) ..... | 791      |
| expansus (Eubrontes) .....       | 11       | felicias (Anancus) .....     | 631      |
| expansus (Siphonocetus) .....    | 572      | felicias (Aphelops) .....    | 749      |
| expansus (Tarsodactylus) .....   | 21       | felicias (Dibelodon) .....   | 631      |
| explanatus (Aublysodon) .....    | 181      | felicias (Elephas) .....     | 646      |
| explanatus (Deinodon) .....      | 181      | felicias (Mastodon) .....    | 631      |
| explanatus (Dromæosaurus) .....  | 181      | felicias (Teloceras) .....   | 749      |
| explanatus (Dryptosaurus) .....  | 181      | Felidae .....                | 539      |
| explanatus (Laelaps) .....       | 181      | Felidi .....                 | 540      |
| exquisita (Amyda) .....          | 111      | Felina .....                 | 550, 550 |
| exsertus (Anchisauripus) .....   | 3        | felina (Deimctis) .....      | 541      |
| exsertus (Brontozoum) .....      | 3        | felina (Dimctis) .....       | 506, 541 |
| exsertus (Eubrontes) .....       | 3        | Felinae .....                | 550      |
| extensa (Platypeltis) .....      | 112      | Felini .....                 | 550      |
| extincta (Pseudemys) .....       | 97       | felinus (Daphænus) .....     | 505      |
| eyra (Felis) .....               | 553      | felinus (Daphænus) .....     | 505      |
| fairbanksi (Pliohippus) .....    | 697      | Felis .....                  | 550      |
| falcatus (Selenichnus) .....     | 20       | atrox .....                  | 552      |
| Falciformes .....                | 310      | augustus .....               | 552      |
| falciformis (Drepanomeryx) ..... | 315      | bebbi .....                  | 552      |
| Falco .....                      | 316, 322 | calcaratus .....             | 554      |
| carolinensis .....               | 321      | californica .....            | 555      |
| columbarius .....                | 322      | canadensis .....             | 554      |
| cooperi .....                    | 315      | centralis .....              | 552      |
| falconella .....                 | 322      | concolor .....               | 552, 553 |
| falconellus .....                | 322      | cougar .....                 | 552      |
| ferrugineus .....                | 316      | cougnar .....                | 552      |
| fusco-caeruleus .....            | 322      | cougnor .....                | 554      |
| fusco-caeruleus .....            | 322      | daggetti .....               | 553      |
| mexicanus .....                  | 322      | eifra .....                  | 553      |
| peregrinus .....                 | 322      | eyra .....                   | 553      |
| sparverius .....                 | 323      | fasciatus .....              | 555      |
| velox .....                      | 315      | floridana .....              | 555      |
| falconella (Falco) .....         | 322      | hawveri .....                | 553      |
| falconellus (Falco) .....        | 322      | hillanus .....               | 553      |
| falconeri (Elephas) .....        | 646      | hillianus .....              | 553      |
| falconeri (Gomphotherium) .....  | 636      | hippolestes .....            | 553      |
| falconeri (Rhynchotherium) ..... | 636      | hyanoides .....              | 553      |
| Falcones .....                   | 314      | imperialis .....             | 553      |
| Falconi .....                    | 314      | inexpectatus .....           | 553      |
| Falconidae .....                 | 320      | longicrus .....              | 553      |
| Falconides .....                 | 314      | lynx .....                   | 555      |
| Falconiformes .....              | 310      | maxima .....                 | 553      |
| Falconinae .....                 | 321      | mercarii .....               | 547      |
| Falconoide .....                 | 313      | onza .....                   | 553      |
| Falconoidea .....                | 314, 320 | oregonensis .....            | 553      |
| falcus (Deinodon) .....          | 177      | parvus .....                 | 555      |
| falcus (Dromæosaurus) .....      | 177      | puma .....                   | 553      |
| falcus (Dryptosaurus) .....      | 177      | rufus .....                  | 555      |
| falcus (Laelaps) .....           | 177      | rufus .....                  | 555      |
| fallax (Triacodon) .....         | 478      | veronis .....                | 554      |
| fallor (Triacodon) .....         | 478      | felix (Diplosaurus) .....    | 146      |
| Farancia .....                   | 269      | felix (Goniopholis) .....    | 146      |
| abacura .....                    | 269      | Felix .....                  | 553      |
| farri (Testudo) .....            | 103      | imperialis .....             | 553      |
| fasciata (Columba) .....         | 345      | felix (Lestosauros) .....    | 260      |
| fasciatus (Felis) .....          | 555      | felix (Platycarpus) .....    | 260      |
| fasciatus (Lynx) .....           | 555      | Feloidæ .....                | 538      |
| Fasianus .....                   | 338      | fenneri (Hypsognathus) ..... | 45       |
| fastigiatus (Crocodylus) .....   | 153      | Fern .....                   | 458, 487 |

|                                   | Page     |                                   | Page     |
|-----------------------------------|----------|-----------------------------------|----------|
| ferox (Æliurodon) .....           | 496      | flagrans (Opisthotomus) .....     | 605      |
| ferox (Agriochærus) .....         | 777      | flagrans (Phenacodus) .....       | 605      |
| ferox (Amyda) .....               | 112      | flammeus (Aluco) .....            | 351      |
| ferox (Aquila) .....              | 318      | flammeus (Asio) .....             | 351      |
| ferox (Bison) .....               | 351      | flammeus (Strix) .....            | 351      |
| ferox (Cænodon) .....             | 464      | flaviventer (Arctomys) .....      | 870      |
| ferox (Coloreodon) .....          | 777      | flaviventer (Marmota) .....       | 870      |
| ferox (Didelphodon) .....         | 390      | flaviventris (Marmota) .....      | 871      |
| ferox (Didelphops) .....          | 390      | flexilis (Aspeipes) .....         | 6        |
| ferox (Hyposaurus) .....          | 147      | flexiloquus (Antipus) .....       | 5        |
| ferox (Labrosaurus) .....         | 174, 184 | flexiloquus (Orthodactylus) ..... | 5        |
| ferox (Megalictis) .....          | 526      | flexus (Monoclonius) .....        | 222, 224 |
| ferox (Patriofelis) .....         | 472      | floreæ (Elphidotarsius) .....     | 929      |
| ferox (Platypeltis) .....         | 112      | floridana (Blarina) .....         | 442      |
| ferox (Priacodon) .....           | 370      | floridana (Cryptotis) .....       | 442      |
| ferox (Sphenacodon) .....         | 53       | floridana (Deirochelys) .....     | 97       |
| ferox (Temnocyon) .....           | 506      | floridana (Macrochelys) .....     | 85       |
| ferox (Testudo) .....             | 112      | floridana (Neofiber) .....        | 895      |
| ferox (Tinodon) .....             | 370      | floridana (Neotoma) .....         | 895      |
| ferox (Triconodon) .....          | 370      | floridana (Pseudemys) .....       | 91       |
| ferox (Trionyx) .....             | 112      | floridana (Pseudostoma) .....     | 879      |
| ferrugineus (Archibuteo) .....    | 316      | floridana (Querquedula) .....     | 306      |
| ferrugineus (Falco) .....         | 316      | floridanum (Gomphotherium) .....  | 636      |
| ferruminatus (Tomioipsis) .....   | 417      | floridanum (Manimut) .....        | 636      |
| ferus (Desmathus) .....           | 770      | floridanum (Metaxytherium) .....  | 656      |
| ferus (Pediobius) .....           | 770      | floridanus (Eumactos) .....       | 520      |
| Fiber .....                       | 900      | floridanus (Felis) .....          | 555      |
| annectens .....                   | 901      | floridanus (Geomys) .....         | 879      |
| nebrascensis .....                | 901      | floridanus (Lepus) .....          | 864      |
| oregonus .....                    | 901      | floridanus (Lynx) .....           | 555      |
| zibethicus .....                  | 901      | floridanus (Machærodus) .....     | 549      |
| zibethicus .....                  | 901      | floridanus (Machairodus) .....    | 549      |
| fiber (Castor) .....              | 887      | floridanus (Mastodon) .....       | 636      |
| fiber-americanus (Castor) .....   | 887      | floridanus (Serridentinus) .....  | 636      |
| fibratus (Gorgosaurus) .....      | 178      | floridanus (Smilodon) .....       | 549      |
| fieldi (Hyphepus) .....           | 15       | floridanus (Sylvilagus) .....     | 864      |
| figginsi (Bison) .....            | 853      | floridanus (Tetrabelodon) .....   | 636      |
| figginsi (Simobison) .....        | 853      | floridanus (Trilophodon) .....    | 636      |
| figginsi (Trigonias) .....        | 740      | floridanus (Trucifelis) .....     | 549      |
| filholanus (Carcinodon) .....     | 481      | floridanus (Ursus) .....          | 520      |
| filatus (Polymastodon) .....      | 384      | floridianus (Mastodon) .....      | 636      |
| filifera (Diatryma) .....         | 283      | floriferus (Orthodactylus) .....  | 16       |
| filiferum (Diatryma) .....        | 283      | fluminalis (Dolichorhinus) .....  | 716      |
| finni (Neomeryx) .....            | 336      | fluminis (Amblycastor) .....      | 885      |
| firmus (Agomphus) .....           | 90       | fluviatilis (Baptomys) .....      | 92       |
| fischeri (Lynx) .....             | 555      | fluviatilis (Metarhinus) .....    | 717      |
| fisheri (Citellus) .....          | 871      | fodiens (Tillotherium) .....      | 856      |
| fisheri (Otospermophilus) .....   | 871      | foliatus (Catopsalis) .....       | 344      |
| fisheri (Spermophilus) .....      | 871      | fontanus (Aspideretes) .....      | 108      |
| fissidens (Bathyopsis) .....      | 617      | fontinalis (Limnophops) .....     | 712      |
| fissidens (Miolabis) .....        | 801      | fontinalis (Palaeosyops) .....    | 712      |
| fissidens (Polymastodon) .....    | 384      | Fontinalis .....                  | 359      |
| fissidens (Procamelus) .....      | 801      | pristina .....                    | 359      |
| fissidens (Protolabis) .....      | 801      | fontis (Cylindrodon) .....        | 907      |
| Fissipeda .....                   | 487, 556 | forcipata (Anoplonassa) .....     | 584      |
| Fissipedes .....                  | 487      | forcipata (Oxyena) .....          | 471      |
| Fissipedia .....                  | 487      | foris (Manteoceras) .....         | 715      |
| fissus (Diadectes) .....          | 34       | Formicariidæ .....                | 354      |
| fissus (Empedias) .....           | 34       | Formicaroidæ .....                | 354      |
| fissus (Empidens) .....           | 34       | Formicaroides .....               | 354      |
| fissus (Monoclonius) .....        | 222      | formosa (Terrapene) .....         | 99       |
| fissus (Periptychus) .....        | 610      | formosa (Xenochelys) .....        | 92       |
| flabellatus (Sternholophus) ..... | 228      | formosum (Aciprion) .....         | 246      |
| flabellatus (Triceratops) .....   | 228      | formosus (Cimolomys) .....        | 880      |
| flagellator (Zarhachis) .....     | 596      | formosus (Entoptychus) .....      | 876      |

|                                     | Page |                                  | Page     |
|-------------------------------------|------|----------------------------------|----------|
| formosus (Grallator) .....          | 13   | fraterculus (Hyposaurus) .....   | 148      |
| formosus (Halodon) .....            | 380  | fraternus (Baptosaurus) .....    | 284      |
| formosus (Hipposyus) .....          | 923  | fraternus (Equus) .....          | 703      |
| formosus (Notharectus) .....        | 923  | fraternus (Mysops) .....         | 904      |
| formosus (Ptilodus) .....           | 380  | frendens (Amphicyon) .....       | 511      |
| formosus (Troodon) .....            | 208  | freudenbergi (Mylodon) .....     | 412      |
| forsteri (Sterna) .....             | 342  | fricki (Amebelodon) .....        | 637      |
| fortis (Allacodon) .....            | 378  | fricki (Gomphotherium) .....     | 637      |
| fortis (Alloodon) .....             | 378  | fricki (Serridentinus) .....     | 638      |
| fortis (Cervus) .....               | 330  | Fringillidæ .....                | 358      |
| fortis (Deinictis) .....            | 542  | Fringillinæ .....                | 358      |
| fortis (Dinictis) .....             | 542  | Fringilloidæ .....               | 354      |
| fortis (Psalodon) .....             | 378  | fritillus (Embolobus) .....      | 60       |
| fossatus (Metamosaurus) .....       | 60   | fritillus (Embolophorus) .....   | 60       |
| fossidens (Brachyprotoma) .....     | 531  | frontata (Mephitis) .....        | 533      |
| fossidens (Mephitis) .....          | 531  | frugivorus (Ignacius) .....      | 447      |
| fossidens (Sorex) .....             | 442  | frugivorus (Pelycodus) .....     | 921, 923 |
| fossiger (Aphelops) .....           | 749  | fugax (Didelphis) .....          | 393      |
| fossiger (Eusyodon) .....           | 749  | fugax (Peratherium) .....        | 398      |
| fossiger (Rhinoceus) .....          | 749  | fugitiva (Sangamonæ) .....       | 880      |
| fossiger (Teleoceras) .....         | 749  | fulciatus (Mosasaurus) .....     | 262      |
| fossilis (Aplodontia) .....         | 906  | Fulica .....                     | 338      |
| fossilis (Cervus) .....             | 829  | americana .....                  | 334      |
| fossilis (Equus) .....              | 709  | minor .....                      | 334      |
| fossilis (Neotoma) .....            | 895  | venustus .....                   | 332      |
| fossilis (Sciurus) .....            | 374  | fulcarina (Hitchcockia) .....    | 4        |
| fossor (Chalicomys) .....           | 883  | Fulcarinæ .....                  | 331      |
| fossor (Palæocastor) .....          | 883  | Fulcinæ .....                    | 338      |
| fossor (Stenofiber) .....           | 883  | fulcoides (Deaneæ) .....         | 4        |
| fossulatus (Merychippus) .....      | 697  | Fulicopus .....                  | 12       |
| fossulatus (Pliohippus) .....       | 697  | giganteus .....                  | 12       |
| fossulatus (Protohippus) .....      | 697  | lyellianus .....                 | 12       |
| foulkii (Hadrosaurus) .....         | 209  | fulculoides (Deaneæ) .....       | 4        |
| foulkii (Trachodon) .....           | 209  | fulculoides (Ornithomites) ..... | 4        |
| foveatus (Aspideretes) .....        | 108  | Fuligula .....                   | 307      |
| foveatus (Trionyx) .....            | 108  | affinis .....                    | 307      |
| fraasi (Platylarodon) .....         | 124  | americana .....                  | 307      |
| fractus (Platomenus) .....          | 106  | marila .....                     | 307      |
| fragilis (Allosaurus) .....         | 174  | Fuliginæ .....                   | 306      |
| fragilis (Androdemus) .....         | 174  | Fulix .....                      | 307      |
| fragilis (Antrodemus) .....         | 174  | Fulmarinæ .....                  | 288      |
| fragilis (Cœlurus) .....            | 185  | Fulmarus .....                   | 289      |
| fragilis (Geranoæctus) .....        | 317  | glacialis .....                  | 289      |
| fragilis (Labrosaurus) .....        | 174  | glupischa .....                  | 289      |
| fragilis (Meniscoæsus) .....        | 382  | fulva (Vulpes) .....             | 502      |
| fragilis (Selenacodon) .....        | 382  | fulvus (Canis) .....             | 602      |
| fragillimus (Amphicœliæ) .....      | 200  | fumeus (Sorex) .....             | 441      |
| francescana (Pliohippus) .....      | 697  | fundaminis (Deltatherium) .....  | 462      |
| francescanus (Pliohippus) .....     | 697  | furcata (Antilope) .....         | 881      |
| franciscæ (Amyda) .....             | 111  | furcatus (Antiacodon) .....      | 755      |
| franciscæ (Trionyx) .....           | 111  | furcatus (Eobasilæus) .....      | 620      |
| francisi (Æleurodon) .....          | 495  | furcatus (Lophiotherium) .....   | 755      |
| francisi (Elephas) .....            | 646  | furcatus (Merycodus) .....       | 831      |
| francisi (Equus) .....              | 705  | furcatus (Sarcodemur) .....      | 755      |
| francisi (Mammut) .....             | 680  | furfifer (Antilocapra) .....     | 885      |
| francisi (Merychippus) .....        | 684  | furfifer (Capromeryx) .....      | 882      |
| francisi (Platygonus) .....         | 773  | furlongi (Canis) .....           | 498      |
| francisi (Pœcilonpondylus) .....    | 48   | furlongi (Cetotherium) .....     | 572      |
| francisi (Protolabis) .....         | 801  | furlongi (Martes) .....          | 588      |
| francisi (Testudo) .....            | 108  | furlongi (Mustela) .....         | 588      |
| frankstonensis (Sorex) .....        | 441  | furscipes (Homodontomys) .....   | 896      |
| fraserianus (Palæosaurus) .....     | 178  | furscipes (Neotoma) .....        | 895, 896 |
| fraserianus (Theodontosaurus) ..... | 178  | fusco-cærulescens (Falco) .....  | 322      |
| fratercula (Conuropsis) .....       | 446  | fuscocerulescens (Falco) .....   | 322      |
| fraterculus (Gavia) .....           | 148  | fuscus (Adelonycteris) .....     | 465      |



|                                      | Page          |                                    | Page     |
|--------------------------------------|---------------|------------------------------------|----------|
| fuscus (Eptesicus) .....             | 455           | Gavialiformes .....                | 147      |
| fuscus (Thomomys) .....              | 373           | Gavialis .....                     | 148      |
| fuscus (Vespertila) .....            | 455           | fraterculus .....                  | 148      |
| fuscus (Vespertilio) .....           | 455           | minor .....                        | 148      |
| gabbii (Priscodelphinus) .....       | 589           | gavialis (Thoracosaurus) .....     | 150      |
| gabbii (Tretosphys) .....            | 589           | Gavialosuchus .....                | 148      |
| galeatus (Eobasileus) .....          | 620           | americanus .....                   | 149      |
| galeatus (Tinoceras) .....           | 620           | Gavidae .....                      | 284      |
| Galecynus .....                      | 490           | Gaviidae .....                     | 284      |
| geismarianus .....                   | 492           | Gaviiformes .....                  | 284      |
| gregorius .....                      | 490           | geismarianus (Cynodontis) .....    | 492      |
| oregonensis .....                    | 491           | geismarianus (Galecynus) .....     | 492      |
| patereulus .....                     | 491           | geismarianus (Nothocyon) .....     | 492      |
| Galera .....                         | 531           | geismarius (Canis) .....           | 492      |
| macrodon .....                       | 531           | Gemitores .....                    | 344      |
| galeus (Triceratops) .....           | 229           | gemmarosæ (Miohippus) .....        | 676      |
| galioornis (Triceratops) .....       | 228           | gemmifer (Blastomeryx) .....       | 818      |
| Galictis .....                       | 531           | gemmifer (Dicrocerus) .....        | 818      |
| macrodon .....                       | 531           | Genomastodon .....                 | 654      |
| Galli .....                          | 323, 324      | willistoni .....                   | 650      |
| Gallidæ .....                        | 323           | Geococcyx .....                    | 347      |
| Galliformes .....                    | 323           | californianus .....                | 347      |
| Gallinacæ .....                      | 323           | Geolabis .....                     | 439      |
| Gallinacæ .....                      | 323           | rhynchæus .....                    | 439      |
| Gallinacei .....                     | 323           | Geomyidæ .....                     | 876      |
| gallinaceus (Ornithopus) .....       | 20            | Geomyina .....                     | 876      |
| Gallinæ .....                        | 323           | Geomyina .....                     | 876, 877 |
| gallinæ (Chriacus) .....             | 461           | Geomyini .....                     | 876      |
| Gallinago .....                      | 337           | Geomyoidea .....                   | 807, 876 |
| Gallini .....                        | 324           | Geomyoidei .....                   | 876      |
| Gallinula .....                      | 334           | Geomys .....                       | 879      |
| Gallinulidæ .....                    | 334           | bisulcatus .....                   | 879      |
| Gallinuloides .....                  | 325           | bursarius .....                    | 879      |
| prentici .....                       | 325           | cisulcatus .....                   | 879      |
| wyomingensis .....                   | 325           | floridanus .....                   | 879      |
| gallinuloides (Anomæpus) .....       | 4             | minor .....                        | 879      |
| gallinuloides (Ornithichnites) ..... | 4             | parvidens .....                    | 879      |
| Gallinuloididæ .....                 | 325           | persimilis .....                   | 879      |
| Galloidæ .....                       | 324           | toxensis .....                     | 879      |
| gallopavo (Meleagris) .....          | 330           | Georgia .....                      | 269      |
| Gallus .....                         | 324, 327, 328 | couperi .....                      | 269      |
| gambeli (Anser) .....                | 303           | Geranoæstus .....                  | 317      |
| gambeli (Hesperomys) .....           | 393           | ales .....                         | 317      |
| gambeli (Peromyscus) .....           | 393           | conterminus .....                  | 317      |
| gambelii (Hesperomys) .....          | 393           | contortus .....                    | 317      |
| gambelii (Peromyscus) .....          | 393           | dananus .....                      | 317      |
| gambelli (Anser) .....               | 303           | fragilis .....                     | 317      |
| Gamphotherium .....                  | 334, 335      | gracilis .....                     | 317      |
| ganei (Heterodontosuchus) .....      | 144           | grinnelli .....                    | 317      |
| ganei (Phytosaurus) .....            | 144           | melanoleucus .....                 | 317      |
| Ganodonta .....                      | 397           | Geranomorphæ .....                 | 330      |
| gapperi (Arvicola) .....             | 399           | gibbesii (Saurocetus) .....        | 581      |
| gapperi (Evotomys) .....             | 399           | gibbi (Osteopygis) .....           | 76       |
| Garialis .....                       | 148           | gibbi (Oxydactylus) .....          | 796      |
| garmani (Mylodon) .....              | 412           | gibbiceps (Anthracotherium) .....  | 759      |
| Garrulina .....                      | 335           | gibbiceps (Octacodon) .....        | 759      |
| gaudrianus (Triisodon) .....         | 465           | gibbiceps (Thecodontosaurus) ..... | 169      |
| gaudryanus (Triisodon) .....         | 465           | gibbosus (Aphanolemur) .....       | 924      |
| gaudryi (Agriochoerus) .....         | 777           | Gidleya .....                      | 844      |
| raulodon (Euhapsis) .....            | 835           | zuniensis .....                    | 844      |
| Gavia .....                          | 284           | gidleyi (Borophagus) .....         | 508      |
| immer .....                          | 284           | gidleyi (Dinocyon) .....           | 508      |
| pusilla .....                        | 284           | gidleyi (Hipparion) .....          | 692      |
| Gaviæ .....                          | 287, 339      | gidleyi (Ischyrotamus) .....       | 903      |
| Gavialidæ .....                      | 148           | gidleyi (Miohippus) .....          | 676      |
| Gavialinæ .....                      | 147           |                                    |          |

| Page                                | Page     |
|-------------------------------------|----------|
| gidleyi (Neohipparion) .....        | 692      |
| gidleyi (Nothodectes) .....         | 446      |
| gidleyi (Otospermophilus) .....     | 371      |
| gidleyi (Phascodon) .....           | 370      |
| gidlovi (Plesiadapis) .....         | 446      |
| gidleyi (Pliocyon) .....            | 508      |
| gidleyi (Subhyracodon) .....        | 741      |
| Gigandipodidae .....                | 1        |
| Gigandipus .....                    | 5, 12    |
| caudatus .....                      | 12       |
| minor .....                         | 5        |
| gigantohomogenes (Dimetrodon) ..... | 55       |
| gigantea (Alabamornis) .....        | 570      |
| gigantea (Bañna) .....              | 72       |
| gigantea (Bellona) .....            | 11       |
| gigantea (Diatryma) .....           | 233      |
| gigantea (Ornithichnites) .....     | 11       |
| gigantea (Pachysena) .....          | 467      |
| giganteum (Brontozoum) .....        | 11       |
| giganteum (Diatryma) .....          | 233      |
| giganteum (Gomphotherium) .....     | 637      |
| giganteum (Mastodon) .....          | 626      |
| giganteum (Titanotherium) .....     | 719      |
| giganteus (Amblyonyx) .....         | 12       |
| giganteus (Anomopus) .....          | 4        |
| giganteus (Bellona) .....           | 11, 12   |
| giganteus (Equus) .....             | 705      |
| giganteus (Eubrontes) .....         | 11       |
| giganteus (Fulicopus) .....         | 12       |
| giganteus (Glyptosaurus) .....      | 253      |
| giganteus (Lepus) .....             | 363      |
| giganteus (Manatus) .....           | 659      |
| giganteus (Mastodon) .....          | 626      |
| giganteus (Menodus) .....           | 719      |
| giganteus (Ornithichnites) .....    | 11, 12   |
| giganteus (Plesiornis) .....        | 19       |
| giganteus (Tetralophodon) .....     | 637      |
| giganteus (Trichechus) .....        | 659      |
| giganteus (Trilophodon) .....       | 637      |
| Gigantitherium .....                | 5, 12    |
| caudatum .....                      | 12       |
| minus .....                         | 5        |
| Gigantofelis .....                  | 523      |
| gigantus (Mastodon) .....           | 626      |
| gigas (Amphicyon) .....             | 511      |
| gigas (Brontotherium) .....         | 722      |
| gigas (Dimetrodon) .....            | 55       |
| gigas (Hydrodamalis) .....          | 637      |
| gigas (Manospondylus) .....         | 183      |
| gigas (Megatylopus) .....           | 303      |
| gigas (Monospondylus) .....         | 183      |
| gigas (Morootherium) .....          | 414      |
| gigas (Onychopus) .....             | 16       |
| gigas (Pliacohenia) .....           | 303      |
| gigas (Polemarchus) .....           | 19       |
| gigas (Protostega) .....            | 73       |
| gigas (Rhytina) .....               | 637      |
| gilberti (Testudo) .....            | 103      |
| gilbertii (Testudo) .....           | 103      |
| gilli (Palaeotetrax) .....          | 326      |
| gilllanus (Anisonchus) .....        | 611      |
| gilli (Palaeotetrax) .....          | 326      |
| gillmorei (Goniopholis) .....       | 146      |
| gillmorei (Proictinia) .....        | 314      |
| Giraffa .....                       | 334      |
| Giraffa—Continued .....             |          |
| nebrascensis .....                  | 334      |
| Giraffidae .....                    | 334      |
| Giraffinae .....                    | 334      |
| giraffinus (Alticamelus) .....      | 300      |
| Giratores .....                     | 344      |
| glacialis (Fulmarus) .....          | 289      |
| gladius (Torosaurus) .....          | 225      |
| glandiferus (Lestosaurus) .....     | 260      |
| glandiferus (Platecarpus) .....     | 260      |
| glareæ (Martes) .....               | 527      |
| glareæ (Plionictis) .....           | 527      |
| Glaucidium .....                    | 350      |
| californicum .....                  | 350      |
| gnoma .....                         | 350      |
| Glaucionetta .....                  | 307      |
| islandica .....                     | 308      |
| glaucogastra (Branta) .....         | 302      |
| Glaucomya .....                     | 375      |
| alpinus .....                       | 375      |
| klamathensis .....                  | 375      |
| sabrinus .....                      | 375      |
| volans .....                        | 375      |
| Glaucosauridae .....                | 46       |
| Glaucosaurinae .....                | 46       |
| Glaucosaurus .....                  | 47       |
| megalops .....                      | 47       |
| glaucaus (Elanus) .....             | 314      |
| Glires .....                        | 356      |
| gliriformis (Ectoganus) .....       | 401      |
| Globicephala .....                  | 586      |
| bæreckii .....                      | 587      |
| Globicephalus .....                 | 587      |
| bæreckii .....                      | 587      |
| Globiceps .....                     | 586      |
| Globidens .....                     | 265      |
| alabamensis .....                   | 265      |
| alabamensis .....                   | 265      |
| *Globidensidae .....                | 264      |
| Globidentidae .....                 | 264      |
| Globideus .....                     | 265      |
| Globiocephalidae .....              | 586      |
| Globiocephalus .....                | 587      |
| Globoscephalidae .....              | 586      |
| glupischa (Fulmarus) .....          | 289      |
| Glutops .....                       | 70       |
| ornatus .....                       | 70       |
| Glyptodon .....                     | 419, 420 |
| clavipes .....                      | 421      |
| euphractus .....                    | 420      |
| mexicanus .....                     | 421      |
| petaliferus .....                   | 420      |
| reticulatus .....                   | 420      |
| rivipacis .....                     | 420      |
| glyptodon (Holops) .....            | 150      |
| glyptodon (Thoracosaurus) .....     | 150      |
| Glyptodonta .....                   | 419      |
| Glyptodontia .....                  | 416, 418 |
| Glyptodontidae .....                | 419      |
| Glyptodontinae .....                | 419      |
| Glyptodontini .....                 | 419      |
| Glyptodontoidae .....               | 418      |
| Glyptops .....                      | 70       |
| belviderensis .....                 | 70       |
| cælatas .....                       | 70       |

|                               | Page                    |                                     | Page     |
|-------------------------------|-------------------------|-------------------------------------|----------|
| <i>Glyptops—Continued</i>     |                         | <i>Gomphotherium—Continued</i>      |          |
| depressus                     | 70                      | productum                           | 638      |
| ornatus                       | 70, 89                  | rectidens                           | 638      |
| pervicax                      | 70                      | republicanum                        | 639      |
| plicatulus                    | 70                      | rugosidens                          | 639      |
| utahensis                     | 70                      | serpentirivale                      | 639      |
| <i>Glyptopsidæ</i>            | 69                      | serridens                           | 639      |
| <i>Glyptosaurus</i>           | 250, 253                | serus                               | 801      |
| anceps                        | 250, 254                | shepardi                            | 639      |
| brevidens                     | 254                     | simplicidens                        | 639      |
| giganteus                     | 253                     | sternbergi                          | 797      |
| hillsi                        | 253                     | tlaxcalæ                            | 639      |
| montanus                      | 254                     | willistoni                          | 639      |
| nodosus                       | 254                     | <i>Goniacodon</i>                   | 465      |
| obtusidens                    | 254                     | gaudrianus                          | 465      |
| ocellatus                     | 254                     | levisanus                           | 466      |
| princeps                      | 254                     | <i>Goniocelys</i>                   | 83       |
| rugosus                       | 254                     | <i>Goniopholidæ</i>                 | 146      |
| sphenodon                     | 254                     | <i>Goniopholididæ</i>               | 146      |
| sylvestris                    | 254                     | <i>Goniopholidiformes</i>           | 146      |
| tuberculatus                  | 254                     | <i>Goniopholinæ</i>                 | 146      |
| <i>Glyptotherium</i>          | 420                     | <i>Goniopholis</i>                  | 146, 147 |
| arizonæ                       | 421                     | affinis                             | 146      |
| texanum                       | 421                     | felix                               | 146      |
| gnoma ( <i>Glaucidium</i> )   | 350                     | gilmorei                            | 146      |
| godfreyi ( <i>Erethizon</i> ) | 912                     | lucasi                              | 146      |
| godmani ( <i>Mastodon</i> )   | 625                     | nanus                               | 146      |
| gomphodus ( <i>Nimravus</i> ) | 543                     | vebbianus                           | 146      |
| <i>Gomphotherium</i>          | 628, 630, 634, 794, 795 | <i>Goniopoda</i>                    | 168      |
| abeli                         | 635                     | <i>Gopherus</i>                     | 101      |
| anguirivale                   | 635                     | atacosæ                             | 101      |
| barbouri                      | 635                     | polyphenus                          | 101      |
| breviceps                     | 635                     | præcedens                           | 101      |
| brevidens                     | 635                     | <i>Gorgosaurus</i>                  | 178      |
| brewsterensis                 | 635                     | fibratus                            | 178      |
| campester                     | 635                     | libratus                            | 178      |
| chapmani                      | 635                     | sternbergi                          | 178      |
| cimarronis                    | 636                     | gouldii ( <i>Plesiosaurus</i> )     | 116      |
| conodon                       | 636                     | gracilis ( <i>Stenomylus</i> )      | 808      |
| dinothorioides                | 636                     | gracile ( <i>Amblotherium</i> )     | 373      |
| elegans                       | 636                     | gracile ( <i>Anchitherium</i> )     | 672      |
| emmonsii                      | 636                     | gracile ( <i>Dolichobrachium</i> )  | 60       |
| euhypodon                     | 636                     | graciliceps ( <i>Nothotherium</i> ) | 466      |
| falconeri                     | 636                     | gracilior ( <i>Anisopus</i> )       | 8        |
| floridanum                    | 636                     | gracilior ( <i>Batrachopus</i> )    | 8        |
| fricki                        | 637                     | gracilior ( <i>Harpedactylus</i> )  | 13       |
| giganteum                     | 637                     | gracilior ( <i>Ornithopus</i> )     | 20       |
| gratum                        | 637                     | gracilior ( <i>Sillimanius</i> )    | 20       |
| guatemalense                  | 637                     | gracilipes ( <i>Macropterna</i> )   | 18       |
| humboldtii                    | 637                     | gracilipes ( <i>Palamopus</i> )     | 18       |
| humboldtii                    | 637                     | gracilis ( <i>Aletomeryx</i> )      | 336      |
| leiddi                        | 637                     | gracilis ( <i>Aletornis</i> )       | 332      |
| ligoniferum                   | 637                     | gracilis ( <i>Amphieyon</i> )       | 491      |
| lulli                         | 637                     | gracilis ( <i>Angistorhinus</i> )   | 143      |
| morrilli                      | 637                     | gracilis ( <i>Anisopus</i> )        | 8        |
| obliquidens                   | 637                     | gracilis ( <i>Aræoscelis</i> )      | 37, 241  |
| obscurum                      | 637                     | gracilis ( <i>Aræoscelis</i> )      | 241      |
| osborni                       | 637                     | gracilis ( <i>Batrachopus</i> )     | 8        |
| paladentatum                  | 637                     | gracilis ( <i>Cathartornis</i> )    | 312      |
| petersoni                     | 638                     | gracilis ( <i>Chirostenotes</i> )   | 186      |
| phippii                       | 638                     | gracilis ( <i>Cimolomys</i> )       | 381      |
| pojoaqueense                  | 638                     | gracilis ( <i>Coslurus</i> )        | 181      |
| præcursor                     | 638                     | gracilis ( <i>Dromæosaurus</i> )    | 181      |
| præcampestre                  | 638                     | gracilis ( <i>Dryolestes</i> )      | 373      |
| proavus                       | 638                     | gracilis ( <i>Ephippus</i> )        | 672      |

| Page                               | Page          |
|------------------------------------|---------------|
| gracilis (Geranoaëtus) .....       | 317           |
| gracilis (Grallator) .....         | 13            |
| gracilis (Hargeria) .....          | 279           |
| gracilis (Harpadactylus) .....     | 13            |
| gracilis (Heniacodon) .....        | 927           |
| gracilis (Hesperomys) .....        | 899           |
| gracilis (Hesperornis) .....       | 279           |
| gracilis (Hitchcockia) .....       | 4             |
| gracilis (Hyopsodus) .....         | 927           |
| gracilis (Hyrachyus) .....         | 733           |
| gracilis (Kalobatippus) .....      | 677           |
| gracilis (Laosaurus) .....         | 206           |
| gracilis (Leptoceratops) .....     | 226           |
| gracilis (Leptochærus) .....       | 752           |
| gracilis (Leptoreodon) .....       | 312           |
| gracilis (Lestosauros) .....       | 200           |
| gracilis (Machærodus) .....        | 547           |
| gracilis (Machairodus) .....       | 547           |
| gracilis (Meryciododon) .....      | 780           |
| gracilis (Microsypsa) .....        | 450           |
| gracilis (Mustela) .....           | 528           |
| gracilis (Notharctus) .....        | 923           |
| gracilis (Nyctodactylus) .....     | 164           |
| gracilis (Nyctosaurus) .....       | 163           |
| gracilis (Oreodon) .....           | 780           |
| gracilis (Orohippus) .....         | 672           |
| gracilis (Pachyæna) .....          | 338, 468      |
| gracilis (Peromyscus) .....        | 894           |
| gracilis (Philohela) .....         | 332           |
| gracilis (Platecarpus) .....       | 260           |
| gracilis (Plectropterna) .....     | 19            |
| gracilis (Pliohippus) .....        | 677           |
| gracilis (Poposaurus) .....        | 172           |
| gracilis (Procamelus) .....        | 798           |
| gracilis (Protohippus) .....       | 677           |
| gracilis (Ptilodus) .....          | 380, 381      |
| gracilis (Putorius) .....          | 528           |
| gracilis (Sarcoclemur) .....       | 924           |
| gracilis (Sinopa) .....            | 478           |
| gracilis (Smilodectes) .....       | 924           |
| gracilis (Smilodon) .....          | 547           |
| gracilis (Smilodontopsis) .....    | 547           |
| gracilis (Stenomylus) .....        | 808           |
| gracilis (Stylacodon) .....        | 375           |
| gracilis (Stypolophus) .....       | 478           |
| gracilis (Typopus) .....           | 23            |
| gracilis (Viverravus) .....        | 478, 483, 487 |
| gracilis (Xestops) .....           | 255           |
| gracilis (Zetodon) .....           | 612           |
| gracillima (Hitchcockia) .....     | 4             |
| gracillima (Platypterna) .....     | 18            |
| gracillimus (Anomopus) .....       | 4             |
| gracillimus (Grallator) .....      | 4             |
| gracillimus (Ornithomimides) ..... | 4             |
| Graculavis .....                   | 293           |
| Graculavus .....                   | 288, 293      |
| agilis .....                       | 288           |
| anceps .....                       | 288           |
| pumilis .....                      | 293           |
| velox .....                        | 293           |
| Graculus .....                     | 293           |
| Idahoensis .....                   | 293           |
| gradata (Domnina) .....            | 436           |
| gradatus (Chalicomys) .....        | 883           |
| gradatus (Palaeocastor) .....      | 883           |
| gradatus (Steneofiber) .....       | 883           |
| Grallæ .....                       | 380, 385      |
| Grallator .....                    | 4, 13         |
| cuneatus .....                     | 13            |
| cursorius .....                    | 13            |
| formosus .....                     | 13            |
| gracilis .....                     | 13            |
| gracillimus .....                  | 4             |
| parallelus .....                   | 3             |
| tenuis .....                       | 13            |
| Grallatores .....                  | 380, 385      |
| Grallatoridæ .....                 | 1             |
| grallipes (Mesoshippus) .....      | 674           |
| grallipes (Pteropelyx) .....       | 216           |
| grammurus (Arctomys) .....         | 871           |
| grammurus (Otospermophilus) .....  | 871           |
| grammurus (Sciurus) .....          | 872           |
| grammurus (Spermophilus) .....     | 871           |
| grandæva (Procolpochelys) .....    | 80            |
| grandævus (Chelone) .....          | 80            |
| grandævus (Oligosimus) .....       | 121           |
| grandævus (Præcodon) .....         | 370           |
| grandævus (Priscodelphinus) .....  | 502           |
| grandævus (Puppigerus) .....       | 80            |
| grandævus (Tetropsphys) .....      | 501           |
| grande (Tinoceras) .....           | 618           |
| grande (Uintatherium) .....        | 618           |
| grandis (Angistorhinus) .....      | 143           |
| grandis (Apatosaurus) .....        | 191           |
| grandis (Brimosauros) .....        | 119           |
| grandis (Camarasaurus) .....       | 191           |
| grandis (Chonespondylus) .....     | 126           |
| grandis (Cimoliasurus) .....       | 119           |
| grandis (Cymbospondylus) .....     | 125           |
| grandis (Deinodon) .....           | 183           |
| grandis (Dinophis) .....           | 267           |
| grandis (Dryosaurus) .....         | 181           |
| grandis (Hemipsalodon) .....       | 481           |
| grandis (Hyrachyus) .....          | 733           |
| grandis (Meryciodus) .....         | 831           |
| grandis (Morosaurus) .....         | 191           |
| grandis (Ornithomimus) .....       | 180, 183      |
| grandis (Palæophis) .....          | 267           |
| grandis (Promerycochærus) .....    | 784           |
| grandis (Pterodon) .....           | 491           |
| grandis (Saniwa) .....             | 252           |
| grandis (Struthiomimus) .....      | 183           |
| grandis (Theropseura) .....        | 50            |
| grandis (Thinosaurus) .....        | 188           |
| grandis (Thoracosaurus) .....      | 150           |
| grandis (Triacodon) .....          | 419           |
| grandis (Vespertilio) .....        | 455           |
| grangeri (Aspideretes) .....       | 109           |
| grangeri (Entomolestes) .....      | 451           |
| grangeri (Leptomus) .....          | 903           |
| grangeri (Mesomeryx) .....         | 755           |
| grangeri (Palæosypsa) .....        | 712           |
| grangeri (Paramys) .....           | 903           |
| grangeri (Sinopa) .....            | 478           |
| grangeri (Triplopus) .....         | 735           |
| grangeri (Wasatchia) .....         | 753           |
| granifer (Aspideretes) .....       | 109           |
| granilis (Procamelus) .....        | 798           |
| granulosus (Peltosaurus) .....     | 254           |
| Graphemys .....                    | 97            |

|                                    | Page |                                     | Page     |
|------------------------------------|------|-------------------------------------|----------|
| Graphiodon .....                   | 598  | Gryposaurus .....                   | 212, 213 |
| vinearius .....                    | 598  | murabilis .....                     | 214      |
| Graptemys .....                    | 98   | notabilis .....                     | 214      |
| inornata .....                     | 98   | selwyni .....                       | 212      |
| gratum (Cordillerion) .....        | 631  | grypus (Crocodilus) .....           | 153      |
| gratum (Gomphotherium) .....       | 631  | grypus (Crocodylus) .....           | 153      |
| gratum (Hipparion) .....           | 692  | guadianus (Trisodon) .....          | 465      |
| gratum (Hippotherium) .....        | 692  | guarana (Plegadis) .....            | 299      |
| gratum (Neohipparion) .....        | 692  | guatemalense (Gomphotherium) .....  | 637      |
| gratus (Ananeus) .....             | 631  | guatemalensis (Serridentinus) ..... | 637      |
| Gravigrada .....                   | 403  | gubernator (Agelaius) .....         | 358      |
| Gravigradi .....                   | 403  | gubernator (Psarocolius) .....      | 358      |
| Gravigradidæ .....                 | 403  | gubernator (Scoleophagus) .....     | 358      |
| gravis (Emys) .....                | 92   | guiotianus (Agriochærus) .....      | 777      |
| gravis (Notomorpha) .....          | 92   | Gulina .....                        | 530      |
| grayi (Apatodontosaurus) .....     | 128  | Gulo .....                          | 530      |
| greenlandica (Phoca) .....         | 568  | arcticus .....                      | 531      |
| gregarius (Cynodictis) .....       | 490  | borealis .....                      | 531      |
| gregarius (Galecyne) .....         | 490  | luscus .....                        | 531      |
| gregarius (Nothocyon) .....        | 490  | gulo (Oxyæna) .....                 | 471      |
| gregarius (Pseudocynodictis) ..... | 490  | gulo (Plesiosaurus) .....           | 116      |
| gregori (Hymenarctos) .....        | 523  | Gulonæ .....                        | 530      |
| gregorii (Dicatherium) .....       | 744  | Gulonina .....                      | 530      |
| gregorii (Nothocyon) .....         | 492  | Gulonina .....                      | 530      |
| gregorii (Metacænopus) .....       | 744  | Gulonini .....                      | 530      |
| gregoryi (Agriotherium) .....      | 523  | guttatus (Aspideretes) .....        | 109      |
| gregoryi (Botitanops) .....        | 712  | guttatus (Trionyx) .....            | 109      |
| gregoryi (Promerycochærus) .....   | 784  | guyotianus (Agriochærus) .....      | 777      |
| gregoryi (Trigonia) .....          | 740  | guyotii (Desmatotherium) .....      | 725      |
| Gressores .....                    | 293  | guyotii (Helaletes) .....           | 725      |
| grinnelli (Geranoaëtus) .....      | 317  | Gymnarthria .....                   | 32       |
| grinnellii (Crocodilus) .....      | 153  | Gymnarthridæ .....                  | 32       |
| grinnellii (Crocodylus) .....      | 153  | Gymnarthriiformes .....             | 32       |
| griseigena (Podicipes) .....       | 785  | Gymnarthus .....                    | 32       |
| griseus (Macrorhamphus) .....      | 337  | willoughbyi .....                   | 32       |
| griseus (Sciurus) .....            | 874  | Gymnogyps .....                     | 312      |
| Grisson .....                      | 531  | amplus .....                        | 312      |
| macrodon .....                     | 531  | californianus .....                 | 312      |
| Grisoniæ .....                     | 531  | Gymnoptichini .....                 | 891      |
| grendlendica (Phoca) .....         | 568  | Gymnoptychus .....                  | 881, 890 |
| greenlandica (Pagophilus) .....    | 568  | chrysodon .....                     | 890      |
| greenlandica (Pagophoca) .....     | 568  | minimus .....                       | 881      |
| greenlandica (Phoca) .....         | 568  | minor .....                         | 881      |
| greenlandicus (Dicrostonyx) .....  | 899  | minutus .....                       | 881      |
| greenlandicus (Mus) .....          | 899  | trilophus .....                     | 881      |
| greenlandicus (Rangifer) .....     | 825  | Gypastidæ .....                     | 310, 820 |
| Gruæ .....                         | 331  | Gypochelys .....                    | 85       |
| Gruidæ .....                       | 331  | Gypsonictops .....                  | 432      |
| Gruiformes .....                   | 330  | hypoconus .....                     | 432      |
| Gruinæ .....                       | 331  | Gyrantes .....                      | 344      |
| Gruoidea .....                     | 331  | Gyremys .....                       | 94       |
| Gruoidæ .....                      | 331  | spectabilis .....                   | 94       |
| Grus .....                         | 331  | Habrosaurus .....                   | 256      |
| americanus .....                   | 331  | dilatatus .....                     | 256      |
| canadensis .....                   | 332  | hadriana (Testudo) .....            | 100      |
| haydeni .....                      | 332  | Hadrianus .....                     | 100      |
| marshi .....                       | 332  | allabatus .....                     | 100      |
| mexicanus .....                    | 332  | corsoni .....                       | 100      |
| minor .....                        | 332  | majusculus .....                    | 100      |
| nobilis .....                      | 332  | octonarius .....                    | 100      |
| parvus .....                       | 332  | quadratus .....                     | 100      |
| pratensis .....                    | 332  | robustus .....                      | 100      |
| prentici .....                     | 332  | schucherti .....                    | 100      |
| proavus .....                      | 332  | tumidus .....                       | 100      |
| gryphus (Vespertilio) .....        | 464  | utahensis .....                     | 100      |

|                               | Page     |                                     | Page     |
|-------------------------------|----------|-------------------------------------|----------|
| Hadrocyon .....               | 508      | Haplocanthus .....                  | 192      |
| mohavensis .....              | 508      | priscus .....                       | 192      |
| Hadrohyus .....               | 791      | Haploceras .....                    | 840      |
| supremus .....                | 791      | Haploceros .....                    | 840      |
| Hadrosauridae .....           | 208      | montanus .....                      | 841      |
| Hadrosaurinae .....           | 209      | Haplocerus .....                    | 840      |
| Hadrosaurus .....             | 209      | montanus .....                      | 841      |
| agilis .....                  | 215      | haplocerus (Episcoposaurus) .....   | 144      |
| annectens .....               | 212      | haplocerus (Phytosaurus) .....      | 144      |
| breviceps .....               | 211      | Haploconus .....                    | 611      |
| calamarius .....              | 211      | angustus .....                      | 611      |
| cavatus .....                 | 209      | coniferus .....                     | 612      |
| foulkii .....                 | 209      | cophater .....                      | 612      |
| longiceps .....               | 211      | corniculatus .....                  | 611      |
| minor .....                   | 209      | lineatus .....                      | 611      |
| mirabilis .....               | 211      | mandibularis .....                  | 611      |
| occidentalis .....            | 213      | Haplodon .....                      | 906      |
| paucidentis .....             | 224      | haplodon (Arctodus) .....           | 523      |
| perangulatus .....            | 211      | haplodon (Arctotherium) .....       | 523      |
| tripos .....                  | 209      | haplodon (Ursus) .....              | 523      |
| Haliastur .....               | 314      | Haplodontia .....                   | 907      |
| Haliastros .....              | 319      | Haplodontia .....                   | 906      |
| leucocephalus .....           | 319      | Haplodontidae .....                 | 901      |
| Haliaetus .....               | 319      | Haplodontidae .....                 | 901      |
| Haliaetus .....               | 319      | Haplodontidae .....                 | 901      |
| leucocephalus .....           | 319      | Haplomyxus .....                    | 445      |
| Halinatus .....               | 319      | speiranius .....                    | 445      |
| leucocephalus .....           | 319      | Haplomys .....                      | 905      |
| haliaetus (Falco) .....       | 320      | liolophus .....                     | 905      |
| haliaetus (Pandion) .....     | 321      | hardingi (Hylomys) .....            | 14       |
| haliaetus (Aquila) .....      | 321      | Harelda .....                       | 307      |
| Halicore .....                | 655      | hyemalis .....                      | 307      |
| Halicore .....                | 658      | hargeri (T. yearion) .....          | 485      |
| Halicore .....                | 655      | hargeri (Miacis) .....              | 485      |
| halidanus (Palaeophis) .....  | 267      | hargeri (Vulpavus) .....            | 485      |
| Halitherium .....             | 655      | Hargeria .....                      | 279      |
| Halitherium .....             | 655      | gracilis .....                      | 279      |
| Halitherium .....             | 655      | harlani (Bottosaurus) .....         | 157      |
| antiquum .....                | 655      | harlani (Crocodilus) .....          | 158      |
| inornatum .....               | 655      | harlani (Hydrarchos) .....          | 570      |
| halius (Nectosaurus) .....    | 242      | harlani (Hydrarchus) .....          | 570      |
| Hallopas .....                | 187      | harlani (Hydrargos) .....           | 570      |
| victor .....                  | 187      | harlani (Mylodon) .....             | 412, 414 |
| Hallopodidae .....            | 187      | harlani (Priscodelphinus) .....     | 582      |
| Hallopodinae .....            | 187      | Harianus .....                      | 851      |
| Hallopidae .....              | 187      | americanus .....                    | 851      |
| Hallopoda .....               | 187      | harlani (Priscodelphinus) .....     | 582      |
| Hallopus .....                | 187      | haroldcooki (Elephas) .....         | 646      |
| victor .....                  | 187      | haroldcooki (Hesperopithecus) ..... | 771      |
| Halodon .....                 | 880, 583 | haroldcooki (Prosthenops) .....     | 771      |
| formosus .....                | 380      | Harpagolestes .....                 | 469      |
| sculptus .....                | 383      | breviceps .....                     | 469      |
| serratus .....                | 380      | immanis .....                       | 469      |
| halophila (Amyda) .....       | 111      | macrocephalus .....                 | 469      |
| halophilus (Trionyx) .....    | 111      | uintensis .....                     | 469      |
| hamatus (Anticheiropus) ..... | 5        | Harpagosauria .....                 | 167, 168 |
| hamatus (Coryphodon) .....    | 615, 616 | Harpagosaurus .....                 | 256      |
| hamatus (Labiodon) .....      | 41       | excedens .....                      | 256      |
| Hapalodectes .....            | 469      | parvus .....                        | 256      |
| compressus .....              | 469      | Harpalodon .....                    | 483, 485 |
| leptognathus .....            | 470      | sylvestris .....                    | 483, 485 |
| Haplacanthosaurus .....       | 192      | vulpinus .....                      | 483      |
| Haplocanthosaurus .....       | 192      | Harpodactylus .....                 | 13       |
| priscus .....                 | 192      | crassus .....                       | 13       |
| utterbackii .....             | 192      | gracillior .....                    | 13       |

|   | Page     |   | Page          |
|---|----------|---|---------------|
| <i>Harpedactylus—Continued</i>              |          | <i>Helaletini</i>                         | 723           |
| <i>gracilis</i>                             | 13       | <i>Helcura</i>                            | 14            |
| <i>tenuissimus</i>                          | 13       | <i>angunea</i>                            | 14            |
| <i>harrisonensis</i> ( <i>Merychylus</i> )  | 787      | <i>caudata</i>                            | 14            |
| <i>harrisonensis</i> ( <i>Ticholeptus</i> ) | 787      | <i>littoralis</i>                         | 14            |
| <i>hartshornianus</i> ( <i>Amphicyon</i> )  | 605      | <i>surgeus</i>                            | 14            |
| <i>hartshornianus</i> ( <i>Daphenus</i> )   | 605      | <i>helenae</i> ( <i>Eporeodon</i> )       | 781           |
| <i>hartshornianus</i> ( <i>Daphenus</i> )   | 505      | <i>helenae</i> ( <i>Eucrotaphus</i> )     | 781           |
| <i>harundivorax</i> ( <i>Tanyorhinus</i> )  | 716      | <i>Helicops</i>                           | 269           |
| <i>hatcheri</i> ( <i>Baëna</i> )            | 72       | <i>abacura</i>                            | 269           |
| <i>hatcheri</i> ( <i>Brontotherium</i> )    | 722      | <i>Heliohippus</i>                        | 670           |
| <i>hatcheri</i> ( <i>Deinosuchus</i> )      | 156      | <i>Heliotherium</i>                       | 671           |
| <i>hatcheri</i> ( <i>Diceratops</i> )       | 226      | <i>procyoninum</i>                        | 671           |
| <i>hatcheri</i> ( <i>Epigaelus</i> )        | 909      | <i>Heliscomys</i>                         | 880           |
| <i>hatcheri</i> ( <i>Epigaulus</i> )        | 909      | <i>parvus</i>                             | 880           |
| <i>hatcheri</i> ( <i>Equus</i> )            | 705      | <i>vetus</i>                              | 880           |
| <i>hatcheri</i> ( <i>Lanceosaurus</i> )     | 258      | <i>heloceras</i> ( <i>Menodus</i> )       | 719           |
| <i>hatcheri</i> ( <i>Paleospiza</i> )       | 359      | <i>heloceras</i> ( <i>Titanotherium</i> ) | 719           |
| <i>hatcheri</i> ( <i>Paleostruthus</i> )    | 359      | <i>helocerus</i> ( <i>Titanotherium</i> ) | 719           |
| <i>hatcheri</i> ( <i>Pediomys</i> )         | 300      | <i>Helodectes</i>                         | 42            |
| <i>hatcheri</i> ( <i>Phobosuchus</i> )      | 156      | <i>isaaci</i>                             | 42            |
| <i>hatcheri</i> ( <i>Promerycocharus</i> )  | 784      | <i>pandius</i>                            | 42            |
| <i>hatcheri</i> ( <i>Protolambda</i> )      | 300      | <i>paridens</i>                           | 42            |
| <i>hatcheri</i> ( <i>Protoptychus</i> )     | 911      | <i>Heloderma</i>                          | 253           |
| <i>hatcheri</i> ( <i>Rhineura</i> )         | 250      | <i>matthewi</i>                           | 253           |
| <i>hatcheri</i> ( <i>Rhineura</i> )         | 250      | <i>Helodermidae</i>                       | 252           |
| <i>Hatteria</i>                             | 134      | <i>Helodermatidae</i>                     | 252           |
| <i>Hatteridae</i>                           | 134      | <i>Helodermatidae</i>                     | 252           |
| <i>hawveri</i> ( <i>Felis</i> )             | 553      | <i>Helodermatoides</i>                    | 252           |
| <i>hawveri</i> ( <i>Nothrotherium</i> )     | 406      | <i>Helodermatoides</i>                    | 253           |
| <i>haydeni</i> ( <i>Elurodon</i> )          | 495      | <i>Helodermoides</i>                      | 253           |
| <i>haydeni</i> ( <i>Canis</i> )             | 495      | <i>tuberculatus</i>                       | 254           |
| <i>haydeni</i> ( <i>Echmatemys</i> )        | 95       | <i>Helohippus</i>                         | 670           |
| <i>haydeni</i> ( <i>Emys</i> )              | 95       | <i>pumilus</i>                            | 671           |
| <i>haydeni</i> ( <i>Grus</i> )              | 332      | <i>Helohyidae</i>                         | 753, 760      |
| <i>haydeni</i> ( <i>Leptictis</i> )         | 431      | <i>Helohyus</i>                           | 688, 753, 760 |
| <i>haydeni</i> ( <i>Paleolagus</i> )        | 365      | <i>etsagicus</i>                          | 688, 753      |
| <i>haydenianus</i> ( <i>Didymictis</i> )    | 482      | <i>lentus</i>                             | 761           |
| <i>haydenianus</i> ( <i>Dysganus</i> )      | 216      | <i>milleri</i>                            | 761           |
| <i>haydenianus</i> ( <i>Vivveravus</i> )    | 482      | <i>pliocolon</i>                          | 761           |
| <i>haydenii</i> ( <i>Paleolagus</i> )       | 665      | <i>validus</i>                            | 761           |
| <i>hayesi</i> ( <i>Tapirus</i> )            | 731      | <i>Helopanoplia</i>                       | 108           |
| <i>hayi</i> ( <i>Baëna</i> )                | 72       | <i>distincta</i>                          | 108           |
| <i>hayi</i> ( <i>Diplodocus</i> )           | 199      | <i>Helotherium</i>                        | 670           |
| <i>hayi</i> ( <i>Elephas</i> )              | 646      | <i>Hemicacodon</i>                        | 926           |
| <i>hayi</i> ( <i>Testudo</i> )              | 103      | <i>gracilis</i>                           | 927           |
| <i>haysi</i> ( <i>Tapirella</i> )           | 731      | <i>nanus</i>                              | 927           |
| <i>haysii</i> ( <i>Tapirus</i> )            | 731      | <i>pygmaeus</i>                           | 927           |
| <i>haysii</i> ( <i>Tetracaulodon</i> )      | 685      | <i>pucillus</i>                           | 928           |
| <i>hazenianus</i> ( <i>Deinodon</i> )       | 177      | <i>Hemicaulodon</i>                       | 637           |
| <i>hazenianus</i> ( <i>Dryptosaurus</i> )   | 177      | <i>effodiens</i>                          | 637           |
| <i>Hebe</i>                                 | 354      | <i>hemiconus</i> ( <i>Phenacodus</i> )    | 605           |
| <i>schucherti</i>                           | 354      | <i>Hemicyon</i>                           | 512           |
| <i>hebraica</i> ( <i>Baëna</i> )            | 73       | <i>barstowensis</i>                       | 512           |
| <i>hebraicum</i> ( <i>Chisternon</i> )      | 73       | <i>californicus</i>                       | 512           |
| <i>heckmani</i> ( <i>Acherontemys</i> )     | 84       | <i>ursinus</i>                            | 512           |
| <i>heilprinianus</i> ( <i>Trisodon</i> )    | 465, 466 | <i>Hemicyoninae</i>                       | 512           |
| <i>Helagras</i>                             | 271      | <i>Hemiganus</i>                          | 399           |
| <i>prisciformis</i>                         | 271      | <i>otariidens</i>                         | 399           |
| <i>Helaletes</i>                            | 724, 725 | <i>hemionus</i> ( <i>Cervus</i> )         | 821           |
| <i>boops</i>                                | 724      | <i>hemionus</i> ( <i>Dorcelaphus</i> )    | 821           |
| <i>guyotii</i>                              | 725      | <i>hemionus</i> ( <i>Odocoileus</i> )     | 821           |
| <i>minusculeus</i>                          | 724      | <i>Hemipsalodon</i>                       | 480           |
| <i>nanus</i>                                | 724      | <i>grandis</i>                            | 481           |
| <i>Helaletidae</i>                          | 723      | <i>hemispherica</i> ( <i>Emys</i> )       | 101           |
| <i>Helaletinae</i>                          | 723      | <i>Hemithlæus</i>                         | 608, 612      |

|                                 | Page     |                                     | Page     |
|---------------------------------|----------|-------------------------------------|----------|
| <i>Hemithlæus—Continued</i>     |          | <i>Hesperornis—Continued</i>        |          |
| baldwini .....                  | 608      | gracilis .....                      | 279      |
| corniculatus .....              | 611      | montana .....                       | 279      |
| kowalevskianus .....            | 612      | montanus .....                      | 279      |
| hennemi (Pareiasaurus) .....    | 39       | regalis .....                       | 279      |
| <i>Heptacodon</i> .....         | 759      | <i>Hesperornithes</i> .....         | 277      |
| armatus .....                   | 759      | <i>Hesperornithidæ</i> .....        | 278      |
| curtus .....                    | 759      | <i>Hesperornithiformes</i> .....    | 277      |
| <i>Heptodon</i> .....           | 723      | <i>Hesperornithoidea</i> .....      | 277      |
| calculus .....                  | 724      | <i>Hesperornithomorphi</i> .....    | 277      |
| posticus .....                  | 724      | hesperus (Chalicomys) .....         | 883      |
| singularis .....                | 724      | hesperus (Desmostylus) .....        | 655      |
| ventorum .....                  | 724      | hesperus (Stenocfiber) .....        | 883      |
| <i>Herbivora</i> .....          | 601, 837 | hesterna (Auchenia) .....           | 803      |
| hermani (Ornitholestes) .....   | 186      | hesterna (Micropalama) .....        | 337      |
| hermanni (Cœlurus) .....        | 186      | hesternus (Canelops) .....          | 803      |
| hermanni (Ornitholestes) .....  | 186      | hesternus (Hologenisicus) .....     | 803      |
| hermitanus (Hylopus) .....      | 14       | hesternus (Placerias) .....         | 63       |
| hermitensis (Hylopus) .....     | 14       | <i>Heterapsida</i> .....            | 65       |
| hermitus (Hylopus) .....        | 14       | heteroclitus (Ancyrops) .....       | 3        |
| <i>Herodia</i> .....            | 293      | heteroclitus (Cetophis) .....       | 581      |
| <i>Herodias</i> .....           | 295      | heterodactylum (Chirotherium) ..... | 9        |
| egretta .....                   | 295      | heterodactylus (Therapsopus) .....  | 9        |
| herodias (Ardea) .....          | 294      | heterodactylus (Therapsopus) .....  | 9        |
| <i>Herodii</i> .....            | 293, 295 | heterodon (Alligator) .....         | 155      |
| <i>Herodindæ</i> .....          | 294      | heterodon (Allognathosuchus) .....  | 155      |
| <i>Herodiones</i> .....         | 293      | heterodon (Crocodilus) .....        | 155      |
| <i>Herodius</i> .....           | 295      | heterodon (Crocodylus) .....        | 155      |
| <i>Herpedactylus</i> .....      | 13       | heterodon (Cyclopidius) .....       | 790      |
| <i>Herpestoidea</i> .....       | 438      | heterodon (Dolichorhinus) .....     | 716      |
| herpestoides (Oödetes) .....    | 486      | <i>Heterodontosuchus</i> .....      | 144      |
| <i>Herpetairius</i> .....       | 373      | ganei .....                         | 144      |
| arcuatus .....                  | 373      | heterodontus (Procamelus) .....     | 801      |
| <i>Herpetomorpha</i> .....      | 129      | heterodontus (Protolabis) .....     | 801      |
| <i>Herpetotherium</i> .....     | 398      | <i>Heterofelis</i> .....            | 546      |
| marsupium .....                 | 393      | catocopsis .....                    | 546      |
| herpichanus (Crocodilus) .....  | 153      | coloradensis .....                  | 546      |
| herpichanus (Crocodylus) .....  | 153      | heteroglypta (Platypeltis) .....    | 112      |
| <i>Hesperlyx</i> .....          | 771      | heteroglyptus (Trionyx) .....       | 118      |
| vagrans .....                   | 771      | <i>Heteromeryx</i> .....            | 813      |
| hesperia (Clemmys) .....        | 94       | dispar .....                        | 813      |
| hesperium (Aceratherium) .....  | 744      | transversus .....                   | 813      |
| hesperium (Diceratherium) ..... | 774      | <i>Heteromyida</i> .....            | 867, 880 |
| hesperius (Adocus) .....        | 89       | <i>Heteromyina</i> .....            | 880      |
| hesperius (Hypertragulus) ..... | 813      | <i>Heteromyina</i> .....            | 880      |
| hesperius (Rhinoceros) .....    | 744      | <i>Heterotitanops</i> .....         | 713      |
| hesperius (Tayassu) .....       | 775      | parvus .....                        | 713      |
| <i>Hesperocetus</i> .....       | 582      | hexagonata (Testudo) .....          | 103      |
| californicus .....              | 582      | hexagonus (Piptomerus) .....        | 121      |
| <i>Hesperornis</i> .....        | 278      | <i>Hexodon</i> .....                | 398      |
| <i>Hesperomyidæ</i> .....       | 891      | hians (Paramys) .....               | 903      |
| <i>Hesperomyiæ</i> .....        | 891      | hians (Prototomus) .....            | 478      |
| <i>Hesperomys</i> .....         | 893      | hians (Pseudotomus) .....           | 903      |
| boylii .....                    | 893      | hians (Sinopa) .....                | 476      |
| gambeli .....                   | 893      | hians (Stypolophus) .....           | 476      |
| gambelli .....                  | 898      | hians (Tinoceras) .....             | 618      |
| gracilis .....                  | 894      | hians (Uintatherium) .....          | 618      |
| leucopus .....                  | 893      | hiantidens (Anaptogonia) .....      | 900      |
| loxodon .....                   | 893      | Hicnodonts .....                    | 415      |
| maniculatus .....               | 893      | hicksi (Ananeus) .....              | 681      |
| <i>Hesperopithecus</i> .....    | 770, 991 | hicksi (Teleoceras) .....           | 750      |
| haroldcookii .....              | 771      | hicksi (Trilophodon) .....          | 681      |
| <i>Hesperornidæ</i> .....       | 278      | <i>Hierosaurus</i> .....            | 239      |
| <i>Hesperornis</i> .....        | 278      | sternbergi .....                    | 239      |
| altus .....                     | 279      | sternbergii .....                   | 239      |
| crassipes .....                 | 279      | hillanus (Felis) .....              | 553      |



|                                | Page               |                                   | Page |
|--------------------------------|--------------------|-----------------------------------|------|
| hilli (Trachemys) .....        | 97                 | Hippotherium—Continued            |      |
| hilli (Winfieldia) .....       | 50                 | calamariun .....                  | 684  |
| hillianus (Felis) .....        | 553                | gratum .....                      | 692  |
| hillia (Glyptosaurus) .....    | 253                | ingenuum .....                    | 692  |
| Hipparion .....                | 690, 691, 708      | isonesum .....                    | 685  |
| affine .....                   | 691                | isosensum .....                   | 685  |
| anthonyi .....                 | 692                | montezuma .....                   | 693  |
| calamariun .....               | 684                | montezumæ .....                   | 693  |
| callodonte .....               | 693                | occidentale .....                 | 693  |
| coloradense .....              | 692                | peninsulatum .....                | 694  |
| condoni .....                  | 692                | plicatile .....                   | 694  |
| cragini .....                  | 692                | rectidens .....                   | 694  |
| dolichops .....                | 692                | retrusum .....                    | 689  |
| eurystylum .....               | 692                | seversum .....                    | 685  |
| gidleyi .....                  | 692                | sinclairi .....                   | 694  |
| gratum .....                   | 692                | sinclairii .....                  | 694  |
| ingenuum .....                 | 692                | sincleri .....                    | 694  |
| isonesum .....                 | 685                | speciosum .....                   | 687  |
| lenticulare .....              | 693                | sphenodus .....                   | 686  |
| leptode .....                  | 693                | venustum .....                    | 694  |
| minimum .....                  | 682                | Hirundinida .....                 | 354  |
| minor .....                    | 693                | hispidæ (Pugomys) .....           | 563  |
| minus .....                    | 693                | hispidæ (Phoen) .....             | 563  |
| mohavense .....                | 693                | hispidæ (Pusa) .....              | 563  |
| molle .....                    | 693                | hispidus (Sigmodon) .....         | 894  |
| montezumæ .....                | 693                | histrionica (Anas) .....          | 308  |
| occidentale .....              | 693                | Histrionicus .....                | 308  |
| paniense .....                 | 685                | histrionicus .....                | 308  |
| peninsulatum .....             | 694                | immutus .....                     | 308  |
| phlegon .....                  | 694                | histrionicus (Histrionicus) ..... | 308  |
| platystyle .....               | 694                | hitchcocki (Anchisauripus) .....  | 3    |
| plicatile .....                | 694                | hitchcocki (Stenomylus) .....     | 809  |
| princeps .....                 | 708                | Hitchcockia .....                 | 4    |
| rectidens .....                | 694                | fulcæria .....                    | 4    |
| relictum .....                 | 686                | gracilis .....                    | 4    |
| retrusum .....                 | 689                | gracillima .....                  | 4    |
| saincleri .....                | 694                | hitchcockii (Anchisauripus) ..... | 3    |
| seversum .....                 | 686                | holælin (Colymbus) .....          | 285  |
| sinclairi .....                | 694                | Holcodus .....                    | 261  |
| sinclairii .....               | 694                | acutidens .....                   | 261  |
| speciosum .....                | 687                | hollandi (Desmatodon) .....       | 36   |
| sphenodus .....                | 686                | hollandi (Dinocherus) .....       | 765  |
| tehonense .....                | 692                | hollandi (Dinohyus) .....         | 765  |
| venustum .....                 | 694                | hollandi (Echmatenys) .....       | 95   |
| whitneyi .....                 | 695                | hollandi (Moropus) .....          | 682  |
| Hippidion .....                | 696                | hollandi (Promerycocherus) .....  | 784  |
| interpolatum .....             | 697                | hollandi (Testudo) .....          | 103  |
| spectans .....                 | 698                | Hollopus .....                    | 188  |
| Hippidium .....                | 696                | holmesi (Equus) .....             | 704  |
| interpolatum .....             | 697                | holmesi (Hydrochærus) .....       | 915  |
| spectans .....                 | 698                | holmesii (Colophodon) .....       | 581  |
| Hippodon .....                 | 687                | holmesii (Phocodon) .....         | 679  |
| speciosus .....                | 687                | holmesii (Squalodon) .....        | 581  |
| hippodus (Allomys) .....       | 905                | Holomeniscus .....                | 803  |
| hippodus (Meniscomys) .....    | 905                | californicus .....                | 803  |
| hippodus (Protogaulus) .....   | 905                | hesternus .....                   | 805  |
| Hippoidea .....                | 664                | macrocephalus .....               | 804  |
| hippolestes (Felis) .....      | 558                | sulcatus .....                    | 805  |
| hippophagus (Tephrocyon) ..... | 510                | vitakerianus .....                | 805  |
| hippophagus (Tomarectus) ..... | 510                | Holops .....                      | 149  |
| Hipposyus .....                | 922                | basitruncatus .....               | 149  |
| formosus .....                 | 923                | brevispinis .....                 | 149  |
| robustior .....                | 923                | brevispinus .....                 | 149  |
| Hippotherina .....             | 680                | cordatus .....                    | 149  |
| Hippotherium .....             | 684, 690, 691, 708 | glyptodon .....                   | 180  |
| affine .....                   | 691                | obscurus .....                    | 180  |

|                            | Page     |                               | Page     |
|----------------------------|----------|-------------------------------|----------|
| Holops— <i>Continued</i>   |          | Hoplosuchus                   | 139      |
| pneumaticus                | 150      | kayi                          | 139      |
| tenebrosus                 | 149      | horridus (Aublysodon)         | 177      |
| Holosaurus                 | 261      | horridus (Ceratops)           | 229      |
| abruptus                   | 261      | horridus (Crotalus)           | 271      |
| holyokensis (Apatichnus)   | 5        | horridus (Demodon)            | 177, 183 |
| holyokensis (Podokesaurus) | 187      | horridus (Dinodon)            | 177      |
| Homacodon                  | 754      | horridus (Episcoposaurus)     | 144      |
| priscus                    | 754      | horridus (Hyenodon)           | 480      |
| puellus                    | 754      | horridus (Megalosaurus)       | 177      |
| vagus                      | 754      | horridus (Mosasaurus)         | 262      |
| Homo                       | 413, 916 | horridus (Neohyænodon)        | 480      |
| nevadensis                 | 413      | horridus (Triceratops)        | 229      |
| Homocamelus                | 799      | horrificus (Diplomodon)       | 264      |
| caninus                    | 799      | hudsonicus (Lutra)            | 537      |
| Homodontomys               | 895      | hudsonicus (Sciurus)          | 874      |
| fuscipes                   | 896      | hudsonicus (Tarniasciurus)    | 874      |
| Homocoryda                 | 220      | hudsonicus (Zapus)            | 210      |
| Homogalax                  | 726      | hudsonicus (Circus)           | 320      |
| bridgerensis               | 726      | hudsonicus (Cuneulus)         | 899      |
| primævus                   | 726      | hudsonius (Dicrostonyx)       | 899      |
| protapirinus               | 726      | hudsonius (Mus)               | 899      |
| semihians                  | 726      | hudsonius (Tarniasciurus)     | 875      |
| uintensis                  | 727      | hudsonius (Zapus)             | 910      |
| Homogalaxine               | 726      | huenoi (Diadectes)            | 34       |
| Homorophus                 | 91       | huerfanensis (Auchenia)       | 804      |
| insuetus                   | 91       | huerfanensis (Camelops)       | 804, 805 |
| homunculus (Anaptomorphus) | 929      | huerfanensis (Eomastarhinus)  | 717      |
| homunculus (Euryacodon)    | 929      | huerfanensis (Oxyæna)         | 471      |
| homunculus (Tetonius)      | 929      | humboldtii (Gomphotherium)    | 631      |
| Hoplichnus                 | 14       | humboldtii (Mammut)           | 631      |
| equus                      | 14       | humboldtii (Mastodon)         | 631      |
| polestas                   | 14       | humboldtii (Mastodon)         | 631      |
| quadrupedans               | 14       | humboldtii (Tetrabelodon)     | 631      |
| Hoplitosaurus              | 232      | humboldtii (Anancus)          | 631      |
| marshi                     | 232      | humboldtii (Chlamydoctherium) | 418      |
| Hoplocetus                 | 597      | humboldtii (Curvieronius)     | 631      |
| obesus                     | 597      | humboldtii (Dibelodon)        | 631      |
| physaloides                | 598      | humboldtii (Gomphotherium)    | 631      |
| Hoplochelys                | 91       | humboldtii (Mastodon)         | 631      |
| bicastrata                 | 91       | humboldtii (Mastotherium)     | 631      |
| calata                     | 91       | humboldtii (Trilophodon)      | 631      |
| crassa                     | 91       | humboldtii (Tetrabelodon)     | 631      |
| elongata                   | 91       | humerosum (Elotherium)        | 765      |
| laqueata                   | 91       | humerosus (Boëcherus)         | 765      |
| paludosa                   | 92       | humerosus (Dæodon)            | 765      |
| salens                     | 92       | humilis (Bottosaurus)         | 153      |
| Hoplophonus                | 543      | humilis (Crocodilus)          | 153      |
| catocopsis                 | 546      | humilis (Crocodylus)          | 153      |
| cerobralis                 | 544      | humilis (Paleosyops)          | 712      |
| erasiænsis                 | 547      | humphresiana (Pliauchenia)    | 802      |
| lakotensis                 | 545      | humphresiana (Pliauchenia)    | 802      |
| davisi                     | 542      | humphresiana (Pliauchenia)    | 802      |
| insolens                   | 544      | huntii (Didelphia)            | 393      |
| latidens                   | 544      | huntii (Peratherium)          | 393      |
| marshi                     | 544      | hutchinsi (Anser)             | 393      |
| mentalis                   | 544      | hutchinsi (Barniola)          | 393      |
| merriami                   | 543      | hutchinsi (Branta)            | 393      |
| occidentalis               | 544      | Hymna                         | 539      |
| oharrai                    | 544      | Hyænarctos                    | 533      |
| oreodontis                 | 544      | gregori                       | 533      |
| primævus                   | 545      | gregoryi                      | 533      |
| robustus                   | 545      | schneideri                    | 533      |
| strigidens                 | 545      | Hyænarctus                    | 533      |
| Hoplophorida               | 419, 421 | Hyænids                       | 538      |
| Hoplophorus                | 418      | Hyænids                       | 538      |

|                                  | Page     |                                  | Page          |
|----------------------------------|----------|----------------------------------|---------------|
| Hyænina .....                    | 539      | hyemalis (Junco) .....           | 359           |
| Hyæniini .....                   | 539      | hylactor (Cynodictes) .....      | 491           |
| Hyænocyon .....                  | 507      | Hyloidichnus .....               | 14            |
| basilatus .....                  | 507      | bifurcatus .....                 | 14            |
| sectorius .....                  | 507      | whitei .....                     | 14            |
| Hyænodon .....                   | 479      | Hylomeryx .....                  | 754           |
| crucians .....                   | 480      | annectens .....                  | 754           |
| cruentus .....                   | 480      | Hylopus .....                    | 14, 16        |
| horridus .....                   | 480      | caudifer .....                   | 6             |
| leptocephalus .....              | 480      | hardingi .....                   | 14            |
| minutus .....                    | 481      | hermitanus .....                 | 14            |
| montanus .....                   | 480      | hermitensis .....                | 14            |
| mustelinus .....                 | 480      | hermitus .....                   | 14            |
| paucidens .....                  | 480      | logani .....                     | 14            |
| Hyænodontidæ .....               | 475      | minor .....                      | 14            |
| Hyænodontinæ .....               | 475, 479 | trifidus .....                   | 16            |
| Hyænodontini .....               | 475      | variabilis .....                 | 14            |
| hyænodus (Ischyrocyon) .....     | 511      | hyodon (Ananeus) .....           | 631           |
| Hyænogmathus .....               | 509, 512 | hyodon (Mastotherium) .....      | 631           |
| cyonoides .....                  | 509      | hyognathum (Telmatherium) .....  | 716           |
| direptor .....                   | 509      | hyognathus (Dolichorhinus) ..... | 716           |
| dubius .....                     | 509      | Hyohippus .....                  | 678           |
| matthewi .....                   | 509      | Hyomeryx .....                   | 778           |
| pachyodon .....                  | 509      | breviceps .....                  | 779           |
| pugnator .....                   | 509      | Hyopotamus .....                 | 769, 780      |
| hyænoides (Ælurodon) .....       | 495      | americanus .....                 | 780           |
| hyænoides (Ambloctonus) .....    | 473      | brachyrhynchus .....             | 780           |
| hyænoides (Brachypsalis) .....   | 495      | deflectus .....                  | 780           |
| hyænoides (Felis) .....          | 553      | rostratus .....                  | 780           |
| hyænoides (Smilodontopsis) ..... | 553      | Hyopsodidæ .....                 | 443           |
| hyattianus (Loxolophus) .....    | 460      | Hyopsodine .....                 | 443           |
| hyattianus (Protochriacus) ..... | 460      | Hyopsodonta .....                | 442           |
| Hybems .....                     | 96       | Hyopsodontidæ .....              | 442           |
| arenaria .....                   | 96       | Hyopsodontoidæ .....             | 442           |
| hybridus (Eporeodon) .....       | 781      | Hyopsodus .....                  | 443, 767, 921 |
| hybridus (Merycoidodon) .....    | 781      | browni .....                     | 444           |
| hybridus (Oreodon) .....         | 781      | decipiens .....                  | 443           |
| Hydrarchos .....                 | 569, 570 | despicens .....                  | 443           |
| harlani .....                    | 570      | distant .....                    | 443           |
| sillimanii .....                 | 570      | gracilis .....                   | 921           |
| Hydrarchus .....                 | 569      | jacksoni .....                   | 444           |
| harlani .....                    | 570      | laticuneus .....                 | 768           |
| Hydrarghos .....                 | 569      | lawsoni .....                    | 444           |
| Hydrargos .....                  | 570      | lemoinianus .....                | 443           |
| harlani .....                    | 570      | lepidus .....                    | 443           |
| sillimanii .....                 | 570      | lysitensis .....                 | 444           |
| Hydrobatidæ .....                | 288      | markmani .....                   | 443           |
| Hydrobatinæ .....                | 288      | marshi .....                     | 443           |
| Hydrochelidon .....              | 342      | mentalis .....                   | 444           |
| nigra .....                      | 342      | minor .....                      | 444           |
| surinamensis .....               | 342      | minuscullus .....                | 444           |
| Hydrochæridæ .....               | 914      | miticulus .....                  | 444           |
| Hydrochærinæ .....               | 914      | paulus .....                     | 444, 736      |
| Hydrochærus .....                | 914      | powellianus .....                | 444           |
| æsopei .....                     | 914      | rarus .....                      | 767           |
| holmesi .....                    | 915      | simplex .....                    | 444           |
| pinckneyi .....                  | 915      | speirianus .....                 | 445           |
| robustus .....                   | 915      | uintensis .....                  | 444           |
| Hydrodamalidæ .....              | 657      | vicarius .....                   | 445           |
| Hydrodamalis .....               | 657      | walcottianus .....               | 444           |
| gigas .....                      | 657      | wortmanni .....                  | 444           |
| stelleri .....                   | 658      | wortmanni .....                  | 445           |
| Hydrotheræ .....                 | 791      | Hyotherinæ .....                 | 767           |
| hyemalis (Anas) .....            | 307      | Hyotheriæ .....                  | 767           |
| hyemalis (Clangula) .....        | 307      | Hyotherium .....                 | 767           |
| hyemalis (Harelda) .....         | 307      | americanum .....                 | 768           |

|                                  | Page          |                                  | Page     |
|----------------------------------|---------------|----------------------------------|----------|
| <i>Hyootherium—Continued</i>     |               | <i>Hypotemnoeyon</i>             | 493      |
| <i>platyops</i>                  | 768           | <i>Hypotemnodon</i>              | 493      |
| <i>Hypacrosaurus</i>             | 217           | <i>corypheus</i>                 | 493      |
| <i>altispinus</i>                | 218           | <i>Hypsibæma</i>                 | 215      |
| <i>Hyperosaurus</i>              | 217           | <i>hypsibata</i> (Branta)        | 302      |
| <i>hyperborea</i> (Chen)         | 303           | <i>hybsibatus</i> (Anser)        | 302      |
| <i>hyperboreus</i> (Chen)        | 303           | <i>hypsibatus</i> (Branta)       | 302      |
| <i>hyperboreus</i> (Lobipes)     | 339           | <i>Hypsibema</i>                 | 215      |
| <i>Hyperoodon</i>                | 585           | <i>crassicauda</i>               | 215      |
| <i>Hypertragulidæ</i>            | 809           | <i>Hypsilophodon</i>             | 207      |
| <i>Hypertragulinae</i>           | 809           | <i>Hypsilophodontidæ</i>         | 207      |
| <i>Hypertragulus</i>             | 811, 812      | <i>Hypsilophodontinæ</i>         | 207      |
| <i>calcaratus</i>                | 813           | <i>Ilysirophus</i>               | 233      |
| <i>hesperus</i>                  | 813           | <i>discurus</i>                  | 234      |
| <i>minutus</i>                   | 813           | <i>seeleyanus</i>                | 234      |
| <i>ordinatus</i>                 | 811           | <i>Ilysirophus</i>               | 234      |
| <i>planiceps</i>                 | 813           | <i>discurus</i>                  | 234      |
| <i>transversus</i>               | 813           | <i>Hypsurrophus</i>              | 233      |
| <i>tricostatus</i>               | 813           | <i>Hypsodus</i>                  | 443      |
| <i>Hyphasma</i>                  | 842           | <i>hypsodus</i> (Ticholeptus)    | 790      |
| <i>lævis</i>                     | 842           | <i>Hypsognathus</i>              | 45       |
| <i>Hyphepus</i>                  | 15            | <i>fenneri</i>                   | 45       |
| <i>fieldi</i>                    | 15            | <i>Hypsorhina</i>                | 250      |
| <i>Hypisodinae</i>               | 809           | <i>antigua</i>                   | 250      |
| <i>Hypisodontinæ</i>             | 809           | <i>antiqua</i>                   | 250      |
| <i>Hypisodus</i>                 | 811           | <i>hypugæa</i> (Speotyto)        | 351      |
| <i>alacer</i>                    | 811           | <i>Hyrachius</i>                 | 733      |
| <i>minimus</i>                   | 811           | <i>Hyrachodontidæ</i>            | 732      |
| <i>hypoceras</i> (Brontotherium) | 722           | <i>Hyrachus</i>                  | 724      |
| <i>hypoceras</i> (Symborodon)    | 722           | <i>singularis</i>                | 724      |
| <i>Hypocetus</i>                 | 597           | <i>Hyrachyinae</i>               | 732      |
| <i>atlanticus</i>                | 597           | <i>Hyrachyus</i>                 | 733      |
| <i>mediatlanticus</i>            | 597           | <i>affinis</i>                   | 733, 734 |
| <i>Hypoconifera</i>              | 722           | <i>agrarius</i>                  | 733      |
| <i>hypoconus</i> (Gypsonictops)  | 432           | <i>agrestis</i>                  | 733      |
| <i>hypogæa</i> (Speotyto)        | 351           | <i>bairdianus</i>                | 733      |
| <i>Hypohippus</i>                | 678, 679, 688 | <i>crassidens</i>                | 734      |
| <i>affinis</i>                   | 679           | <i>eximius</i>                   | 733      |
| <i>australis</i>                 | 681           | <i>gracilis</i>                  | 733      |
| <i>equinus</i>                   | 679           | <i>grandis</i>                   | 733      |
| <i>matthewi</i>                  | 679           | <i>imperialis</i>                | 733      |
| <i>nevadensis</i>                | 679           | <i>implicatus</i>                | 734      |
| <i>osborni</i>                   | 679           | <i>intermedius</i>               | 734      |
| <i>pachyops</i>                  | 688           | <i>modestus</i>                  | 734      |
| <i>pertinax</i>                  | 680           | <i>paradoxus</i>                 | 734      |
| <i>Hypolagus</i>                 | 866           | <i>princeps</i>                  | 734      |
| <i>browni</i>                    | 866           | <i>priscus</i>                   | 734      |
| <i>edensis</i>                   | 866           | <i>Hyracodon</i>                 | 735      |
| <i>vetus</i>                     | 866           | <i>apertus</i>                   | 736      |
| <i>Hypopnous</i>                 | 40            | <i>arcidens</i>                  | 736      |
| <i>squaliceps</i>                | 40            | <i>cruentus</i>                  | 480      |
| <i>Hyporhina</i>                 | 250           | <i>leidyanus</i>                 | 736      |
| <i>antigua</i>                   | 250           | <i>major</i>                     | 736      |
| <i>antiqua</i>                   | 250           | <i>minus</i>                     | 736      |
| <i>Hyposaurus</i>                | 147           | <i>nebrascense</i>               | 736      |
| <i>ferox</i>                     | 147           | <i>nebrascensis</i>              | 736      |
| <i>fraterculus</i>               | 148           | <i>nebrascensis</i>              | 736      |
| <i>natator</i>                   | 147           | <i>petersoni</i>                 | 736      |
| <i>oweni</i>                     | 147           | <i>planiceps</i>                 | 736      |
| <i>rogersi</i>                   | 147           | <i>priscidens</i>                | 736      |
| <i>rogersii</i>                  | 147           | <i>selenidens</i>                | 736      |
| <i>vehbianus</i>                 | 146           | <i>Hyracodontidæ</i>             | 732      |
| <i>vehbil</i>                    | 146           | <i>Hyracodontinæ</i>             | 732, 734 |
| <i>webbii</i>                    | 146           | <i>Hyracodontini</i>             | 732      |
| <i>hypostylus</i> (Mesohippus)   | 674           | <i>hyracoides</i> (Tillotherium) | 856      |
| <i>hypostylus</i> (Trigonias)    | 740           | <i>Hyracops</i>                  | 606      |

|   | Page     |   | Page |
|---|----------|---|------|
| <i>Hyracops—Continued</i>               |          | <i>Ictops</i>                             | 430  |
| <i>socialis</i>                         | 607      | <i>acutidens</i>                          | 430  |
| <i>Hyracotheriidae</i>                  | 606      | <i>bullatus</i>                           | 430  |
| <i>Hyracotheriinae</i>                  | 606, 672 | <i>dakotensis</i>                         | 430  |
| <i>Hyracotherium</i>                    | 607      | <i>didelphoides</i>                       | 425  |
| <i>craspedotum</i>                      | 608      | <i>intermedius</i>                        | 430  |
| <i>cristatum</i>                        | 608      | <i>major</i>                              | 430  |
| <i>index</i>                            | 609      | <i>montanus</i>                           | 430  |
| <i>montanum</i>                         | 609      | <i>porcinus</i>                           | 430  |
| <i>osbornianus</i>                      | 671      | <i>tenuis</i>                             | 430  |
| <i>tapirinum</i>                        | 609      | <i>thompsoni</i>                          | 431  |
| <i>vasaccense</i>                       | 609      | <i>thomsoni</i>                           | 431  |
| <i>venticulum</i>                       | 609      | <i>Ictopsidae</i>                         | 429  |
| <i>Hystriidae</i>                       | 911      | <i>idahensis</i> ( <i>Phalacrocorax</i> ) | 292  |
| <i>Hystriiformes</i>                    | 911      | <i>idahoensis</i> ( <i>Graculus</i> )     | 292  |
| <i>Hystriicina</i>                      | 911      | <i>Idiophyseter</i>                       | 507  |
| <i>Hystriicoidea</i>                    | 911      | <i>merriami</i>                           | 507  |
| <i>Hystriicoidea</i>                    | 911      | <i>idoneus</i> ( <i>Amphicyon</i> )       | 511  |
| <i>Hystriicomorpha</i>                  | 911      | <i>Ignacius</i>                           | 447  |
| <i>Hystriicomorphi</i>                  | 911      | <i>frugivorus</i>                         | 447  |
| <i>Hystriocops</i>                      | 885      | <i>ignavus</i> ( <i>Paleanodon</i> )      | 422  |
| <i>venustus</i>                         | 885      | <i>Iguana</i>                             | 245  |
| <i>Hystrix</i>                          | 885, 911 | <i>Iguanavus</i>                          | 246  |
| <i>dorsatus</i>                         | 912      | <i>exilis</i>                             | 246  |
| <i>venustus</i>                         | 885      | <i>teres</i>                              | 246  |
| <i>iamonensis</i> ( <i>Mesocyon</i> )   | 493      | <i>iguanavus</i> ( <i>Chidastes</i> )     | 263  |
| <i>Ibidæ</i>                            | 296      | <i>Iguania</i>                            | 245  |
| <i>Ibidide</i>                          | 298      | <i>Iguanidae</i>                          | 245  |
| <i>Ibididoidea</i>                      | 298      | <i>Iguaniformes</i>                       | 245  |
| <i>Ibis</i>                             | 298      | <i>Iguaninae</i>                          | 245  |
| <i>Ichnites</i>                         | 1        | <i>Iguanodon</i>                          | 219  |
| <i>Ichnozoa</i>                         | 1        | <i>Iguanodontia</i>                       | 203  |
| <i>Ichthyoidichnites</i>                | 15       | <i>Iguanodontidae</i>                     | 203  |
| <i>acadiensis</i>                       | 15       | <i>Iguanodontidea</i>                     | 203  |
| <i>Ichthyoidinites</i>                  | 16       | <i>Iguanodontinae</i>                     | 219  |
| <i>Ichthyopterygia</i>                  | 122      | <i>Iguanodontoidae</i>                    | 202  |
| <i>Ichthyornidae</i>                    | 281      | <i>Iguanodontotoidea</i>                  | 202  |
| <i>Ichthyornis</i>                      | 281      | <i>Iguanoidæ</i>                          | 245  |
| <i>agilis</i>                           | 282      | <i>Iligoceros</i>                         | 839  |
| <i>anceps</i>                           | 282      | <i>Iligoceras</i>                         | 839  |
| <i>celer</i>                            | 282      | <i>alexandriae</i>                        | 839  |
| <i>dispar</i>                           | 282      | <i>Iligoceratinae</i>                     | 839  |
| <i>lentus</i>                           | 282      | <i>Iligoceros</i>                         | 839  |
| <i>tener</i>                            | 282      | <i>alexandriae</i>                        | 839  |
| <i>validus</i>                          | 282      | <i>schizoceros</i>                        | 839  |
| <i>victor</i>                           | 282      | <i>Iligoceras</i>                         | 839  |
| <i>Ichthyornithes</i>                   | 281      | <i>illinoensis</i> ( <i>Captothinus</i> ) | 40   |
| <i>Ichthyornithidae</i>                 | 281      | <i>imbricarius</i> ( <i>Basilemys</i> )   | 88   |
| <i>Ichthyornithiformes</i>              | 281      | <i>imbricarius</i> ( <i>Compsemys</i> )   | 88   |
| <i>Ichthyosauri</i>                     | 122, 123 | <i>immanis</i> ( <i>Atlantosaurus</i> )   | 194  |
| <i>Ichthyosauria</i>                    | 122      | <i>immanis</i> ( <i>Harpagolestes</i> )   | 469  |
| <i>Ichthyosaurii</i>                    | 123      | <i>immanis</i> ( <i>Ornithotarsus</i> )   | 216  |
| <i>Ichthyosauridae</i>                  | 123      | <i>immanis</i> ( <i>Titanosaurus</i> )    | 194  |
| <i>Ichthyosaurinae</i>                  | 123      | <i>immer</i> ( <i>Colymbus</i> )          | 284  |
| <i>Ichthyosaurus</i>                    | 123      | <i>immer</i> ( <i>Gavia</i> )             | 284  |
| <i>missouriensis</i>                    | 283      | <i>impar</i> ( <i>Camarasaurus</i> )      | 191  |
| <i>Ichthyosaurus</i>                    | 123      | <i>impar</i> ( <i>Morasaurus</i> )        | 191  |
| <i>ictericus</i> ( <i>Lestosaurus</i> ) | 280      | <i>imparidigitata</i>                     | 863  |
| <i>ictericus</i> ( <i>Platycarpus</i> ) | 280      | <i>impenis</i> ( <i>Alca</i> )            | 343  |
| <i>Icteridæ</i>                         | 357      | <i>impennia</i> ( <i>Pinguinus</i> )      | 343  |
| <i>Icterinae</i>                        | 357      | <i>impennia</i> ( <i>Plautus</i> )        | 343  |
| <i>Icterus</i>                          | 357      | <i>impensa</i> ( <i>Testudo</i> )         | 103  |
| <i>xanthocephalus</i>                   | 357      | <i>imperator</i> ( <i>Archæotherium</i> ) | 793  |
| <i>Ictidocyon</i>                       | 504      | <i>imperator</i> ( <i>Archidiskodon</i> ) | 647  |
| <i>Ictidops</i>                         | 430      | <i>imperator</i> ( <i>Elephas</i> )       | 646  |
| <i>acutidens</i>                        | 430      |   |      |

|                                   | Page     |                                    | Page     |
|-----------------------------------|----------|------------------------------------|----------|
| imperator (Elotherium) .....      | 762      | ingens (Ornithostoma) .....        | 163      |
| imperator (Entelodon) .....       | 762      | ingens (Pteranodon) .....          | 163      |
| imperfectus (Leptosuchus) .....   | 143      | ingens (Sauropus) .....            | 20       |
| imperfectus (Peromyscus) .....    | 893      | ingens (Steropoides) .....         | 21       |
| imperialis (Elephas) .....        | 647      | ingens (Tinoceras) .....           | 613      |
| imperialis (Felis) .....          | 553      | ingens (Titanotherium) .....       | 719      |
| imperialis (Felix) .....          | 553      | ingens (Triceratops) .....         | 229      |
| imperialis (Hyrachyus) .....      | 733      | ingens (Tridentipes) .....         | 21       |
| imporiosus (Dinamosaurus) .....   | 180      | ingens (Uintatherium) .....        | 618      |
| implicatus (Hyrachyus) .....      | 734      | ingenium (Hipparion) .....         | 692      |
| impressa (Terrapene) .....        | 99       | ingenium (Hippotherium) .....      | 692      |
| improvisus (Neotragocerus) .....  | 838      | ingenium (Neohipparion) .....      | 692      |
| inaequalis (Pomatodelphis) .....  | 591      | ingravata (Nandochelys) .....      | 75       |
| inequalis (Toxicnus) .....        | 22       | Iniadæ .....                       | 682      |
| inequidens (Ellipsodon) .....     | 608      | Iniadæ .....                       | 582      |
| inequidens (Mioclanus) .....      | 608      | Iniadæ .....                       | 582      |
| inequidens (Procamelus) .....     | 798      | innominatum (Peratherium) .....    | 393      |
| inequidens (Protolabis) .....     | 798      | innoxia (Terrapene) .....          | 99       |
| inewlens (Chelonoides) .....      | 9        | inornata (Chrysemys) .....         | 98       |
| incerta (Phenacops) .....         | 433      | inornata (Graptomys) .....         | 98       |
| incerta (Talpa) .....             | 438      | inornatus (Halitherium) .....      | 657      |
| incertus (Mionictis) .....        | 536      | inornatus (Manatus) .....          | 667      |
| incisivus (Pariotichus) .....     | 40       | inornatus (Trichechus) .....       | 667      |
| incisa (Testudo) .....            | 103      | insculpta (Clommys) .....          | 94       |
| incisivorus (Pariotichus) .....   | 41       | Insectivora .....                  | 422      |
| incisivum (Telmatherium) .....    | 714      | insectivora (Sinopa) .....         | 476      |
| incisivus (Cyclopidius) .....     | 790      | Insectivori .....                  | 423      |
| incisivus (Dimetrodon) .....      | 55       | insectivorus (Stypolophus) .....   | 476      |
| incisivus (Labidosaurus) .....    | 41       | insidiosus (Apheliscus) .....      | 450      |
| incisivus (Pariotichus) .....     | 40       | insignis (Anaptomorphus) .....     | 927      |
| incisivus (Sthenodectes) .....    | 714      | insignis (Merychippus) .....       | 684, 686 |
| incisus (Cimolostes) .....        | 392      | insignis (Plastomenus) .....       | 106      |
| incisus (Cynocercus) .....        | 86       | insignis (Protolippus) .....       | 684, 686 |
| incrassatus (Deinodon) .....      | 177      | insignis (Tetraceratops) .....     | 56       |
| incrassatus (Dryptosaurus) .....  | 177, 179 | insignis (Tridentipes) .....       | 21       |
| incrassatus (Laelaps) .....       | 177, 179 | insignis (Washakius) .....         | 927      |
| ineurymianus (Kritosaurus) .....  | 213      | insiliens (Thescelus) .....        | 73       |
| Indaretos .....                   | 622      | insolens (Achenodon) .....         | 762      |
| oregonensis .....                 | 622      | insolens (Diplophus) .....         | 873      |
| Indaretus .....                   | 522      | insolens (Hoplrophoneus) .....     | 544      |
| oregonensis .....                 | 522      | insolitus (Paciulus) .....         | 911      |
| index (Bohippus) .....            | 669      | insuetus (Homorophus) .....        | 91       |
| index (Hyracotherium) .....       | 699      | insularis (Lembonax) .....         | 80       |
| index (Orotherium) .....          | 699      | integer (Parahippus) .....         | 682      |
| indianapolis (Elephas) .....      | 644      | intermedia (Pachyena) .....        | 498      |
| indianensis (Canis) .....         | 501      | intermediu (Prothyraodon) .....    | 735      |
| indianensis (Colletosaurus) ..... | 9        | intermedius (Aminodon) .....       | 737      |
| Indrodon .....                    | 448      | intermedius (Anancus) .....        | 632      |
| malaria .....                     | 448      | intermedius (Anomopus) .....       | 4, 5     |
| inopetata (Felis) .....           | 553      | intermedius (Clidastes) .....      | 268      |
| inexpectata (Uncia) .....         | 553      | intermedius (Corythosaurus) .....  | 218      |
| infelix (Bunelurus) .....         | 525      | intermedius (Dolichorhinus) .....  | 716      |
| infelix (Steropoides) .....       | 21       | intermedius (Elasmosaurus) .....   | 118      |
| inflata (Baena) .....             | 72       | intermedius (Equus) .....          | 704, 709 |
| inflatus (Daphoenus) .....        | 505      | intermedius (Hyrachyus) .....      | 734      |
| inflatus (Promerycochoerus) ..... | 784      | intermedius (Totops) .....         | 480      |
| inflatus (Protemnoconyon) .....   | 505      | intermedius (Mastodon) .....       | 688      |
| ingens (Amphieyon) .....          | 511      | intermedius (Mesohippus) .....     | 677      |
| ingens (Archotherium) .....       | 764      | intermedius (Mesoreodon) .....     | 738      |
| ingens (Brontotherium) .....      | 719      | intermedius (Miohippus) .....      | 677      |
| ingens (Chimærichnus) .....       | 20       | intermedius (Paleolagus) .....     | 895      |
| ingens (Dinoceras) .....          | 618      | intermedius (Pantolestes) .....    | 426      |
| ingens (Elotherium) .....         | 764      | intermedius (Phenacodus) .....     | 605      |
| ingens (Entelodon) .....          | 764      | intermedius (Platygonus) .....     | 773      |
| ingens (Menodus) .....            | 719      | intermedius (Stephanosaurus) ..... | 218      |

|                                    | Page     |                                    | Page          |
|------------------------------------|----------|------------------------------------|---------------|
| intermontanus (Merychippus) .....  | 685      | isodactyletus (Argoides) .....     | 6             |
| interpolatum (Hippidion) .....     | 697      | isodactylum (Brontozoum) .....     | 4             |
| interpolatum (Hippidium) .....     | 697      | isodactylus (Anomæpus) .....       | 4             |
| interpolatus (Pliohippus) .....    | 697      | Isodectes .....                    | 32, 43        |
| interpolatus (Protohippus) .....   | 697      | copei .....                        | 32            |
| interpositum (Chisternon) .....    | 73       | megalos .....                      | 43            |
| interrupta (Mephitis) .....        | 534      | punctatus .....                    | 32            |
| interrupta (Spilogale) .....       | 534      | isolomus (Captorhinus) .....       | 40            |
| interruptum (Deltatherium) .....   | 462      | isolomus (Pariotichus) .....       | 40            |
| intrepidus (Metailurus) .....      | 549      | isonesum (Hipparion) .....         | 685           |
| intrepidus (Pseudalurus) .....     | 549      | isonesum (Hippotherium) .....      | 685           |
| introvergens (Orthodactylus) ..... | 17       | isonesum (Neohipparion) .....      | 685           |
| inuitata (Testudo) .....           | 103      | isonesum (Merychippus) .....       | 685           |
| inversus (Pentacodon) .....        | 425      | isonesus (Stylonus) .....          | 685           |
| involutus (Microtus) .....         | 898      | isosensum (Hippotherium) .....     | 685           |
| isaaci (Helodectes) .....          | 42       | Isotemnidae .....                  | 680           |
| ischadicus (Elasmosaurus) .....    | 118      | Ithygrammodon .....                | 757           |
| ischadicus (Polycotylus) .....     | 118      | cameloides .....                   | 757           |
| Ischyrocyon .....                  | 511      | Ixacanthus .....                   | 590, 592      |
| hyænodus .....                     | 511      | atropius .....                     | 589           |
| Ischyromidæ .....                  | 890      | celospondylus .....                | 592           |
| Ischyromyidæ .....                 | 890, 902 | conradi .....                      | 590           |
| Ischyromyus .....                  | 890      | spinosus .....                     | 590           |
| Ischyromyini .....                 | 890      | stenus .....                       | 592           |
| Ischyromys .....                   | 890      | Jabiru .....                       | 296           |
| chrysodon .....                    | 890      | mycteria .....                     | 296           |
| cristatus .....                    | 890      | weillsi .....                      | 296           |
| lloydi .....                       | 891      | jacksonensis (Batrachichnus) ..... | 7             |
| nanus .....                        | 891      | jacksonensis (Notalacerta) .....   | 7             |
| parvus .....                       | 891      | jacksoni (Elephas) .....           | 643, 644      |
| pliacus .....                      | 891      | jacksoni (Eucrotaphus) .....       | 781, 782      |
| typus .....                        | 891      | jacksoni (Eucrotophus) .....       | 781           |
| veterior .....                     | 891      | jacksoni (Euelephas) .....         | 643, 644      |
| ischyros (Archelon) .....          | 79       | jacksoni (Hypopodus) .....         | 443           |
| ischyros (Chelon) .....            | 79       | jacksonii (Euelephas) .....        | 644           |
| Ischyrosaurus .....                | 122      | Jaculine .....                     | 909           |
| antiquus .....                     | 122      | Jaculus .....                      | 910           |
| Ischyrosmilus .....                | 545      | labradorius .....                  | 910           |
| idahoënsis .....                   | 545      | jaksoni (Eucrotophus) .....        | 781           |
| ischyros .....                     | 546      | jamaicensis (Anas) .....           | 308           |
| osborni .....                      | 546      | jamaicensis (Erismatura) .....     | 308           |
| Ischyrotherium .....               | 122      | jarmani (Trachemys) .....          | 97            |
| antiquum .....                     | 122      | jarrovi (Pelycodus) .....          | 921           |
| Ischyrotomus .....                 | 903      | jarrovii (Pelycodus) .....         | 921           |
| compressidens .....                | 903      | jarrowi (Pelycodus) .....          | 921           |
| gidleyi .....                      | 903      | jeanesii (Lytoloma) .....          | 77            |
| petersoni .....                    | 903      | jeffersoni (Megalonyx) .....       | 408           |
| robustus .....                     | 903      | jeffersoni (Parasciurus) .....     | 904           |
| ischyros (Dinobastis) .....        | 547      | jeffersoni (Prosciurus) .....      | 904           |
| ischyros (Machærodus) .....        | 547      | jeffersoni (Sciurus) .....         | 904           |
| ischyros (Machairodus) .....       | 547      | jeffersonii (Elephas) .....        | 642, 643, 646 |
| Isectolophidæ .....                | 727      | jeffersonii (Mastodon) .....       | 825           |
| Isectolophinæ .....                | 727      | jeffersonii (Megalonyx) .....      | 408           |
| Isectolophus .....                 | 727      | jeffersonii (Megatherium) .....    | 408           |
| annectens .....                    | 727      | jeffersonii (Parelephas) .....     | 643           |
| latidens .....                     | 727      | jemezianus (Aphelops) .....        | 747           |
| modestus .....                     | 727      | jemezianus (Teleoceras) .....      | 747           |
| scotti .....                       | 727      | jordani (Metaxytherium) .....      | 656           |
| islandica (Anas) .....             | 308      | josephi (Mesocyon) .....           | 498           |
| islandica (Clangula) .....         | 308      | jubata (Eumetopias) .....          | 588           |
| islandica (Glaucionetta) .....     | 308      | jubata (Otaria) .....              | 588           |
| Isocampe .....                     | 15       | jubatus (Equus) .....              | 705           |
| moodii .....                       | 15       | jugulans (Uintacyon) .....         | 494           |
| strata .....                       | 15       | jugum (Tinoceras) .....            | 618           |
| isodactylatus (Argoides) .....     | 6        | jugum (Uintatherium) .....         | 618           |

|                               | Page     |                              | Page     |
|-------------------------------|----------|------------------------------|----------|
| Junco                         | 359      | Labrosaurus                  | 173, 184 |
| hyemalis                      | 359      | ferox                        | 174, 184 |
| junior (Palaeosyops)          | 713      | fragilis                     | 174      |
| kalicola (Mysops)             | 904      | lucaris                      | 184      |
| Kallistina                    | 92       | sulcatus                     | 174      |
| Kallistira                    | 92       | labrosus (Merychippus)       | 685      |
| costilata                     | 92       | lucer (Adocus)               | 90       |
| Kalobattippus                 | 677, 678 | Lacerta                      | 24, 249  |
| agatensis                     | 677      | Lacerti                      | 243      |
| anceps                        | 676      | Lacertidae                   | 249      |
| gracilis                      | 677      | Lacertiformes                | 242      |
| praestans                     | 677      | Lacertilia                   | 243      |
| Kalodontidae                  | 203, 210 | Lacertoidea                  | 249      |
| kansanus (Camelops)           | 304, 306 | lacertoideus (Corvipes)      | 10       |
| kansensis (Bison)             | 351      | Lacertosauria                | 245      |
| kansensis (Castoroides)       | 338      | lacertosus (Priscodelphinus) | 592      |
| karene (Anthracotherium)      | 758      | lachrymalis (Plastomenus)    | 106      |
| kayi (Hoplosuchus)            | 139      | lacota (Potamotherium)       | 536      |
| keahi (Tracaulodon)           | 625      | lacustre (Tinoceras)         | 619      |
| kelloggii (Tephrocyon)        | 494      | lacustre (Uimatherium)       | 619      |
| kenabekides (Dryptosaurus)    | 177      | lacustris (Diplodocus)       | 109      |
| Kentriodon                    | 588      | lacustris (Paronychodon)     | 385      |
| pernix                        | 588      | lacustris (Procamelus)       | 798      |
| Kentrosaurus                  | 224      | lacustris (Protagras)        | 271      |
| Kepolestes                    | 374      | Laelaps                      | 174, 177 |
| coloradensis                  | 374      | aquilunguis                  | 178      |
| kernensis (Allodesmus)        | 558      | explanatus                   | 181      |
| kerrianus (Mesoteras)         | 576      | falculus                     | 177      |
| Kinosternidae                 | 93       | incrassatus                  | 177, 179 |
| Kinosternon                   | 93       | trihedron                    | 174      |
| arizonense                    | 93       | leivicornis (Carineus)       | 821      |
| kinseyi (Martes)              | 527      | leivicornis (Dama)           | 821      |
| Kionocerania                  | 245      | leivicornis (Odocoileus)     | 821      |
| kirtlandii (Adocus)           | 89       | levidens (Limnolagus)        | 713      |
| kiamathensis (Glaucornis)     | 375      | levidens (Palaeosyops)       | 713      |
| kiamathensis (Lepus)          | 363      | levidens (Tamias)            | 833      |
| kiamathensis (Sciuropterys)   | 375      | lavifrons (Deinodon)         | 181      |
| klettiana (Testudo)           | 103      | lavifrons (Dromaeosaurus)    | 181      |
| kochii (Basilosaurus)         | 370      | lavifrons (Dryptosaurus)     | 181      |
| kochii (Tetracaulodon)        | 625      | lavis (Leptotragulus)        | 818      |
| kohlhaas (Navajovius)         | 929      | lavis (Macrosaurus)          | 259      |
| Koilosoma                     | 8        | lavis (Mylagaulus)           | 908      |
| nidificans                    | 8        | lavis (Parameryx)            | 812      |
| kowalevskianus (Hemithylaeus) | 612      | lavis (Telacodon)            | 396      |
| kraepidodus (Echippus)        | 668      | Lagomorpha                   | 858      |
| Kritosaurus                   | 213      | Lagomyidae                   | 859      |
| incurvimanus                  | 213      | Lagomys                      | 860      |
| marginatus                    | 214      | princeps                     | 860      |
| navajovius                    | 214      | lagophagus (Bunelurus)       | 525      |
| navajovius                    | 214      | Lagunculapex                 | 15       |
| notabilis                     | 214      | latus                        | 15       |
| Kyphobalena                   | 675      | Lagunculipes                 | 15       |
| labiatum (Poebrotherium)      | 794      | latus                        | 15       |
| Labidolemur                   | 446      | Lama                         | 308, 308 |
| soricoides                    | 446      | california                   | 308      |
| Labidosauria                  | 39       | californica                  | 308      |
| Labidosauridae                | 39       | stevensi                     | 308      |
| Labidosauroides               | 44       | lamariensis (Champsosaurus)  | 183      |
| Labidosaurus                  | 40       | lambdoideus (Entoptychus)    | 876      |
| broilii                       | 41       | Lambdotheriidae              | 711      |
| hamatus                       | 41       | Lambdotheriinae              | 711      |
| inoisivus                     | 41       | Lambdotherium                | 711      |
| labradoria (Meles)            | 585      | brownianum                   | 712      |
| labradorius (Jaculus)         | 910      | magnum                       | 711      |
| Labrosauridae                 | 184      | poposagium                   | 711      |



|                                 | Page     |                            | Page     |
|---------------------------------|----------|----------------------------|----------|
| Lambdotherium— <i>Continued</i> |          | Larus— <i>Continued</i>    |          |
| primævum                        | 711      | californicus               | 341      |
| priscum                         | 711      | oregonus                   | 341      |
| progressum                      | 711      | philadelphia               | 340      |
| lambei (Equus)                  | 705      | pristinus                  | 341      |
| lambei (Lambeosaurus)           | 218      | robustus                   | 341      |
| Lambeosaurinæ                   | 247      | vero                       | 341      |
| Lambeosaurus                    | 218      | lateralis (Aublysodon)     | 177      |
| lambei                          | 219      | lateralis (Denodon)        | 177      |
| Lamellirostres                  | 200      | lateralis (Leptonyx)       | 21       |
| Lamellosodontati                | 200      | lateralis (Stenonyx)       | 21       |
| lancensis (Aspideretes)         | 109      | latibuccatus (Diadectes)   | 34       |
| lancensis (Exostinus)           | 246      | laticarinata (Chelydra)    | 85       |
| Lanceosaurus                    | 256      | laticaudata (Testudo)      | 104      |
| compressus                      | 256      | laticaudus (Tylosaurus)    | 259      |
| hatcheri                        | 256      | 'aticeps (Alloodon)        | 377      |
| Langunculapes                   | 15       | laticeps (Ctenacodon)      | 377      |
| latus                           | 15       | laticeps (Dimoceras)       | 619      |
| lania (Sinopa)                  | 477      | laticeps (Diracodon)       | 234, 235 |
| Lanidæ                          | 336      | laticeps (Diracodon)       | 235      |
| Lani                            | 356      | 'aticeps (Limnonyxops)     | 713      |
| Lanidæ                          | 356      | laticeps (Merycochærus)    | 780      |
| Laniinæ                         | 356      | laticeps (Palæosyops)      | 713      |
| Laninæ                          | 356      | laticeps (Pariotichus)     | 42       |
| Lanius                          | 356      | laticeps (Porthochelys)    | 87       |
| ludovicianus                    | 357      | laticeps (Promomotherium)  | 786      |
| lanus (Mesonyx)                 | 469      | laticeps (Uimtatherium)    | 618      |
| lanus (Synoplotherium)          | 469      | laticollis (Apatosaurus)   | 105      |
| Laodon                          | 373      | laticornis (Bison)         | 849      |
| venustus                        | 373      | laticuneus (Testudo)       | 104      |
| Laolestes                       | 374      | laticuneus (Diadexodis)    | 756      |
| eminus                          | 374      | laticuneus (Hyopsodius)    | 756      |
| Laopithecus                     | 762      | latidens (Æluotherium)     | 472      |
| robustus                        | 762      | latidens (Bathmodon)       | 615      |
| Laoporus                        | 15       | latidens (Canis)           | 492      |
| coloradensis                    | 15       | latidens (Coryphodon)      | 615      |
| coloradoënsis                   | 15       | latidens (Cynodontomys)    | 449      |
| nobeli                          | 15       | latidens (Hoplodontops)    | 544      |
| schucherti                      | 15       | latidens (Isætolophus)     | 727      |
| Laopteryx                       | 277      | latidens (Megachærus)      | 763      |
| prisca                          | 277      | latidens (Merycoides)      | 787      |
| priscus                         | 277      | latidens (Mesohippus)      | 674      |
| Laornis                         | 301      | latidens (Mesoreodon)      | 787      |
| edwardsianus                    | 301      | latidens (Miacis)          | 485      |
| Laosauridæ                      | 205      | latidens (Microsyops)      | 449      |
| Laosaurinæ                      | 205      | latidens (Neodanodon)      | 465      |
| Laosaurus                       | 206      | latidens (Nqthocyon)       | 492      |
| altus                           | 206      | latidens (Pariscetolophus) | 727      |
| celer                           | 206      | latidens (Patriofelis)     | 472      |
| consors                         | 206      | latidens (Promerycochærus) | 784      |
| gracilis                        | 206      | latidens (Tillotherium)    | 856      |
| minimus                         | 206      | latidentata (Vulpes)       | 503      |
| laquenta (Hoplochelys)          | 91       | latidentatus (Canis)       | 493      |
| laramiensis (Champsosaurus)     | 133      | latidentatus (Urocyon)     | 493      |
| laramiensis (Cimoliasaurus)     | 119      | latifrons (Agriochærus)    | 777      |
| laramiensis (Tricleidus)        | 119      | latifrons (Alces)          | 825, 827 |
| Lari                            | 339      | latifrons (Bison)          | 849      |
| Laridæ                          | 339      | latifrons (Bos)            | 849, 851 |
| Lariformes                      | 339      | latifrons (Eubæna)         | 72       |
| Larinæ                          | 339, 340 | latifrons (Lestosaurus)    | 209      |
| Laroidæ                         | 339      | latifrons (Platycarpus)    | 280      |
| Laroidæ                         | 339      | latifrons (Uimtatherium)   | 619      |
| Laro-Limicolæ                   | 335      | latilabiata (Echinatemyx)  | 95       |
| Larus                           | 340      | latilabiata (Emyx)         | 95       |
| argentatus                      | 340      | latimanus (Trinacromerus)  | 117      |

|                                    | Page          |                                   | Page     |
|------------------------------------|---------------|-----------------------------------|----------|
| latimolis (Polymastodon) .....     | 384           | lemomianus (Hyopsodus) .....      | 444      |
| latipes (Bathmodon) .....          | 616           | lemur (Canis) .....               | 493      |
| latipes (Coryphodon) .....         | 616           | lemur (Galecyne) .....            | 493      |
| Latipinnati .....                  | 122           | lemur (Nothocyon) .....           | 492      |
| latipinnis (Polycotylus) .....     | 116           | Lemuravus .....                   | 443      |
| latiradix (Rhabdosteus) .....      | 590, 591      | distant .....                     | 444      |
| latiremis (Torycheles) .....       | 86            | Lemures .....                     | 918      |
| latiremis (Toxochelys) .....       | 86            | Lemuridae .....                   | 918      |
| latirostris (Manatus) .....        | 659           | Lemuriformes .....                | 918      |
| latirostris (Trichechus) .....     | 659           | lemurinum (Menotherium) .....     | 752      |
| latispinus (Lestosauros) .....     | 260           | lemurinus (Leptoclerus) .....     | 752      |
| latispinus (Platacarpus) .....     | 260           | Lemuroidea .....                  | 919      |
| lativertebralis (Echmatemys) ..... | 95            | Lemuroidea .....                  | 918      |
| lativertebralis (Emys) .....       | 95            | lemuroides (Mioclanus) .....      | 608      |
| latrans (Canis) .....              | 498, 499, 500 | lemuroides (Promioclænus) .....   | 608      |
| latum (Tinoceras) .....            | 619           | lenus (Leptophoca) .....          | 562      |
| latum (Uintatherium) .....         | 618           | lenis (Tayassu) .....             | 775      |
| latus (Amphicelias) .....          | 201           | lenticularis (Hipparion) .....    | 693      |
| latus (Amphicelus) .....           | 201           | lenticularis (Merychippus) .....  | 693      |
| latus (Aspideretes) .....          | 109           | lenticularis (Neohipparion) ..... | 693      |
| latus (Lagunculapes) .....         | 15            | lenticularis (Protophippus) ..... | 693      |
| latus (Lagunculipes) .....         | 15            | lentiginosus (Botaurus) .....     | 295      |
| latus (Palæoscincus) .....         | 237           | lentus (Allacodon) .....          | 378      |
| latus (Lagunculapes) .....         | 15            | lentus (Baropus) .....            | 7        |
| latus (Torosaurus) .....           | 226           | lentus (Barosaurus) .....         | 200      |
| laurentius (Equus) .....           | 705           | lentus (Bothriolabis) .....       | 768      |
| lawsoni (Hyopsodus) .....          | 444           | lentus (Camarasaurus) .....       | 191      |
| leaii (Belodon) .....              | 142, 145      | lentus (Diadectes) .....          | 34       |
| leaii (Clepsysaurus) .....         | 142           | lentus (Helohyus) .....           | 761      |
| leaii (Phytosaurus) .....          | 142, 145      | lentus (Ichthyornis) .....        | 320      |
| lecontei (Dipodops) .....          | 884           | lentus (Morosaurus) .....         | 191      |
| lecontei (Eucastor) .....          | 884           | lentus (Nothodon) .....           | 34       |
| lecontei (Signogomphus) .....      | 884, 888      | lentus (Perchocerus) .....        | 768      |
| leidianum (Uintatherium) .....     | 619           | lentus (Thinohyus) .....          | 768      |
| leidii (Gomphotherium) .....       | 637           | lentus (Xestops) .....            | 255      |
| leidii (Serridentinus) .....       | 637           | leonardi (Protomeryx) .....       | 795      |
| leidii (Trilophodon) .....         | 637           | leomensis (Parahippus) .....      | 682      |
| leidyanum (Ælurotherium) .....     | 478           | Lepidosauria .....                | 239      |
| leidyanum (Ammodon) .....          | 766           | Lepidosternidae .....             | 250      |
| leidyanum (Uintatherium) .....     | 619           | lepidus (Creotarsus) .....        | 487      |
| leidyanus (Ammodon) .....          | 766           | lepidus (Euryacodon) .....        | 928      |
| leidyanus (Hyracodon) .....        | 736           | lepidus (Hyopsodus) .....         | 443      |
| leidyanus (Plihippus) .....        | 697           | lepidus (Oligobunus) .....        | 525      |
| leidydividum (Delphinodon) .....   | 588           | lepidus (Thinosauros) .....       | 248      |
| leidyi (Brontotherium) .....       | 722           | lepidus (Tinodon) .....           | 371      |
| leidyi (Delphinodon) .....         | 588           | lepidus (Tinosaurus) .....        | 248      |
| leidyi (Equus) .....               | 706, 708      | Leporida .....                    | 868      |
| leidyi (Megalonox) .....           | 409           | Leporidae .....                   | 869, 860 |
| leidyi (Merycocherus) .....        | 784           | Leporina .....                    | 869      |
| leidyi (Neohippus) .....           | 706           | Leporinae .....                   | 861      |
| leidyi (Palæosyops) .....          | 713           | Leporini .....                    | 861      |
| leidy (Pronerycocherus) .....      | 784           | leporinus (Haplodon) .....        | 808      |
| Leidyosuchus .....                 | 155           | leporinus (Palæolagus) .....      | 865      |
| canadensis .....                   | 155           | Leporidae .....                   | 869      |
| sternbergii .....                  | 155           | Leposternidae .....               | 250      |
| Lædon .....                        | 258           | leptacanthus (Eporeodon) .....    | 782      |
| proriger .....                     | 259           | Leptacatherium .....              | 741      |
| Leipsanolestes .....               | 451           | allum .....                       | 741      |
| sigfriedi .....                    | 451           | tridactylus .....                 | 748      |
| Leimonax .....                     | 80            | trigonodum .....                  | 741      |
| insularis .....                    | 80            | trigonogum .....                  | 741      |
| polemicus .....                    | 80            | Leptacodon .....                  | 432      |
| propylæus .....                    | 80            | tener .....                       | 432      |
| Lenus .....                        | 901           | Leptarctus .....                  | 535      |
| sibethicus .....                   | 901           | primævus .....                    | 535      |

|                              | Page |                            | Page     |
|------------------------------|------|----------------------------|----------|
| Leptarctus— <i>Continued</i> |      | leptomylus (Didymictis)    | 482      |
| primus                       | 535  | leptomylus (Viverravus)    | 483      |
| wortmani                     | 535  | Leptonyx                   | 21       |
| Leptauchenia                 | 788  | lateralis                  | 21       |
| deora                        | 789  | leptonyx (Morootherium)    | 415      |
| densa                        | 789  | Leptophoca                 | 562      |
| major                        | 789  | lenis                      | 562      |
| nitida                       | 789  | leptophrys (Pleuoliscus)   | 877      |
| Leptictidae                  | 429  | leptops (Mephitis)         | 632      |
| Leptictididae                | 430  | Leptopterygius             | 129      |
| Lepticinae                   | 430  | Leptoreodon                | 812      |
| Leptictus                    | 431  | gracilis                   | 812      |
| haydeni                      | 431  | marshi                     | 812      |
| leptocentrum (Cetotherium)   | 573  | leptorhinus (Platigonus)   | 772      |
| leptocephalus (Clepsydraps)  | 50   | leptorhinus (Platygonus)   | 772      |
| leptocephalus (Diopæus)      | 50   | leptorhynchus (Merychyus)  | 787      |
| leptocephalus (Diopæus)      | 50   | leptorhynchus (Merychyus)  | 787      |
| leptocephalus (Hysænodon)    | 480  | leptosteus (Bubo)          | 350      |
| Leptoceratops                | 226  | leptostoma (Megalonyx)     | 410      |
| gracilis                     | 226  | leptostomus (Megalonyx)    | 410      |
| Leptoceratopsinae            | 226  | Leptosuchus                | 143      |
| Leptocheirus                 | 125  | crosbiensis                | 143      |
| zitteli                      | 125  | imperfectus                | 143      |
| Leptochirus                  | 125  | Leptotragulinae            | 809      |
| Leptocheridae                | 752  | Leptotragulus              | 811, 812 |
| Leptocherus                  | 752  | lævis                      | 812      |
| gracilis                     | 752  | medius                     | 812      |
| lemurinus                    | 752  | proavus                    | 812      |
| quadriscus                   | 753  | profectus                  | 812      |
| robustus                     | 752  | sulcatus                   | 812      |
| spectabilis                  | 752  | leptouphalus (Clepsydraps) | 50       |
| leptocolon (Alticamelus)     | 800  | lepturus (Belodon)         | 142      |
| Leptocyon                    | 494  | lepturus (Phytosaurus)     | 142      |
| vafer                        | 494  | Lepus                      | 861      |
| leptodactylus (Brontozoum)   | 22   | americanus                 | 863      |
| leptodactylus (Thenaropus)   | 22   | auduboni                   | 864      |
| leptodactylus (Trienopus)    | 22   | audubonii                  | 864      |
| leptode (Hipparion)          | 693  | bachmanni                  | 864      |
| leptode (Neohipparion)       | 693  | benjamini                  | 863      |
| leptodirus (Camarasaurus)    | 191  | californica                | 863      |
| leptodus (Ancodon)           | 760  | californicus               | 863      |
| leptodus (Bothodon)          | 760  | campester                  | 863      |
| leptodus (Bothriodon)        | 760  | campestris                 | 863      |
| leptodus (Paramys)           | 903  | cinerascens                | 864      |
| leptodus (Saniwa)            | 258  | ennisianus                 | 868      |
| leptodus (Thinosaurus)       | 258  | floridanus                 | 864      |
| leptogamus (Caulodon)        | 193  | giganteus                  | 863      |
| Leptoglossa                  | 248  | klamathensis               | 863      |
| leptognathus (Dissacus)      | 470  | macrocephalus              | 863      |
| leptognathus (Hapalodectes)  | 470  | orthognathus               | 863      |
| leptognathus (Procamelus)    | 793  | palustris                  | 864      |
| Leptomerycinae               | 809  | primigenius                | 863      |
| Leptomeryx                   | 809  | princeps                   | 860      |
| drummondianus                | 810  | sylvaticus                 | 864      |
| caulatus                     | 810  | townsendii                 | 863      |
| evansi                       | 810  | vetus                      | 868      |
| mammiifer                    | 810  | washingtonii               | 863      |
| obliquidens                  | 810  | Lepusidae                  | 860      |
| semicinctus                  | 810  | leslianus (Taphrosphyx)    | 75       |
| speciosus                    | 810  | lestes (Canis)             | 499      |
| transmontanus                | 810  | Lestophis                  | 268      |
| leptomitus (Plastomenus)     | 106  | crassus                    | 268      |
| leptomitus (Trionyx)         | 106  | Lesiosaurus                | 269      |
| Leptomus                     | 903  | acutidens                  | 261      |
| grangeri                     | 903  | olidastoides               | 260      |

|                             | Page     |                                    | Page     |
|-----------------------------|----------|------------------------------------|----------|
| Lestosaurus—Continued       |          | Limnohyops                         | 712, 713 |
| coryphæus                   | 260      | diaconus                           | 712      |
| crassartus                  | 260      | fontinalis                         | 712      |
| curtirostris                | 260      | laticeps                           | 713      |
| felix                       | 260      | manteoceras                        | 715      |
| glandiferus                 | 260      | matthewi                           | 713      |
| gracilis                    | 260      | monoconus                          | 713      |
| ictericus                   | 260, 261 | priscus                            | 713      |
| latifrons                   | 260      | Limnohyus                          | 713      |
| latispinus                  | 260      | levidens                           | 713      |
| mudgei                      | 260      | robustus                           | 713      |
| oxyrhinus                   | 260      | Limnolagus                         | 865      |
| planifrons                  | 260      | palustris                          | 865      |
| simus                       | 260      | Limnophis                          | 268      |
| tectulus                    | 261      | Limnopus                           | 15       |
| leucas (Beluga)             | 594      | coloradensis                       | 15       |
| leucas (Delphinapterus)     | 594      | vagens                             | 10       |
| leucas (Delphinus)          | 594      | vagus                              | 15       |
| leucas (Phocaena)           | 594      | Limnosaurus                        | 155      |
| leucocephalus (Falco)       | 319      | ziphodon                           | 155      |
| leucocephalus (Haliaëtus)   | 319      | Limnoscelidæ                       | 43       |
| leucocephalus (Haliaëtus)   | 319      | Limnoscelis                        | 43       |
| leucocephalus (Haliaëtus)   | 318      | paludis                            | 44       |
| leucodon (Thomomys)         | 878      | Limnotheridæ                       | 443      |
| leucopotamica (Platypeltis) | 112      | Limnotheriidae                     | 443      |
| leucopotamicus (Trionyx)    | 112      | Limnotherium                       | 922      |
| leucopus (Hesperomys)       | 893      | affinis                            | 922      |
| leucopus (Peromyscus)       | 893      | tyrannus                           | 923      |
| leucosteus (Phalacyon)      | 514      | Limosa                             | 338      |
| leucosteus (Phalacyon)      | 514      | vanrossemi                         | 338      |
| leucurus (Elanus)           | 314      | Limosavus                          | 203      |
| leucurus (Milvus)           | 314      | velox                              | 203      |
| Leurospondylus              | 119      | lindgreni (Neotragocerus)          | 338      |
| ultimus                     | 119      | lineans (Plectropterna)            | 10       |
| levis (Cursipes)            | 10       | linearis (Orthodactylus)           | 16       |
| levisanus (Goniurodon)      | 466      | lineatus (Haploconus)              | 611      |
| leydeyi (Megalonyx)         | 409      | lineolatus (Adocus)                | 90       |
| libratus (Gorgosaurus)      | 178      | lineolatus (Compsemys)             | 90       |
| ligonia (Testudo)           | 104      | Liodon                             | 258      |
| ligoniferum (Gomphotherium) | 637      | dyspelor                           | 259      |
| ligoniferus (Mastodon)      | 637      | nepæolicus                         | 259      |
| ligoniferus (Tetrabelodon)  | 637      | proriger                           | 259      |
| ligoniferus (Trilophodon)   | 637      | liodon (Crocodylus)                | 153      |
| lima (Amyda)                | 111      | Liodontia                          | 906      |
| lima (Trionyx)              | 111      | alexandrea                         | 906      |
| limbatus (Clepsydraps)      | 55       | liodontus (Clidastes)              | 263      |
| Limicolæ                    | 336      | liolophus (Allomys)                | 905      |
| Limicolavis                 | 338      | liolophus (Gymnoptychus)           | 881      |
| pluvianella                 | 338      | liolophus (Haplomys)               | 905      |
| Limnænetes                  | 755      | liolophus (Meniscornys)            | 905      |
| anceps                      | 755      | Liops                              | 844      |
| platyceps                   | 755      | zuniensis                          | 844      |
| Limnocyon                   | 473, 478 | liops (Choneziphius)               | 333      |
| douglasi                    | 474      | Lipotyphla                         | 424      |
| dysclerus                   | 475      | lippincottianus (Cynodictis)       | 490, 491 |
| dysodus                     | 475      | lippincottianus (Pseudocynodictis) | 491      |
| dysotus                     | 475      | Lissops                            | 844      |
| medius                      | 474      | zuniensis                          | 844      |
| potens                      | 474      | Lithophis                          | 268      |
| protenus                    | 483      | sargenti                           | 268      |
| riparius                    | 474      | littoralis (Allopus)               | 2        |
| velox                       | 474      | littoralis (Equus)                 | 706      |
| verus                       | 474, 479 | littoralis (Heloura)               | 14       |
| Limnocyonina                | 473      | littoralis (Palæophis)             | 267      |
| Limnofelis                  | 471      | littoralis (Palæotringa)           | 338      |

|                                    | Page          |                                   | Page          |
|------------------------------------|---------------|-----------------------------------|---------------|
| litoralis (Passalacodon) .....     | 426           | Longirostre .....                 | 147           |
| lloydi (Ischyromys) .....          | 891           | Longirostrinae .....              | 623           |
| lobata (Tringa) .....              | 339           | longirostris (Arvicola) .....     | 898           |
| lobatum (Diceratherium) .....      | 744           | longirostris (Euchatus) .....     | 806           |
| lobatus (Coryphodon) .....         | 616           | longirostris (Mastodon) .....     | 637           |
| lobatus (Lobipes) .....            | 339           | longirostris (Mesoplodon) .....   | 533, 585      |
| lobatus (Phalaropus) .....         | 339           | longirostris (Oxydactylus) .....  | 796           |
| Lobipes .....                      | 339           | longirostris (Paleosyops) .....   | 713           |
| hyperboreus .....                  | 339           | longirostris (Prosthennops) ..... | 771           |
| lobatus .....                      | 339           | longirostris (Ziphius) .....      | 585           |
| Lobodon .....                      | 562           | longispinis (Rhabdopelix) .....   | 164           |
| vetus .....                        | 562           | longispinus (Stegosaurus) .....   | 234           |
| Lobodoninae .....                  | 562           | longurio (Aramornis) .....        | 332           |
| Lobodontinae .....                 | 562           | longurio (Procamelus) .....       | 798           |
| lobulatus (Pelycictis) .....       | 533           | longus (Diplodocus) .....         | 199           |
| lockingtonianus (Pacichnus) .....  | 911           | loomisi (Diceratherium) .....     | 745           |
| lockwoodi (Taphrosaurus) .....     | 121           | loomisi (Monotragulus) .....      | 811           |
| lockwoodii (Plesiosaurus) .....    | 121           | loomisi (Proterix) .....          | 434           |
| lovii (Orotherium) .....           | 668           | Lophiodon .....                   | 723, 851      |
| logani (Hylomys) .....             | 14            | brachygnathus .....               | 851           |
| lomas (Coryphodon) .....           | 616           | modestus .....                    | 714           |
| lomocana (Moris) .....             | 291           | oregonensis .....                 | 726           |
| Lonchodelphis .....                | 593           | pumilis .....                     | 671           |
| occiduus .....                     | 593           | Lophiodontidae .....              | 723           |
| longævus (Dissacus) .....          | 467           | Lophiodontinae .....              | 723           |
| longicauda (Reithrodon) .....      | 892           | Lophiodontoidea .....             | 723           |
| longicauda (Reithrodontomys) ..... | 892           | Lophiohyus .....                  | 754           |
| longicaudatus (Pantolestes) .....  | 426           | alticeps .....                    | 754           |
| longicaudus (Pantolestes) .....    | 426           | Lophiotherium .....               | 669, 766      |
| longiceps (Camelomeryx) .....      | 811           | furcatus .....                    | 766           |
| longiceps (Dolichorhinus) .....    | 716           | sylvaticum .....                  | 671           |
| longiceps (Edmontonia) .....       | 237           | vasatchense .....                 | 669           |
| longiceps (Hadrosaurus) .....      | 211           | Lophocetus .....                  | 587           |
| longiceps (Merycoides) .....       | 737           | calvertensis .....                | 587           |
| longiceps (Mesoreodon) .....       | 737           | Lophodytes .....                  | 309           |
| longiceps (Mycterosaurus) .....    | 47            | cucullatus .....                  | 309           |
| longiceps (Protolabis) .....       | 801           | Lophœthya .....                   | 286           |
| longiceps (Pteranodon) .....       | 163           | Lophoprotopus .....               | 143, 144      |
| longiceps (Tinoceras) .....        | 619           | buceros .....                     | 144           |
| longiceps (Trachodon) .....        | 211           | Lophortyx .....                   | 327           |
| longiceps (Uintatherium) .....     | 619           | californica .....                 | 327           |
| longicollis (Coselophysis) .....   | 186           | californicus .....                | 327           |
| longicollis (Tanystropheus) .....  | 186           | Lophosaurus .....                 | 144           |
| longicristis (Meschippus) .....    | 677           | buceros .....                     | 144           |
| longicristis (Miohippus) .....     | 677           | Lophotherium .....                | 671           |
| longicrus (Felis) .....            | 553           | hallardi .....                    | 671           |
| longieundus (Pantolestes) .....    | 426           | sylvaticum .....                  | 671           |
| longifrons (Ceterhinops) .....     | 591           | Loricata .....                    | 135, 150, 416 |
| longifrons (Eporeodon) .....       | 782           | loripes (Steropoides) .....       | 21            |
| longimana (Balana) .....           | 576           | lotor (Procyon) .....             | 515           |
| longimana (Megaptera) .....        | 576           | louisæ (Apatosaurus) .....        | 195           |
| longinsula (Terrapen) .....        | 99            | lowii (Desmatochelys) .....       | 77            |
| longinuchus (Taphrosphyx) .....    | 75            | Loxodon .....                     | 648           |
| Longipennes .....                  | 287, 288, 330 | loxodon (Eumys) .....             | 863           |
| longipes (Aphelops) .....          | 747           | loxodon (Hesperomys) .....        | 893           |
| longipes (Colodon) .....           | 726           | loxodon (Megalonyx) .....         | 410           |
| longipes (Mesotapirus) .....       | 726           | loxodon (Peromyscus) .....        | 893           |
| longipes (Mimocyon) .....          | 485           | Loxodontinae .....                | 640           |
| longipes (Oxydactylus) .....       | 796           | Loxolophodon .....                | 616, 618, 620 |
| longipes (Rhinceros) .....         | 747, 749      | cornutus .....                    | 620           |
| longipes (Stegomochus) .....       | 139           | furcatus .....                    | 620           |
| longipes (Stegomys) .....          | 139           | pressicornis .....                | 620           |
| Longipinnati .....                 | 123           | semicinctus .....                 | 616           |
| Longipinnatidae .....              | 123           | Loxolophus .....                  | 460           |
| longiramus (Dimetrodon) .....      | 56            | attenuatus .....                  | 460           |

| Page                                       | Page   |
|--|--|
| <i>Loxolophus—Continued</i>                | <i>Lutrinnæ</i> ..... 535                      |
| <i>hyattianus</i> ..... 460                | <i>Lutrini</i> ..... 536                       |
| <i>priscus</i> ..... 460                   | <i>luxatus</i> (Colodon) ..... 726             |
| <i>loxostyla</i> (Moris) ..... 261         | <i>lycaon</i> (Canis) ..... 499                |
| <i>loxostyla</i> (Sula) ..... 261          | <i>Lycarion</i> ..... 485                      |
| <i>lucare</i> (Dinoceras) ..... 619        | <i>hargeri</i> ..... 485                       |
| <i>lucare</i> (Uintatherium) ..... 619     | <i>medius</i> ..... 485                        |
| <i>lucaris</i> (Allosaurus) ..... 184      | <i>Lyciscus</i> ..... 497                      |
| <i>lucaris</i> (Antrodemus) ..... 184      | <i>lycopotamica</i> (Lutra) ..... 536          |
| <i>lucaris</i> (Taxymys) ..... 904         | <i>lycopotamica</i> (Sthenictis) ..... 536     |
| <i>lucaris</i> (Uintornis) ..... 353       | <i>lycopotamicum</i> (Potamotherium) ..... 536 |
| <i>lucasanus</i> (Tichosteus) ..... 187    | <i>lycopotamicus</i> (Lutricetus) ..... 536    |
| <i>lucasi</i> (Æchmophorus) ..... 286      | <i>lydekkeri</i> (Aquila) ..... 318            |
| <i>lucasi</i> (Brachauchenius) ..... 119   | <i>lydekkerianus</i> (Miocænus) ..... 608      |
| <i>lucasi</i> (Cervus) ..... 330           | <i>lyellianus</i> (Amblyonyx) ..... 12         |
| <i>lucasi</i> (Pediocetes) ..... 326       | <i>lyellianus</i> (Fulicopus) ..... 12         |
| <i>lucasi</i> (Pediocetes) ..... 326       | <i>Lynapida</i> ..... 23                       |
| <i>lucasi</i> (Amphicotylus) ..... 146     | <i>Lynx</i> ..... 554                          |
| <i>lucasi</i> (Goniopholis) ..... 146      | <i>calcaratus</i> ..... 554                    |
| <i>lucasi</i> (Pediocetes) ..... 326       | <i>californicus</i> ..... 555                  |
| <i>luciae</i> (Testudo) ..... 104          | <i>canadensis</i> ..... 554                    |
| <i>lucius</i> (Alligator) ..... 167        | <i>compresus</i> ..... 555                     |
| <i>lucius</i> (Crocodilus) ..... 167       | <i>fasciatus</i> ..... 555                     |
| <i>ludovicianus</i> (Cercomys) ..... 372   | <i>fischeri</i> ..... 555                      |
| <i>ludovicianus</i> (Cynomys) ..... 372    | <i>floridanus</i> ..... 555                    |
| <i>ludovicianus</i> (Lanius) ..... 357     | <i>occidentalis</i> ..... 555                  |
| <i>lulli</i> (Gomphotherium) ..... 637     | <i>parvus</i> ..... 555                        |
| <i>lulli</i> (Mastodon) ..... 637          | <i>rufus</i> ..... 555                         |
| <i>lulli</i> (Megabelodon) ..... 637       | <i>rufus</i> ..... 555                         |
| <i>lulli</i> (Oxydactylus) ..... 796       | <i>lynx</i> (Felis) ..... 555                  |
| <i>lulli</i> (Priacodon) ..... 370         | <i>Lyognathi</i> ..... 539                     |
| <i>lulli</i> (Promerycochærus) ..... 784   | <i>lysitensis</i> (Didymictis) ..... 433       |
| <i>lulli</i> (Seridentinus) ..... 637      | <i>lysitensis</i> (Ilyopsodus) ..... 444       |
| <i>lulli</i> (Tetabelodon) ..... 637       | <i>lysitensis</i> (Wasatchia) ..... 758        |
| <i>lulli</i> (Trilophodon) ..... 637       | <i>Lytoloma</i> ..... 76                       |
| <i>lulli</i> (Tympanuchus) ..... 326       | <i>angusta</i> ..... 76, 77                    |
| <i>lullianus</i> (Cyclopedius) ..... 790   | <i>jeanesii</i> ..... 77                       |
| <i>lullianus</i> (Pholippus) ..... 697     | <i>platyops</i> ..... 77                       |
| <i>lunatus</i> (Dipriodon) ..... 334       | <i>wielandi</i> ..... 77                       |
| <i>lunatus</i> (Meniscoœsus) ..... 334     | <i>Lytolomidae</i> ..... 76                    |
| <i>lunifrons</i> (Petrochelidon) ..... 355 | <i>Lytolominae</i> ..... 76                    |
| <i>lupina</i> (Oxyæna) ..... 471           | <i>Macelognathide</i> ..... 187                |
| <i>lupovicianus</i> (Cynomys) ..... 372    | <i>Macelognathus</i> ..... 187                 |
| <i>Lupus</i> ..... 499                     | <i>vagans</i> ..... 187                        |
| <i>lupus</i> (Canis) ..... 499             | <i>Machærodidae</i> ..... 541                  |
| <i>luscus</i> (Gulo) ..... 531             | <i>Machærodinae</i> ..... 541                  |
| <i>lutescens</i> (Geomys) ..... 379        | <i>Machærodontinae</i> ..... 541               |
| <i>Lutra</i> ..... 536                     | <i>Machærodontini</i> ..... 541                |
| <i>canadensis</i> ..... 537                | <i>Machærodus</i> ..... 540, 548               |
| <i>hudsonica</i> ..... 537                 | <i>catocopsis</i> ..... 546                    |
| <i>placinararia</i> ..... 538              | <i>coloradensis</i> ..... 546                  |
| <i>placinxia</i> ..... 538                 | <i>crassidens</i> ..... 547                    |
| <i>pristina</i> ..... 538                  | <i>gracilis</i> ..... 547                      |
| <i>rhoadesi</i> ..... 538                  | <i>ischyrus</i> ..... 546                      |
| <i>rhoadesii</i> ..... 538                 | <i>maximus</i> ..... 553                       |
| <i>vaga</i> ..... 537                      | <i>merceri</i> ..... 547                       |
| <i>Lutreola</i> ..... 538, 531             | <i>mercerii</i> ..... 547                      |
| <i>antiquus</i> ..... 539                  | <i>niobrarenensis</i> ..... 547                |
| <i>macrodon</i> ..... 531                  | <i>Machæroides</i> ..... 475                   |
| <i>vison</i> ..... 539                     | <i>eothen</i> ..... 475                        |
| <i>lutreola</i> (Palmosinopa) ..... 426    | <i>Machæromeryx</i> ..... 317                  |
| <i>Lutricetus</i> ..... 536                | <i>tragulus</i> ..... 317                      |
| <i>lycopotamicus</i> ..... 536             | <i>Machæroprosopus</i> ..... 143               |
| <i>Lutridæ</i> ..... 536                   | <i>andersoni</i> ..... 144                     |
| <i>Lutrinnæ</i> ..... 536                  | <i>bueros</i> ..... 144                        |

|                                     | Page     |                                      | Page |
|-------------------------------------|----------|--------------------------------------|------|
| <i>Machæoprosopus—Continued</i>     |          | <i>Macrosaurus—Continued</i>         |      |
| validus .....                       | 144      | lævis .....                          | 259  |
| <i>Macherosaurus</i> .....          | 256      | mitchilli .....                      | 259  |
| torrejonensis .....                 | 256      | macrospandylus (Clepsydraps) .....   | 56   |
| <i>Machairodina</i> .....           | 540, 541 | macrospandylus (Dimetrodon) .....    | 56   |
| <i>Machairodontidæ</i> .....        | 540      | macrospandylus (Zeuglodon) .....     | 570  |
| <i>Machairodontina</i> .....        | 540      | macrostegus (Merycochoerus) .....    | 784  |
| <i>Machairodus</i> .....            | 546      | macrostegus (Promerycochoerus) ..... | 784  |
| catocopsis .....                    | 546      | Macrotheriina .....                  | 661  |
| crassidens .....                    | 547      | macrotis (Cervus) .....              | 821  |
| floridanus .....                    | 549      | macroura (Zenaidura) .....           | 346  |
| gracilis .....                      | 547      | madisonius (Dromomeryx) .....        | 820  |
| ischyrus .....                      | 547      | madisonius (Merycochoerus) .....     | 788  |
| mercerii .....                      | 547      | madisonius (Palæomeryx) .....        | 820  |
| niobrarensis .....                  | 547      | madisonius (Procamelus) .....        | 798  |
| macrospandylus (Zeuglodon) .....    | 570      | madisonius (Pronomotherium) .....    | 788  |
| mackenzianus (Ovibos) .....         | 846      | mæandrinus (Phocyon) .....           | 508  |
| macnaughtoni (Thenaropus) .....     | 22       | magister (Neotoma) .....             | 896  |
| macnaughtoni (Therianopus) .....    | 22       | magna (Collettosaurus) .....         | 9    |
| Macrasaurus .....                   | 259      | magna (Notamphibia) .....            | 9    |
| piriger .....                       | 259      | magna (Palauchena) .....             | 808  |
| macrocephalus (Agriochoerus) .....  | 777      | magna (Sturnella) .....              | 357  |
| macrocephalus (Camelops) .....      | 804      | magnificus (Otouphepus) .....        | 17   |
| macrocephalus (Coloreodon) .....    | 777      | magniventris (Anchylosaurus) .....   | 238  |
| macrocephalus (Harpagolestes) ..... | 469      | magniventris (Ankylosaurus) .....    | 238  |
| macrocephalus (Holomeniscus) .....  | 804      | magniventris (Ankylosaurus) .....    | 238  |
| macrocephalus (Lepus) .....         | 863      | magnum (Lambdotherium) .....         | 711  |
| macrocephalus (Physeter) .....      | 599      | magnus (Ælurodon) .....              | 507  |
| Macrochelys .....                   | 85       | magnus (Cimoliasaurus) .....         | 120  |
| floridana .....                     | 85       | magnus (Collettosaurus) .....        | 9    |
| teminckii .....                     | 85       | magnus (Cyphornis) .....             | 200  |
| temminckii .....                    | 85       | magnus (Diprionomys) .....           | 881  |
| Macrolemmys .....                   | 85       | magnus (Euoploceyon) .....           | 507  |
| Macrolemys .....                    | 85       | magnus (Merycochoerus) .....         | 786  |
| macrodactylatus (Argoides) .....    | 6        | magnus (Palæocastor) .....           | 884  |
| macrodactylatus (Argozoum) .....    | 6        | magnus (Pleuroceyon) .....           | 486  |
| Macrodactyli .....                  | 533      | magnus (Podilymbus) .....            | 286  |
| macrodactylotus (Argoides) .....    | 6        | magnus (Pontoleon) .....             | 558  |
| macrodactylus (Argoides) .....      | 6        | magnus (Pontolis) .....              | 558  |
| macrodon (Galera) .....             | 531      | magnus (Trihamus) .....              | 23   |
| macrodon (Gallitis) .....           | 531      | magoder (Palæosceincus) .....        | 237  |
| macrodon (Grison) .....             | 531      | maibeni (Archidiakodon) .....        | 648  |
| macrodon (Lutreola) .....           | 528, 531 | maibeni (Elephas) .....              | 648  |
| macrodon (Mustela) .....            | 528      | maior (Ammosaurus) .....             | 171  |
| Macrogenis .....                    | 771      | maior (Palæosyops) .....             | 713  |
| crassigenis .....                   | 771      | major (Agriochoerus) .....           | 777  |
| Macropoda .....                     | 901      | major (Ammosaurus) .....             | 171  |
| macrops (Proroziphus) .....         | 583, 585 | major (Anchisaurus) .....            | 171  |
| Macropterna .....                   | 18       | major (Anomœopus) .....              | 4    |
| divaricans .....                    | 18       | major (Aplodontia) .....             | 906  |
| gracilipes .....                    | 18       | major (Archelurus) .....             | 543  |
| vulgaris .....                      | 18       | major (Auchenia) .....               | 798  |
| macropternus (Bunophorus) .....     | 753      | major (Bolosaurus) .....             | 37   |
| macropternus (Phenacodus) .....     | 753      | major (Diniectis) .....              | 543  |
| macropus (Dryptosaurus) .....       | 181      | major (Diniectis) .....              | 543  |
| macropus (Lelaps) .....             | 181      | major (Eotitanops) .....             | 712  |
| macropus (Phalacrocorax) .....      | 292      | major (Epreodon) .....               | 792  |
| Macrorhampus .....                  | 337      | major (Equus) .....                  | 703  |
| griseus .....                       | 337      | major (Eucretaphus) .....            | 762  |
| macrorhinus (Merycododon) .....     | 781      | major (Hyraodon) .....               | 736  |
| macrorhinus (Oreodon) .....         | 781      | major (Ictops) .....                 | 430  |
| macrorhinus (Palæarctomys) .....    | 868      | major (Leptauchenia) .....           | 790  |
| Macrorhynchidæ .....                | 147      | major (Merychyus) .....              | 787  |
| macrorhynchus (Bottosaurus) .....   | 157      | major (Meryhyus) .....               | 787  |
| Macrosaurus .....                   | 259      | major (Ninuruvus) .....              | 543  |

| Page                               | Page          |
|------------------------------------|---------------|
| major (Orohippus) .....            | 671           |
| major (Palaeosyops) .....          | 713           |
| major (Paramys) .....              | 903           |
| major (Pliauchenia) .....          | 798           |
| major (Pocamelus) .....            | 798, 803      |
| major (Saniwa) .....               | 552, 551      |
| major (Saniwa) .....               | 552           |
| major (Sinopa) .....               | 476           |
| major (Stypolophus) .....          | 476           |
| major (Teleoceras) .....           | 750           |
| major (Uintacyon) .....            | 484           |
| major (Eporeodon) .....            | 782           |
| majus (Aciprion) .....             | 248           |
| majusculus (Hadrianus) .....       | 100           |
| malacorchinus (Aphelops) .....     | 747           |
| malacorchinus (Peraceras) .....    | 747           |
| malacorchinus (Teleoceras) .....   | 747           |
| malaris (Indrodon) .....           | 448           |
| malta (Ciconia) .....              | 296           |
| maltha (Ciconia) .....             | 296           |
| Malthacolestes .....               | 374           |
| osborni .....                      | 374           |
| Mammalia .....                     | 360           |
| mammifer (Leptomeryx) .....        | 810           |
| mammifer (Trigenicus) .....        | 810           |
| Mammifera .....                    | 360           |
| mammillaris (Ovis) .....           | 843           |
| Mammonteus .....                   | 642           |
| americanus .....                   | 649           |
| compressus .....                   | 650           |
| primigenius .....                  | 649, 650      |
| mammonteus (Elephas) .....         | 648           |
| Mammontinae .....                  | 622, 640      |
| Mammotinae .....                   | 622, 640      |
| Mammot .....                       | 623, 634, 642 |
| americanum .....                   | 624           |
| brevidentis .....                  | 635           |
| campestre .....                    | 635           |
| chapmani .....                     | 635           |
| cordillarum .....                  | 638           |
| euthypodon .....                   | 638           |
| floridanum .....                   | 638           |
| francisi .....                     | 630           |
| humboldtii .....                   | 631           |
| matthewi .....                     | 630           |
| merriami .....                     | 630           |
| mirificum .....                    | 633           |
| obscurum .....                     | 637           |
| ohioticum .....                    | 625           |
| oregonense .....                   | 630           |
| plicatum .....                     | 630           |
| praecursor .....                   | 638           |
| proavus .....                      | 638           |
| productum .....                    | 638           |
| progenium .....                    | 630           |
| rugosidentis .....                 | 630           |
| serridentis .....                  | 639           |
| shepardi .....                     | 639           |
| tropicum .....                     | 632           |
| Mammotinae .....                   | 623           |
| Manati .....                       | 658           |
| Manatidae .....                    | 658           |
| Manatini .....                     | 658           |
| Manatus .....                      | 658           |
| americanus .....                   | 659           |
| Manatus—Continued                  |               |
| antiquus .....                     | 656           |
| giganteus .....                    | 659           |
| inornatus .....                    | 657           |
| latirostris .....                  | 659           |
| manatus (Trichechus) .....         | 659           |
| Mancalla .....                     | 344           |
| californiensis .....               | 344           |
| mandibularis (Anisonchus) .....    | 611           |
| mandibularis (Haplaconus) .....    | 611           |
| manducans (Temnotrionyx) .....     | 112           |
| manhattanensis (Phytosaurus) ..... | 145           |
| manhattanensis (Rutiodon) .....    | 145           |
| maniculatus (Peromyscus) .....     | 893           |
| manigaulti (Diplottherium) .....   | 656           |
| manigaultii (Diplottherium) .....  | 656           |
| manigaultii (Metaxytherium) .....  | 656           |
| Manospondylus .....                | 183           |
| gigas .....                        | 183           |
| Manteoceras .....                  | 713, 714      |
| foris .....                        | 715           |
| manteoceras .....                  | 715           |
| pratensis .....                    | 715           |
| uintensis .....                    | 715           |
| ultimus .....                      | 713           |
| vallidens .....                    | 714           |
| washakiensis .....                 | 715           |
| manteoceras (Limnohyops) .....     | 715           |
| manteoceras (Manteoceras) .....    | 715           |
| manteoceras (Palaeosyops) .....    | 715           |
| Manteodon .....                    | 615           |
| Manupeda .....                     | 919           |
| Maroca .....                       | 305           |
| americana .....                    | 305           |
| marginale (Peratherium) .....      | 393           |
| marginalis (Didelphis) .....       | 393           |
| marginatus (Coryphodon) .....      | 616           |
| marginatus (Kritosaurus) .....     | 214           |
| marginatus (Pteropelyx) .....      | 214           |
| marginatus (Stephanosaurus) .....  | 214, 219      |
| marginatus (Trachodon) .....       | 214           |
| marinavis (Phalacrocorax) .....    | 292           |
| Marila .....                       | 307           |
| affinis .....                      | 307           |
| americana .....                    | 307           |
| collaris .....                     | 307           |
| marila .....                       | 307           |
| valisineria .....                  | 307           |
| marila (Anas) .....                | 307           |
| marila (Athyia) .....              | 307           |
| marila (Fuligula) .....            | 307           |
| marila (Marila) .....              | 307           |
| maritimus (Thalarectus) .....      | 521           |
| maritimus (Thalassaretus) .....    | 521           |
| maritimus (Ursus) .....            | 521           |
| markmani (Hyopsodus) .....         | 443           |
| Marmota .....                      | 870           |
| arizona .....                      | 870           |
| arrodens .....                     | 870           |
| flaviventer .....                  | 870           |
| flaviventris .....                 | 871           |
| minor .....                        | 871           |
| monax .....                        | 871           |
| nevadensis .....                   | 871           |
| torta .....                        | 871           |



|                               | Page     |                                | Page               |
|-------------------------------|----------|--------------------------------|--------------------|
| Marmotidae                    | 868      | Mastodon—Continued             |                    |
| marnochii (Cistudo)           | 99       | adum                           | 633                |
| marnochii (Terrapene)         | 99       | americanus                     | 624, 647           |
| marschi (Elasmosaurus)        | 118      | andicus                        | 632                |
| marshalli (Brachypterus)      | 526      | andum                          | 631                |
| marshi (Alphodon)             | 391      | angustidens                    | 636, 638           |
| marshi (Archæotherium)        | 764      | antiquissimus                  | 632                |
| marshi (Ammopus)              | 2        | antium                         | 631                |
| marshi (Aræocyon)             | 507      | austialis                      | 632                |
| marshi (Baña)                 | 72       | brevidens                      | 635                |
| marshi (Baptanodon)           | 127      | canpester                      | 635                |
| marshi (Blastomeryx)          | 818      | chapmani                       | 635                |
| marshi (Dyseomeryx)           | 818      | collinsonii                    | 625                |
| marshi (Elasmosaurus)         | 118      | conodon                        | 636                |
| marshi (Grus)                 | 332      | cordillerum                    | 632                |
| marshi (Hoplitosaurus)        | 232      | cuvieri                        | 625                |
| marshi (Hoplophoneus)         | 544      | dinotherioides                 | 636, 638           |
| marshi (Hyopsodus)            | 443      | euhypodon                      | 636                |
| marshi (Leptoreodon)          | 812      | floridanus                     | 636                |
| marshi (Megacerops)           | 721      | floridianus                    | 636                |
| marshi (Metacheiromys)        | 422      | giganteum                      | 626                |
| marshi (Metallurus)           | 550      | giganteus                      | 624, 636           |
| marshi (Paroreodon)           | 781      | gigantus                       | 628                |
| marshi (Pliocyon)             | 607      | godmani                        | 625                |
| marshi (Pseudelurus)          | 660      | humboldtii                     | 631                |
| marshi (Promerycocherus)      | 784      | humboldtii                     | 631                |
| marshi (Stegosaurus)          | 232      | humboldtii                     | 631                |
| marshi (Tephrocyon)           | 610      | intermedius                    | 632                |
| marshi (Tomarctus)            | 510      | jeffersonii                    | 625                |
| marshii (Archelon)            | 79       | ligoniferus                    | 637                |
| marshii (Canis)               | 714      | longirostris                   | 637                |
| marshii (Protostega)          | 79       | lulli                          | 637                |
| marshii (Telmatherium)        | 714      | matthewi                       | 630                |
| marshii (Vulpavus)            | 714      | maximum                        | 628                |
| Marsupiali                    | 386      | maximus                        | 627                |
| Marsupialia                   | 385, 386 | mercificus                     | 633                |
| marsupialis (Didelphis)       | 384      | mexicanus                      | 629                |
| marsupialis (Didelphys)       | 384      | mirificus                      | 633                |
| marsupialoides (Canichnoides) | 10       | morilli                        | 637                |
| Marsupiatæ                    | 386      | obscurus                       | 636, 637, 638, 639 |
| Marsupiatæ                    | 387      | ohioticus                      | 626                |
| marsupium (Herpetotherium)    | 393      | oligobunus                     | 632                |
| marsupium (Peratherium)       | 393      | plicatus                       | 630                |
| Martes                        | 526, 628 | præcursor                      | 638                |
| americana                     | 527      | proavus                        | 638                |
| caurina                       | 527      | productus                      | 638                |
| furlongi                      | 528      | rugatum                        | 627                |
| glavæ                         | 527      | rugosidens                     | 639                |
| kinseyi                       | 527      | serridens                      | 639                |
| minor                         | 529      | shepardi                       | 639                |
| nambianus                     | 530      | subtapiroidea                  | 637                |
| nobilis                       | 527      | tapiroidea                     | 635                |
| ogygia                        | 527      | tetracaulodon                  | 626                |
| parviloba                     | 527      | tiopicus                       | 632                |
| pennanti                      | 527      | Mastodonadæ                    | 623                |
| Martina                       | 625      | Mastodonta                     | 623                |
| martinii (Ogmodirus)          | 119      | mastodonta (Elephas)           | 629                |
| marylandica (Thecachampsa)    | 154      | mastodonteus (Elephas)         | 629                |
| marylandicus (Crocodylus)     | 154      | Mastodonti                     | 623                |
| masculinus (Agomphus)         | 90       | Mastodontidæ                   | 623                |
| massetericus (Didymiotis)     | 484      | Mastodontinæ                   | 623                |
| massetericus (Uintacyon)      | 484      | Mastodontoides                 | 621, 623           |
| massetericus (Viverravus)     | 484      | mastodontoides (Tetracaulodon) | 627                |
| Mastelphas                    | 624, 627 | mastodontus (Elephas)          | 625                |
| Mastodon                      | 623, 624 | Mastotherium                   | 624                |

| Page |                                      | Page          |                                |
|------|--------------------------------------|---------------|--------------------------------|
|      | Mastotherium—Continued               |               |                                |
|      | humboldtii .....                     | 631           | medium (Brontotherium) .....   |
|      | matheri (Agostopus) .....            | 2             | medius (Agostopus) .....       |
|      | matthewi (Hysenognathus) .....       | 501           | medius (Allosaurus) .....      |
|      | matthewi (Cygnus) .....              | 301           | medius (Anrodemus) .....       |
|      | matthewi (Diplobunops) .....         | 757           | medius (Blastomeryx) .....     |
|      | matthewi (Heloderma) .....           | 253           | medius (Camptosaurus) .....    |
|      | matthewi (Hysenognathus) .....       | 509           | medius (Dryptosaurus) .....    |
|      | matthewi (Hypohippus) .....          | 679           | medius (Leptotragulus) .....   |
|      | matthewi (Limnonyops) .....          | 713           | medius (Limnocyon) .....       |
|      | matthewi (Mammut) .....              | 630           | medius (Lycarion) .....        |
|      | matthewi (Mastodon) .....            | 630           | medius (Merychylus) .....      |
|      | matthewi (Merycochoerus) .....       | 786           | medius (Miakis) .....          |
|      | matthewi (Miomastodon) .....         | 630           | medius (Paranys) .....         |
|      | matthewi (Moropus) .....             | 662           | medius (Pleurocyon) .....      |
|      | matthewi (Notharctus) .....          | 923           | medius (Pliocyon) .....        |
|      | matthewi (Olor) .....                | 301           | medius (Procamelus) .....      |
|      | matthewi (Paralabis) .....           | 795           | medius (Protohippus) .....     |
|      | matthewi (Pliomastodon) .....        | 630           | medius (Protoreodon) .....     |
|      | matthewi (Porthocyon) .....          | 509           | medius (Sigmodon) .....        |
|      | matthewi (Probassariscus) .....      | 516           | medius (Thinoeyon) .....       |
|      | matthewi (Pronothodectes) .....      | 445           | medius (Thiocyon) .....        |
|      | matthewi (Pseudolabis) .....         | 795           | medius (Titanops) .....        |
|      | naturus (Aspideretes) .....          | 100           | Megabelodon .....              |
|      | naturus (Paronymys) .....            | 929           | lulli .....                    |
|      | matutinus (Aceratherium) .....       | 747           | Megaceratops .....             |
|      | matutinus (Aphelops) .....           | 747           | coloradoensis .....            |
|      | matutinus (Boreodon) .....           | 385           | Megacerops .....               |
|      | matutinus (Brachypsalis) .....       | 526           | angulatus .....                |
|      | matutinus (Rhinoceros) .....         | 747           | angustidens .....              |
|      | maxima (Felis) .....                 | 553           | angustigenis .....             |
|      | maximiliani (Mosasaurus) .....       | 262           | assiniboiensis .....           |
|      | maximus (Agriochcerus) .....         | 777           | avus .....                     |
|      | maximus (Angiorthorhinus) .....      | 143           | bicornutus .....               |
|      | maximus (Camelus) .....              | 807           | brachycephalus .....           |
|      | maximus (Diadectes) .....            | 34            | coloradensis .....             |
|      | maximus (Euscydon) .....             | 750           | coloradoensis .....            |
|      | maximus (Machcerodus) .....          | 553           | crassicornis .....             |
|      | maximus (Mastodon) .....             | 627           | dispar .....                   |
|      | maximus (Melanosaurus) .....         | 255           | marahi .....                   |
|      | maximus (Moropus) .....              | 662           | primitivus .....               |
|      | maximus (Mosasaurus) .....           | 262           | riggsi .....                   |
|      | maximus (Nanopus) .....              | 16            | robustus .....                 |
|      | maximus (Nothodon) .....             | 34            | selwynianus .....              |
|      | maximus (Ovibos) .....               | 847           | serotinus .....                |
|      | maximus (Prosaurolophus) .....       | 217           | syccerus .....                 |
|      | mayfieldi (Preptoceras) .....        | 844           | tichoceras .....               |
|      | Mazama .....                         | 820, 822, 840 | tyleri .....                   |
|      | americana .....                      | 822           | Megachcerus .....              |
|      | virginiana .....                     | 632           | latidens .....                 |
|      | meadi (Palaeartonyx) .....           | 487           | zygomatus .....                |
|      | meandrinus (Zeludon) .....           | 508           | Megadactylus .....             |
|      | meandrinus (Canis) .....             | 508           | polyzelus .....                |
|      | meandrinus (Borophagus) .....        | 508           | Megalopia .....                |
|      | meandrinus (Dinoeyon) .....          | 508           | Megalictis .....               |
|      | meandrinus (Pliocyon) .....          | 508           | ferox .....                    |
|      | media (Mionula) .....                | 291           | Megalosaurus .....             |
|      | media (Pliauchenia) .....            | 799           | rex .....                      |
|      | mediævus (Anternodus) .....          | 427           | megalodon (Mosoreodon) .....   |
|      | mediævus (Ptilodus) .....            | 380           | megalodus (Aceratherium) ..... |
|      | mediatlanticus (Diaphrocetus) .....  | 597           | megalodus (Aphelops) .....     |
|      | mediatlanticus (Hypocetus) .....     | 597           | Megalomeryx .....              |
|      | mediatlanticus (Orycterocetus) ..... | 597           | notbrarensis .....             |
|      | mediocornutus (Teleoceras) .....     | 750           | Megalonix .....                |
|      | mediterraneus (Phalacrocorax) .....  | 292           | Megalonychia .....             |
|      |                                      |               | Megalonychus .....             |

|                             | Page               |                               | Page          |
|-----------------------------|--------------------|-------------------------------|---------------|
| Megalonyx                   | 406, 407           | Megatherium                   | 403, 404, 408 |
| californicus                | 409                | americanum                    | 405           |
| curvidens                   | 408                | jeffersonii                   | 408           |
| dissimilis                  | 408, 410           | mirabile                      | 405           |
| jeffersoni                  | 408                | Megatylopus                   | 803           |
| jeffersoni                  | 408                | gigas                         | 803           |
| leidyi                      | 409                | Megencephalon                 | 538           |
| leptostoma                  | 410                | primævus                      | 538           |
| leptostomus                 | 410                | Megopterna                    | 452           |
| leydeyi                     | 409                | minuta                        | 452           |
| loxodon                     | 410                | megaulax (Echmatomys)         | 95            |
| priscus                     | 411                | megaulax (Emsy)               | 95            |
| scalper                     | 410                | meirsanus (Thoracosaurus)     | 150           |
| sierrensis                  | 410                | Melanitta                     | 308           |
| sierrensis                  | 410                | perspicillata                 | 308           |
| sphenodon                   | 410                | Melanodon                     | 374           |
| tortulus                    | 410                | oweni                         | 374           |
| toxodon                     | 410                | melanolencus (Geranoaëtus)    | 317           |
| validus                     | 410                | melanolencus (Scelopax)       | 338           |
| wheatleyi                   | 410                | melanolencus (Spizæëtus)      | 317           |
| megalophysum (Cetotherium)  | 572                | melanolencus (Totanus)        | 338           |
| megalophysum (Plesiocetus)  | 572                | melanops (Eptesicus)          | 455           |
| megaloporus (Piptomerus)    | 121                | Melanosaurus                  | 255           |
| megalops (Glaucosaurus)     | 47                 | maximus                       | 255           |
| megalops (Isodectes)        | 43                 | Meleagridæ                    | 328           |
| megalops (Pariotichus)      | 43                 | Melegrinæ                     | 328           |
| Megalornis                  | 331                | Melegris                      | 329           |
| canadensis                  | 332                | altus                         | 330           |
| minor                       | 332                | antiqua                       | 329           |
| pratensis                   | 333                | antiquus                      | 329           |
| Megalornithiformes          | 331                | celer                         | 330           |
| Megalornithinæ              | 331                | gallopavo                     | 330           |
| Megalosauria                | 169, 170           | richmondi                     | 330           |
| Megalosauriæ                | 169, 170, 173, 176 | silvestris                    | 330           |
| Megalosaurina               | 170                | superba                       | 330           |
| Megalosaurioidæ             | 169, 170           | superbus                      | 330           |
| Megalosaurus                | 169, 173, 176      | meleagroides (Paleophasianus) | 328           |
| trihedron                   | 174                | Meles                         | 534           |
| valens                      | 174                | labradoria                    | 536           |
| megalotis (Reithrodontomys) | 892                | taxus                         | 536           |
| Megapezia                   | 16, 18             | Melidæ                        | 533           |
| coloradensis                | 18                 | Melinæ                        | 531, 534      |
| pineoi                      | 16                 | Meliosaurus                   | 148           |
| Megaptera                   | 575                | Menacodon                     | 370           |
| hoops                       | 576                | rarius                        | 371           |
| brachychira                 | 575                | menigaultii (Dioplotherium)   | 656           |
| longimana                   | 576                | Meniscocephalus               | 382, 384      |
| miocæna                     | 575                | borealis                      | 382           |
| mysticetoides               | 575                | brevis                        | 382           |
| nodosa                      | 576                | asperatus                     | 382           |
| Megapterna                  | 452                | coelatus                      | 382           |
| minuta                      | 452                | conquistus                    | 382           |
| megarhinum (Telmatherium)   | 710                | fragilis                      | 382           |
| megarhinus (Mesatirhinus)   | 716                | lunatus                       | 384           |
| Megaseurus                  | 256                | robustus                      | 384           |
| robustus                    | 256                | sculptus                      | 383           |
| Megascops                   | 349                | Meniscomya                    | 905           |
| bendirei                    | 349                | cavatus                       | 903           |
| Megatheria                  | 404                | hippodus                      | 905           |
| Megatheriæ                  | 404                | liolopus                      | 903           |
| Megatheridæ                 | 404                | multiplicatus                 | 903           |
| Megatheriidæ                | 404, 407           | Meniscotheridæ                | 906           |
| Megatheriina                | 404                | Meniscotheriidæ               | 906           |
| Megatheriini                | 404                | Meniscotherium                | 906           |
| Megatherioidæ               | 403                | chanense                      | 907           |

|                                 | Page     |                                  | Page     |
|---------------------------------|----------|----------------------------------|----------|
| <i>Meniscotherium—Continued</i> |          | <i>Mergus—Continued</i>          |          |
| priseum .....                   | 607      | serrator .....                   | 309      |
| tapiaetis .....                 | 607      | meridianus (Aphelops) .....      | 747      |
| terrærubræ .....                | 607      | meridianus (Rhinoceros) .....    | 747      |
| meniscula (Branta) .....        | 302      | Meriones .....                   | 310      |
| Menoceras .....                 | 745      | canadensis .....                 | 310      |
| cooki .....                     | 745      | merriami (Dimacrottherium) ..... | 523      |
| Menodontida .....               | 718      | merriami (Idiophyseter) .....    | 597      |
| Menodus .....                   | 718      | merriami (Mammut) .....          | 630      |
| giganteus .....                 | 719      | merriami (Mastodon) .....        | 630      |
| heloceras .....                 | 719      | merriami (Miomastodon) .....     | 630      |
| ingens .....                    | 719      | merriami (Moropus) .....         | 663      |
| peltoceras .....                | 722      | merriami (Nanopus) .....         | 16       |
| proutii .....                   | 719      | merriami (Nimravus) .....        | 543      |
| schwynianus .....               | 721      | merriami (Peratherium) .....     | 393      |
| torvus .....                    | 718      | merriami (Pliauchenia) .....     | 802      |
| trigonoceras .....              | 719      | merriami (Tapirus) .....         | 731      |
| Menops .....                    | 722      | merriami (Teratomis) .....       | 313      |
| varians .....                   | 722      | Merriamia .....                  | 125      |
| Menotherium .....               | 762      | zitteli .....                    | 125      |
| lemurinum .....                 | 762      | Merriana .....                   | 125      |
| robustum .....                  | 762      | zitteli .....                    | 125      |
| Menotyphla .....                | 450      | Merychippus .....                | 680, 683 |
| mentalis (Hoplaphoneus) .....   | 544      | avus .....                       | 681      |
| mentalis (Hypsodus) .....       | 444      | calamarius .....                 | 684      |
| mentalis (Pelycodus) .....      | 444      | californicus .....               | 684      |
| mentalis (Sarclemur) .....      | 444      | campestris .....                 | 684      |
| mento (Delphinodon) .....       | 588      | castilli .....                   | 688      |
| mento (Dinolysus) .....         | 765      | coalingensis .....               | 684, 686 |
| Mephitis .....                  | 531      | cuniminui .....                  | 690      |
| mephitica (Mephitis) .....      | 533      | eohippurion .....                | 684      |
| Mephitina .....                 | 531      | eoplacidus .....                 | 684      |
| Mephitis .....                  | 531      | fossulatus .....                 | 687      |
| Mephitis .....                  | 532      | fraucisi .....                   | 684      |
| avia .....                      | 533      | insignis .....                   | 684, 686 |
| elongata .....                  | 532      | internontantus .....             | 685      |
| fossidens .....                 | 531      | isonesus .....                   | 685      |
| frontata .....                  | 533      | labrosus .....                   | 685      |
| leptops .....                   | 532      | lenticularis .....               | 693      |
| mephitica .....                 | 532, 533 | mirabilis .....                  | 697, 698 |
| mephiticus .....                | 533      | missouriensis .....              | 685      |
| mephitis .....                  | 533      | obliquus .....                   | 686      |
| mesomelas .....                 | 533      | pachyops .....                   | 688      |
| newtonensis .....               | 533      | paniensis .....                  | 685      |
| nigra .....                     | 533      | parvulus .....                   | 688      |
| obtusata .....                  | 533      | patrum .....                     | 686      |
| occidentalis .....              | 533      | perditus .....                   | 688, 689 |
| orthoclia .....                 | 533      | phlegon .....                    | 684      |
| orthoclichus .....              | 533      | placidus .....                   | 689      |
| orthoclicia .....               | 533      | primus .....                     | 685      |
| putida .....                    | 533      | proparvulus .....                | 686      |
| putorius .....                  | 534      | propinquus .....                 | 684      |
| merceri (Machairodus) .....     | 547      | quartus .....                    | 685      |
| merceri (Smilodon) .....        | 547      | quintus .....                    | 685      |
| merceri (Uncia) .....           | 547      | relictus .....                   | 686      |
| merceri (Felis) .....           | 547      | republicanus .....               | 686      |
| merceri (Machairodus) .....     | 547      | secundus .....                   | 685      |
| merceri (Machairodus) .....     | 547      | sejunctus .....                  | 686      |
| merceri (Smilodontopsis) .....  | 547      | severus .....                    | 686      |
| mercensis (Mastodon) .....      | 638      | severus .....                    | 686      |
| Mergida .....                   | 309      | socius .....                     | 686      |
| Mergina .....                   | 309      | speciosus .....                  | 687      |
| Mergus .....                    | 309      | sphenodus .....                  | 686      |
| americanus .....                | 309      | stylodontus .....                | 684      |
| cuscutatus .....                | 309      | summi .....                      | 686      |

|                               | Page     |                   | Page     |
|-------------------------------|----------|-------------------|----------|
| Merychippus— <i>Continued</i> |          | Merycoides        | 787      |
| supremus                      | 688      | cursor            | 787      |
| tertius                       | 685      | latidens          | 787      |
| vellicans                     | 687      | longiceps         | 787      |
| Merychys                      | 787      | Merycoidodon      | 779      |
| arenarius                     | 787      | affinis           | 780      |
| arenarum                      | 787      | bullatum          | 782      |
| curtus                        | 787      | bullatus          | 782      |
| delicatus                     | 787      | culbertsoni       | 780      |
| elegans                       | 787      | culbertsonii      | 780      |
| harrisonensis                 | 787      | gracilis          | 780      |
| leptorhynchus                 | 787      | hybridus          | 781      |
| leptorhynchus                 | 787      | macrorhinus       | 781      |
| major                         | 787      | minor             | 781      |
| medius                        | 788      | periclorum        | 780      |
| minimus                       | 788      | platycephalus     | 781      |
| paniensis                     | 788      | Merycoidodontidae | 779      |
| parigonus                     | 788      | Merycoidontinae   | 779      |
| pariagonus                    | 788      | Meryhippus        | 683      |
| profectus                     | 788      | Meryhyus          | 787      |
| relictus                      | 788      | major             | 787      |
| siouxensis                    | 788      | Mesacodon         | 450      |
| smithi                        | 788      | speciosus         | 450      |
| zygomanticus                  | 790      | Mesatapirus       | 726      |
| Merycocherus                  | 784, 785 | occidentalis      | 726      |
| altiramis                     | 786      | Mesatirhinus      | 716      |
| altiramus                     | 786      | megarhinus        | 716      |
| buwaldi                       | 785      | peterstoni        | 716      |
| californicus                  | 785      | superior          | 716      |
| cenopus                       | 785      | Mesaxonia         | 663, 664 |
| chelydra                      | 784      | Meseutheria       | 397      |
| comopus                       | 785      | Mesippus          | 673      |
| compressidens                 | 785      | Mesocetus         | 571      |
| elrodi                        | 785      | siphunculus       | 571      |
| laticeps                      | 786      | Mesocyon          | 493      |
| leidy                         | 784      | brachyops         | 493      |
| macrostegus                   | 784      | corypheus         | 493      |
| madisonius                    | 786      | drummondianus     | 493      |
| magnus                        | 786      | iamonensis        | 493      |
| matthewi                      | 786      | josephi           | 493      |
| montanus                      | 784      | robustus          | 493      |
| obliquidens                   | 785      | secundus          | 493      |
| proprius                      | 786      | Mesodactyli       | 663      |
| rusticus                      | 786      | Mesodectes        | 431      |
| superbus                      | 785      | caniculus         | 431      |
| temporalis                    | 785      | Mesodonta         | 218      |
| Merycodontidae                | 779, 830 | Mesogaulus        | 907      |
| Merycodontinae                | 830      | ballensis         | 907      |
| Merycodus                     | 816, 830 | Mesohippus        | 672      |
| agilis                        | 831      | acutidens         | 676      |
| altidens                      | 831      | anceps            | 676      |
| coronatus                     | 831      | annectens         | 676      |
| furcatus                      | 831      | assimboiensis     | 673      |
| gemmaifer                     | 818      | bairdi            | 673      |
| grandis                       | 831      | bairdii           | 673      |
| necatus                       | 831, 832 | brachylophus      | 676      |
| nevadensis                    | 831      | brachystylus      | 676      |
| osborni                       | 831      | celer             | 674      |
| ramosus                       | 832      | condoni           | 676      |
| ramulosus                     | 832      | copei             | 676, 735 |
| sablunius                     | 831      | cuneatus          | 674      |
| tehuanus                      | 832      | equiceps          | 676      |
| teres                         | 818      | eulophus          | 674      |
| trilateralis                  | 816      | exoletus          | 674      |
| warreni                       | 832      | grallipes         | 674      |

|                              | Page     |                             | Page     |
|------------------------------|----------|-----------------------------|----------|
| Mesohippus— <i>Continued</i> |          | Metahyrachyus               | 734      |
| hypostylus                   | 674      | bicornutus                  | 734      |
| intermedius                  | 677      | Metailurus                  | 549, 553 |
| latidens                     | 674      | intrepidus                  | 549      |
| longicristis                 | 677      | marshi                      | 550      |
| meteuolophus                 | 677      | sinclaire                   | 550      |
| montanensis                  | 674      | Metalophodon                | 614, 615 |
| obliquidens                  | 674      | metalophus (Cænopus)        | 741      |
| planidens                    | 674      | metalophus (Subhyracodon)   | 741      |
| portentus                    | 674      | Metamosaurus                | 60       |
| præcocidens                  | 674      | fossatus                    | 60       |
| præstans                     | 678      | Metamynodon                 | 738      |
| propinquus                   | 674      | planifrons                  | 738      |
| proteulophus                 | 674      | rex                         | 738      |
| stenolophus                  | 675      | Metarhinus                  | 141, 717 |
| trigonostylus                | 675      | bransonii                   | 141      |
| validus                      | 677      | buceros                     | 144      |
| westoni                      | 675      | cristatus                   | 717      |
| mesomelas (Chincha)          | 533      | earlei                      | 717      |
| mesomelas (Mephitis)         | 533      | fluvialilis                 | 717      |
| Mesomeryx                    | 755      | riparius                    | 717      |
| grangeri                     | 755      | Metarmosaurus               | 60       |
| Mesonychidæ                  | 485, 486 | Metatheria                  | 336      |
| Mesonychinae                 | 486      | Metaxytherium               | 655      |
| Mesonychini                  | 486, 475 | floridanum                  | 656      |
| Mesonychoidea                | 485      | jordani                     | 656      |
| Mesonychoidea                | 485      | manigaultii                 | 656      |
| Mesonyx                      | 488      | Meteoreodon                 | 788      |
| dakotensis                   | 488      | relictus                    | 788      |
| lanius                       | 489      | meteuolophus (Mesohippus)   | 677      |
| obtusidens                   | 488      | meteuolophus (Miohippus)    | 677      |
| ossifragus                   | 488      | Metopocetus                 | 573      |
| uintensis                    | 489      | durinus                     | 573      |
| vorax                        | 489      | Meteoreodon                 | 787, 788 |
| Mesopelodon                  | 583, 584 | profectus                   | 788      |
| longirostris                 | 583, 585 | relictus                    | 788      |
| prorops                      | 583, 585 | metasiacus (Diacyodexis)    | 756      |
| Mesoreodon                   | 783      | metasiacus (Trigonolestes)  | 756      |
| chelonox                     | 783      | metzeri (Barynodus)         | 7        |
| intermedius                  | 783      | mexicana (Ardea)            | 332      |
| latidens                     | 787      | mexicana (Capromeryx)       | 332      |
| longiceps                    | 787      | mexicanum (Nothotherium)    | 406      |
| megalodon                    | 783      | mexicanus (Brachyostreacon) | 421      |
| Mesosuchia                   | 146      | mexicanus (Canis)           | 116      |
| Mesotapirus                  | 725      | mexicanus (Falco)           | 322      |
| dakotensis                   | 726      | mexicanus (Glyptodon)       | 481      |
| longipes                     | 726      | mexicanus (Grus)            | 332      |
| occidentalis                 | 726      | mexicanus (Mastodon)        | 689      |
| procrispidatus               | 726      | mexicanus (Plesiosaurus)    | 116      |
| Mesoteras                    | 576      | mexicanus (Polyptychodon)   | 116      |
| kerrianus                    | 576      | Miacidæ                     | 481      |
| Metacænopus                  | 743      | Miacididæ                   | 481      |
| egregius                     | 744, 745 | Miacinæ                     | 483      |
| egreus                       | 744      | Miacis                      | 484      |
| gregorii                     | 744      | bathynathus                 | 484      |
| stigeri                      | 745      | brevirostris                | 486      |
| Metacheiromyidæ              | 421      | canavus                     | 486      |
| Metacheiromys                | 421      | exiguus                     | 485      |
| desypus                      | 422      | hargeri                     | 485      |
| marshi                       | 422      | latidens                    | 485      |
| tatusia                      | 422      | medius                      | 485      |
| Metachromys                  | 422      | parvivorus                  | 485      |
| Metacænopus                  | 743      | robustus                    | 485      |
| egregius                     | 743, 744 | sylvestris                  | 485      |
| stigeri                      | 743      | uintensis                   | 485      |

|  | Page     |                                   | Page     |
|--|----------|-----------------------------------|----------|
| <i>Miacis—Continued</i>                  |          | <i>Microtus—Continued</i>         |          |
| vulpinus                                 | 485      | montanus                          | 898      |
| washakius                                | 485      | mordax                            | 898      |
| <i>Mincoideæ</i>                         | 481      | neglectus                         | 897      |
| <i>Micrathene</i>                        | 360      | ochrogaster                       | 898      |
| whitneyi                                 | 351      | pennsylvanicus                    | 898      |
| <i>Micrichnium</i>                       | 16       | pinetorum                         | 900      |
| scotti                                   | 16       | richardsoni                       | 898      |
| <i>Mierichnus</i>                        | 16       | speothen                          | 898      |
| scotti                                   | 16       | vellerosus                        | 898      |
| microcephalus ( <i>Promerycochærus</i> ) | 784      | micula ( <i>Chlorænas</i> )       | 345      |
| <i>Microchiroptera</i>                   | 453      | midas ( <i>Chelone</i> )          | 82       |
| <i>Microclænodon</i>                     | 466      | miersi ( <i>Mosasaurus</i> )      | 262      |
| assurgens                                | 466      | migrans ( <i>Agriochoerus</i> )   | 777      |
| <i>Microconodon</i>                      | 368      | milleri ( <i>Canis</i> )          | 601      |
| tenuirostris                             | 368      | milleri ( <i>Helohyus</i> )       | 761      |
| <i>Microcypops</i>                       | 449      | milleri ( <i>Pareumys</i> )       | 892      |
| microdon ( <i>Thomomys</i> )             | 878      | nilo ( <i>Agathaumas</i> )        | 212      |
| <i>Microdontosaurus</i>                  | 127      | Milvidæ                           | 314      |
| petersoni                                | 127      | Milvinæ                           | 314      |
| microdus ( <i>Edaphosaurus</i> )         | 58       | Milvus                            | 314      |
| microdus ( <i>Naosaurus</i> )            | 58       | leucurus                          | 314      |
| microdus ( <i>Xestops</i> )              | 255      | <i>Minioceyon</i>                 | 485      |
| microglypha ( <i>Zygoramma</i> )         | 91       | longipes                          | 485      |
| <i>Microlestidæ</i>                      | 376      | minus ( <i>Hyaecodon</i> )        | 736      |
| micromus ( <i>Rhinosaurus</i> )          | 259      | <i>Minerva</i>                    | 352      |
| micromus ( <i>Tylosaurus</i> )           | 259      | antiqua                           | 352      |
| <i>Micronodon</i>                        | 368      | saurodosis                        | 352      |
| tenuirostris                             | 368      | minidoke ( <i>Camelops</i> )      | 804      |
| <i>Micropalama</i>                       | 337      | minima ( <i>Auchenia</i> )        | 798, 800 |
| hesterna                                 | 337      | minima ( <i>Brauta</i> )          | 302      |
| <i>Micropallas</i>                       | 350      | minima ( <i>Exocampe</i> )        | 12       |
| whitneyi                                 | 350      | minima ( <i>Pliauchenia</i> )     | 802      |
| microporus ( <i>Piptomerus</i> )         | 121      | minimum ( <i>Anchitherium</i> )   | 682      |
| <i>Micropternodus</i>                    | 427      | minimum ( <i>Hipparion</i> )      | 682      |
| borealis                                 | 427      | minimum ( <i>Neohipparion</i> )   | 682      |
| <i>Micropteron</i>                       | 584      | minimus ( <i>Adjidaumo</i> )      | 881      |
| <i>Microsorex</i>                        | 440      | minimus ( <i>Adjidaumo</i> )      | 881      |
| minutus                                  | 440      | minimus ( <i>Agriochoerus</i> )   | 778      |
| <i>Microsus</i>                          | 756      | minimus ( <i>Anaptomorphus</i> )  | 928      |
| cuspidatus                               | 756      | minimus ( <i>Anomæpus</i> )       | 4        |
| <i>Microsyopidæ</i>                      | 448      | minimus ( <i>Apatosaurus</i> )    | 195      |
| <i>Microsyops</i>                        | 449      | minimus ( <i>Argoides</i> )       | 6        |
| annectans                                | 450      | minimus ( <i>Brontosaurus</i> )   | 196      |
| elegans                                  | 450      | minimus ( <i>Entoptychus</i> )    | 876      |
| gracilis                                 | 450      | minimus ( <i>Eotitanops</i> )     | 712      |
| latidens                                 | 449      | minimus ( <i>Gymnoptychus</i> )   | 881      |
| schlosseri                               | 450      | minimus ( <i>Hypisodus</i> )      | 811      |
| scottianus                               | 449      | minimus ( <i>Laosaurus</i> )      | 206      |
| speciosus                                | 450      | minimus ( <i>Merychius</i> )      | 788      |
| typus                                    | 450      | minimus ( <i>Miccytyotyrans</i> ) | 374      |
| uintensis                                | 924      | minimus ( <i>Mysops</i> )         | 904      |
| verus                                    | 450      | minimus ( <i>Parahippus</i> )     | 682      |
| <i>Microsyopsidæ</i>                     | 448      | minimus ( <i>Peromyscus</i> )     | 894      |
| <i>Microtinæ</i>                         | 891, 896 | minimus ( <i>Plesiornis</i> )     | 6        |
| <i>Microtus</i>                          | 896      | minimus ( <i>Procamelus</i> )     | 798      |
| alleni                                   | 900      | minimus ( <i>Sciuravus</i> )      | 904      |
| austerus                                 | 898      | minimus ( <i>Thinoceyon</i> )     | 474      |
| californicus                             | 897      | minisculum ( <i>Brontozoum</i> )  | 8        |
| cantus                                   | 898      | minitans ( <i>Plectropterna</i> ) | 19       |
| chrotorrhinus                            | 897      | minor ( <i>Adjidaumo</i> )        | 881      |
| dideita                                  | 897      | minor ( <i>Adjidaumo</i> )        | 881      |
| dideitus                                 | 897      | minor ( <i>Anchippodus</i> )      | 886      |
| diluvianus                               | 897      | minor ( <i>Anomæpus</i> )         | 5        |
| involutus                                | 898      | minor ( <i>Apatichnus</i> )       | 5        |

|                                 | Page     |                                 | Page          |
|---------------------------------|----------|---------------------------------|---------------|
| minor (Arctomys) .....          | 871      | minutus (Nanomys) .....         | 381           |
| minor (Auchenia) .....          | 799      | minutus (Notharctus) .....      | 386           |
| minor (Capromeryx) .....        | 832      | minutus (Omomys) .....          | 926           |
| minor (Cynodesmus) .....        | 491      | minutus (Ornithomimus) .....    | 183           |
| minor (Dipodomys) .....         | 881      | minutus (Pliohippus) .....      | 694           |
| minor (Entoptychus) .....       | 876      | minutus (Protobippus) .....     | 694           |
| minor (Eumys) .....             | 892      | minutus (Pseudopterodon) .....  | 481           |
| minor (Euprotogonia) .....      | 603      | minutus (Pterodon) .....        | 481           |
| minor (Fulica) .....            | 334      | minutus (Viverravus) .....      | 433           |
| minor (Gavialis) .....          | 148      | minutus (Xestops) .....         | 255           |
| minor (Geomys) .....            | 879      | Miobasileus .....               | 723           |
| minor (Gigandipus) .....        | 5        | ophiyas .....                   | 723           |
| minor (Grus) .....              | 332      | miocæna (Megaptera) .....       | 575           |
| minor (Gymnoptychus) .....      | 881      | miocæna (Platypeltis) .....     | 112           |
| minor (Hadrosaurus) .....       | 209      | miocænus (Palæochenoides) ..... | 291           |
| minor (Hipparion) .....         | 693      | miocænus (Phasianus) .....      | 323           |
| minor (Hylopus) .....           | 14       | miocænus (Proscalops) .....     | 436           |
| minor (Hypsodus) .....          | 444      | miocænus (Trionyx) .....        | 113           |
| minor (Marmota) .....           | 871      | miocæuus (Palæochenoides) ..... | 291           |
| minor (Martes) .....            | 529      | miocæuus (Phasianus) .....      | 323           |
| minor (Megalornis) .....        | 332      | Mioclenidæ .....                | 607           |
| minor (Merycododon) .....       | 781      | Mioclenus .....                 | 607           |
| minor (Mosasaurus) .....        | 262      | acolytus .....                  | 608           |
| minor (Mustela) .....           | 529      | inaequidens .....               | 608           |
| minor (Otophæpus) .....         | 17       | lenuroides .....                | 607           |
| minor (Palæchthon) .....        | 928      | lydekkerianus .....             | 607           |
| minor (Palæosyops) .....        | 855      | turgidumculus .....             | 607           |
| minor (Percherus) .....         | 768      | turgidus .....                  | 607           |
| minor (Plesiornis) .....        | 4        | Miocyon .....                   | 482, 484      |
| minor (Pliachenia) .....        | 799      | bathynathus .....               | 484           |
| minor (Pliohippus) .....        | 697      | Miohippus .....                 | 673, 675, 681 |
| minor (Procamelus) .....        | 798      | acutidens .....                 | 675           |
| minor (Promerycochoerus) .....  | 784      | agrestis .....                  | 681           |
| minor (Protoreodon) .....       | 778      | anceps .....                    | 676           |
| minor (Sigmodon) .....          | 895      | annectens .....                 | 676           |
| minor (Sinopa) .....            | 477, 478 | australis .....                 | 681           |
| minor (Teleoceras) .....        | 750      | bairdi .....                    | 673           |
| minor (Tetracænodon) .....      | 603      | blackbergi .....                | 676           |
| minor (Trachodon) .....         | 309      | brachylophus .....              | 676           |
| minor (Trogosus) .....          | 355      | brachystylus .....              | 676           |
| minor (Zeuglodon) .....         | 568      | celer .....                     | 673           |
| minor (Zygorhiza) .....         | 568      | condoni .....                   | 676           |
| minus (Gigantitherium) .....    | 5        | copei .....                     | 725           |
| minus (Hipparion) .....         | 693      | crassiscuspis .....             | 676           |
| minus (Otozoum) .....           | 17       | cuneatus .....                  | 674           |
| minuscule (Branta) .....        | 302      | equiceps .....                  | 676           |
| minuscule (Anchisauripus) ..... | 8        | equinatus .....                 | 676           |
| minuscule (Brontozoum) .....    | 3        | exoletus .....                  | 674           |
| minuscule (Dilophodon) .....    | 724      | gemmarosæ .....                 | 676           |
| minuscule (Eubrontes) .....     | 3        | gidleyi .....                   | 676           |
| minuscule (Helalestes) .....    | 724      | intermedius .....               | 677           |
| minuscule (Hypsodus) .....      | 444      | longicristis .....              | 677           |
| minuta (Megaptera) .....        | 452      | meteuolophus .....              | 677           |
| minuta (Megopterna) .....       | 452      | navasotæ .....                  | 677           |
| minutalis (Parahippus) .....    | 682      | prestans .....                  | 678           |
| minutus (Adjidaumo) .....       | 881      | primus .....                    | 677           |
| minutus (Adjidaumus) .....      | 881      | quartus .....                   | 677           |
| minutus (Anaptomorphus) .....   | 485      | ultimus .....                   | 688           |
| minutus (Cimolomys) .....       | 381      | validus .....                   | 677           |
| minutus (Entomacodon) .....     | 435      | westoni .....                   | 675           |
| minutus (Equus) .....           | 694      | Miolabina .....                 | 796           |
| minutus (Gymnoptychus) .....    | 881      | Miolabis .....                  | 796           |
| minutus (Histrionicus) .....    | 308      | cameloides .....                | 797           |
| minutus (Hysanodon) .....       | 481      | fissidens .....                 | 801           |
| minutus (Hypertragulus) .....   | 813      | longiceps .....                 | 801           |
| minutus (Microsorex) .....      | 440      | primævus .....                  | 797           |



|   | Page     |  | Page     |
|---|----------|--|----------|
| <i>Miolabis—Continued</i>                     |          | <i>mitchilli</i> ( <i>Macrosaurus</i> )  | 250      |
| <i>sternbergi</i>                             | 797      | <i>mite</i> ( <i>Aceratherium</i> )      | 742      |
| <i>tenuis</i>                                 | 796      | <i>miti</i> ( <i>Caenopus</i> )          | 444      |
| <i>transmontanus</i>                          | 796      | <i>mticulus</i> ( <i>Hypsodus</i> )      | 444      |
| <i>Miomastodon</i>                            | 630      | <i>mitis</i> ( <i>Caenopus</i> )         | 742      |
| <i>mathewi</i>                                | 630      | <i>mitis</i> ( <i>Elomeiyx</i> )         | 759      |
| <i>merriami</i>                               | 630      | <i>mtis</i> ( <i>Subhyracodon</i> )      | 742      |
| <i>proavus</i>                                | 638      | <i>mntis</i> ( <i>Xestops</i> )          | 255      |
| <i>Mionictis</i>                              | 536      | <i>Mixoclenus</i>                        | 463      |
| <i>elegans</i>                                | 536      | <i>encenensis</i>                        | 463      |
| <i>incertus</i>                               | 536      | <i>Mixodectes</i>                        | 447, 448 |
| <i>Miosula</i>                                | 291      | <i>copei</i>                             | 448      |
| <i>media</i>                                  | 291      | <i>crassiusculus</i>                     | 448      |
| <i>mira</i> ( <i>Amyda</i> )                  | 111      | <i>crassivultus</i>                      | 448      |
| <i>mirabile</i> ( <i>Dinoceras</i> )          | 019      | <i>pungens</i>                           | 448      |
| <i>mirabile</i> ( <i>Megatherium</i> )        | 405      | <i>Mixodectidae</i>                      | 447      |
| <i>mirabile</i> ( <i>Planetetherium</i> )     | 608      | <i>Mixodectinae</i>                      | 447      |
| <i>mirabile</i> ( <i>Uintatherium</i> )       | 619      | <i>Mixodectini</i>                       | 447      |
| <i>mirabilis</i> ( <i>Diclonius</i> )         | 211      | <i>Mixodectoide</i>                      | 445      |
| <i>mirabilis</i> ( <i>Gryposaurus</i> )       | 214      | <i>Mixophagus</i>                        | 516      |
| <i>mirabilis</i> ( <i>Hadrosaurus</i> )       | 211      | <i>spelæus</i>                           | 516      |
| <i>mirabilis</i> ( <i>Morychippus</i> )       | 607, 608 | <i>Mixosauridae</i>                      | 124      |
| <i>mirabilis</i> ( <i>Plesiornis</i> )        | 19       | <i>Mixosaurinae</i>                      | 124      |
| <i>mirabilis</i> ( <i>Pliohippus</i> )        | 697      | <i>Mixosaurus</i>                        | 124, 125 |
| <i>mirabilis</i> ( <i>Protohippus</i> )       | 697      | <i>nataus</i>                            | 125      |
| <i>mirabilis</i> ( <i>Trachodon</i> )         | 211      | <i>modesta</i> ( <i>Phoca</i> )          | 564      |
| <i>mirandus</i> ( <i>Aublysodon</i> )         | 177      | <i>modestus</i> ( <i>Hyrachyus</i> )     | 734      |
| <i>mirandus</i> ( <i>Ornithomimus</i> )       | 177      | <i>modestus</i> ( <i>Isectolophus</i> )  | 734      |
| <i>mirificum</i> ( <i>Mammut</i> )            | 633      | <i>modestus</i> ( <i>Lophiodon</i> )     | 734      |
| <i>mirificus</i> ( <i>Anancus</i> )           | 633      | <i>modestus</i> ( <i>Squalodon</i> )     | 564      |
| <i>mirificus</i> ( <i>Dibelodon</i> )         | 633      | <i>modicus</i> ( <i>Brachypsalis</i> )   | 526      |
| <i>mirificus</i> ( <i>Elephas</i> )           | 633      | <i>Mœritherioidea</i>                    | 621      |
| <i>mirificus</i> ( <i>Mammut</i> )            | 633      | <i>mohavense</i> ( <i>Hipparion</i> )    | 693      |
| <i>mirificus</i> ( <i>Mastodon</i> )          | 633      | <i>mohavensis</i> ( <i>Hadrocyon</i> )   | 508      |
| <i>mirificus</i> ( <i>Rhabdobunus</i> )       | 633      | <i>mohavensis</i> ( <i>Testudo</i> )     | 104      |
| <i>mirificus</i> ( <i>Stegodon</i> )          | 633      | <i>molaria</i> ( <i>Erquelinnesia</i> )  | 77       |
| <i>mirificus</i> ( <i>Stegomastodon</i> )     | 633      | <i>molaris</i> ( <i>Diadectes</i> )      | 34       |
| <i>mirificus</i> ( <i>Tetralophodon</i> )     | 633      | <i>molaris</i> ( <i>Empedias</i> )       | 34       |
| <i>mirus</i> ( <i>Apatodon</i> )              | 201      | <i>molaris</i> ( <i>Empedocles</i> )     | 34       |
| <i>mirus</i> ( <i>Apatomerus</i> )            | 164      | <i>molestus</i> ( <i>Coryphodon</i> )    | 616      |
| <i>mirus</i> ( <i>Ophiacodon</i> )            | 49       | <i>molestus</i> ( <i>Eucosmodon</i> )    | 379      |
| <i>mirus</i> ( <i>Panoplosaurus</i> )         | 237      | <i>molestus</i> ( <i>Neoplaginulax</i> ) | 379      |
| <i>mirus</i> ( <i>Stylinodon</i> )            | 401      | <i>molle</i> ( <i>Hipparion</i> )        | 693      |
| <i>mirus</i> ( <i>Trionyx</i> )               | 111      | <i>molle</i> ( <i>Neohipparion</i> )     | 693      |
| <i>mississippiensis</i> ( <i>Eopteryx</i> )   | 360      | <i>mollis</i> ( <i>Blastomeryx</i> )     | 818      |
| <i>mississippiensis</i> ( <i>Ænoeyon</i> )    | 501      | <i>mollis</i> ( <i>Nothocyon</i> )       | 492      |
| <i>mississippiensis</i> ( <i>Alligator</i> )  | 157      | <i>molopinus</i> ( <i>Anostira</i> )     | 106      |
| <i>mississippiensis</i> ( <i>Canis</i> )      | 601      | <i>molopinus</i> ( <i>Platomenus</i> )   | 106      |
| <i>mississippiensis</i> ( <i>Champsia</i> )   | 157      | <i>molops</i> ( <i>Taphrosphyx</i> )     | 73       |
| <i>mississippiensis</i> ( <i>Elephas</i> )    | 644      | <i>molossus</i> ( <i>Hoplophonus</i> )   | 544      |
| <i>mississippiensis</i> ( <i>Eopteryx</i> )   | 360      | <i>monax</i> ( <i>Arctomys</i> )         | 871      |
| <i>missouriensis</i> ( <i>Colletosaurus</i> ) | 9        | <i>monax</i> ( <i>Marmota</i> )          | 871      |
| <i>missouriensis</i> ( <i>Ichthyosaurus</i> ) | 262      | <i>mongoliae</i> ( <i>Cervus</i> )       | 830      |
| <i>missouriensis</i> ( <i>Morychippus</i> )   | 685      | <i>Monitor</i>                           | 251      |
| <i>missouriensis</i> ( <i>Mosasauros</i> )    | 262      | <i>Monitoridae</i>                       | 251      |
| <i>missouriensis</i> ( <i>Mylodon</i> )       | 413      | <i>Monoceros</i>                         | 595      |
| <i>missouriensis</i> ( <i>Neolacerta</i> )    | 9        | <i>monoceros</i> ( <i>Monodon</i> )      | 595      |
| <i>missouriensis</i> ( <i>Notolacerta</i> )   | 9        | <i>Monocloninae</i>                      | 220      |
| <i>missouriensis</i> ( <i>Notolacerta</i> )   | 9        | <i>Monoclonius</i>                       | 221, 221 |
| <i>Missourium</i>                             | 627      | <i>belli</i>                             | 223      |
| <i>tetracaulodon</i>                          | 627      | <i>canadensis</i>                        | 221      |
| <i>theristocaulodon</i>                       | 628      | <i>crassus</i>                           | 223, 225 |
| <i>missuriensis</i> ( <i>Polythorax</i> )     | 73       | <i>cutleri</i>                           | 222      |
| <i>Missurium</i>                              | 624      | <i>dawsoni</i>                           | 223, 224 |
| <i>tetracaulodon</i>                          | 627      | <i>fixus</i>                             | 222      |
| <i>theristocaulodon</i>                       | 627      | <i>flexus</i>                            | 223, 224 |

|   | Page     |  | Page     |
|---|----------|--|----------|
| <i>Monoclonius—Continued</i>              |          | <i>montezumæ</i> (Equus) .....           | 693      |
| <i>nasicornus</i> .....                   | 222      | <i>montezumæ</i> (Hipparion) .....       | 693      |
| <i>recurvirostris</i> .....               | 222      | <i>montezumæ</i> (Neohipparion) .....    | 693, 694 |
| <i>sphenocerus</i> .....                  | 225      | <i>monticola</i> (Thomomys) .....        | 878      |
| <i>Monocondylia</i> .....                 | 24, 272  | <i>moodii</i> (Isocampe) .....           | 15       |
| <i>monoconus</i> (Limnohyops) .....       | 713      | <i>moodii</i> (Otozoum) .....            | 17       |
| <i>Monodelphia</i> .....                  | 385, 396 | <i>mooreheadi</i> (Smilodontopsis) ..... | 547      |
| <i>Monodon</i> .....                      | 595      | <i>moratus</i> (Ulias) .....             | 573      |
| <i>monoceros</i> .....                    | 595      | <i>mordax</i> (Mynomes) .....            | 898      |
| <i>monodon</i> (Mesogaulus) .....         | 908      | <i>mordax</i> (Sinopa) .....             | 477      |
| <i>monodon</i> (Mylagaulus) .....         | 908      | <i>morilli</i> (Mastodon) .....          | 637      |
| <i>Monodontidæ</i> .....                  | 595      | <i>moirilli</i> (Trilophodon) .....      | 637      |
| <i>Monodontinæ</i> .....                  | 595      | <i>Moris</i> .....                       | 291      |
| <i>Monospondylus</i> .....                | 183      | <i>lom pocana</i> .....                  | 291      |
| <i>gigas</i> .....                        | 183      | <i>loxostyla</i> .....                   | 291      |
| <i>Monotremata</i> .....                  | 307      | <i>Morophus</i> .....                    | 669      |
| <i>Monotreta</i> .....                    | 239      | <i>Moropodidæ</i> .....                  | 661      |
| <i>montana</i> (Arvicola) .....           | 898      | <i>Moropodinæ</i> .....                  | 662      |
| <i>montana</i> (Brachychampsa) .....      | 158      | <i>Moropus</i> .....                     | 662      |
| <i>montana</i> (Hesperornis) .....        | 279      | <i>cooki</i> .....                       | 662      |
| <i>montana</i> (Ovis) .....               | 841      | <i>distans</i> .....                     | 662      |
| <i>montanensis</i> (Ammobatrachus) .....  | 2        | <i>elatus</i> .....                      | 662      |
| <i>montanensis</i> (Brachyceratops) ..... | 221      | <i>hollandi</i> .....                    | 662      |
| <i>montanensis</i> (Meshippus) .....      | 674      | <i>matthewi</i> .....                    | 662      |
| <i>montanensis</i> (Myrmecoboides) .....  | 432      | <i>maximus</i> .....                     | 662      |
| <i>montanensis</i> (Neolenodon) .....     | 465      | <i>merriami</i> .....                    | 663      |
| <i>montanus</i> (Apatosaurus) .....       | 194      | <i>oregonensis</i> .....                 | 663      |
| <i>montanus</i> (Aphelops) .....          | 747      | <i>parvus</i> .....                      | 663      |
| <i>montanus</i> (Aploceros) .....         | 841      | <i>petersoni</i> .....                   | 663      |
| <i>montanus</i> (Astrodon) .....          | 193      | <i>senex</i> .....                       | 663      |
| <i>montanus</i> (Atlantosaurus) .....     | 104      | <i>Morosauridæ</i> .....                 | 189      |
| <i>montanus</i> (Brachyceratops) .....    | 221      | <i>Morosaurus</i> .....                  | 189, 191 |
| <i>montanus</i> (Bunomeryx) .....         | 754      | <i>agilis</i> .....                      | 191      |
| <i>montanus</i> (Ceratops) .....          | 224      | <i>grandis</i> .....                     | 191      |
| <i>montanus</i> (Chalicornys) .....       | 883      | <i>impar</i> .....                       | 191      |
| <i>montanus</i> (Coriphagus) .....        | 451      | <i>lentus</i> .....                      | 191      |
| <i>montanus</i> (Dermodactylus) .....     | 161      | <i>robustus</i> .....                    | 191      |
| <i>montanus</i> (Echippus) .....          | 669      | <i>supremus</i> .....                    | 191      |
| <i>montanus</i> (Eporeodon) .....         | 781      | <i>Morootherium</i> .....                | 414      |
| <i>montanus</i> (Euclotaphus) .....       | 781      | <i>gigas</i> .....                       | 414      |
| <i>montanus</i> (Glyptosaurus) .....      | 254      | <i>leptonyx</i> .....                    | 415      |
| <i>montanus</i> (Haploceros) .....        | 841      | <i>Morphnus</i> .....                    | 316      |
| <i>montanus</i> (Haplocerus) .....        | 841      | <i>daggetti</i> .....                    | 317      |
| <i>montanus</i> (Hesperornis) .....       | 277      | <i>woodwardi</i> .....                   | 316      |
| <i>montanus</i> (Hymenodon) .....         | 480      | <i>morrisi</i> (Aulophyseter) .....      | 597      |
| <i>montanus</i> (Ictops) .....            | 480      | <i>morrilli</i> (Eubelodon) .....        | 637      |
| <i>montanus</i> (Merycoeloceros) .....    | 784      | <i>morrilli</i> (Eubelodon) .....        | 637      |
| <i>montanus</i> (Microtus) .....          | 898      | <i>morrilli</i> (Gomphotherium) .....    | 637      |
| <i>montanus</i> (Oreamnos) .....          | 841      | <i>Morrillia</i> .....                   | 635      |
| <i>montanus</i> (Oreamnus) .....          | 841      | <i>barbouri</i> .....                    | 635      |
| <i>montanus</i> (Ovis) .....              | 841      | <i>morrisiæ</i> (Clammys) .....          | 94       |
| <i>montanus</i> (Palaærotomys) .....      | 868      | <i>morsitans</i> (Oxyæna) .....          | 471      |
| <i>montanus</i> (Pleurocelus) .....       | 193      | <i>mortifer</i> (Tephrocyon) .....       | 510      |
| <i>montanus</i> (Pliolophus) .....        | 869      | <i>mortifer</i> (Tomarctus) .....        | 510      |
| <i>montanus</i> (Procamelus) .....        | 801      | <i>mortoni</i> (Archæotherium) .....     | 763, 764 |
| <i>montanus</i> (Proceratops) .....       | 223      | <i>mortoni</i> (Atlantochelys) .....     | 78       |
| <i>montanus</i> (Promerycocherus) .....   | 784      | <i>mortoni</i> (Elotherium) .....        | 764      |
| <i>montanus</i> (Protolabis) .....        | 801      | <i>mortoni</i> (Entelodon) .....         | 764      |
| <i>montanus</i> (Ptilodus) .....          | 380      | <i>mortonii</i> (Elotherium) .....       | 764      |
| <i>montanus</i> (Steneofiber) .....       | 885      | <i>mortuarius</i> (Agathaumas) .....     | 231      |
| <i>montanus</i> (Stibarus) .....          | 753      | <i>mortuarius</i> (Polponax) .....       | 231      |
| <i>montanus</i> (Symborodon) .....        | 718      | <i>mortuarius</i> (Polygonax) .....      | 231      |
| <i>montanus</i> (Symborodon) .....        | 718      | <i>mortuarius</i> (Polygonax) .....      | 231      |
| <i>montanus</i> (Titanosaurus) .....      | 194      | <i>Mosassauri</i> .....                  | 257      |
| <i>montazumai</i> (Neohipparion) .....    | 693      | <i>Mosassauria</i> .....                 | 257      |
| <i>montezuma</i> (Hippotherium) .....     | 693      | <i>Mosassauridæ</i> .....                | 258      |

|                                     | Page     |                              | Page     |
|-------------------------------------|----------|------------------------------|----------|
| Moassauriformes .....               | 257      | Mustela— <i>Continued</i>    |          |
| Mosassaurine .....                  | 261      | angustidens .....            | 528      |
| Mosassaurioidea .....               | 257      | arizonensis .....            | 528      |
| Mosasaurus .....                    | 261      | buwaldi .....                | 528      |
| brumbyi .....                       | 262      | cicognani .....              | 528      |
| carolinensis .....                  | 262      | diluviana .....              | 528      |
| copeanus .....                      | 262      | furlongi .....               | 528      |
| couperi .....                       | 262      | gracilis .....               | 528      |
| crassidens .....                    | 262      | macrodon .....               | 529      |
| dekayi .....                        | 262      | minor .....                  | 529      |
| depressus .....                     | 262      | nambianus .....              | 530      |
| fulciatus .....                     | 262      | noveboracensis .....         | 529      |
| horridus .....                      | 262      | ogygia .....                 | 527      |
| maximiliani .....                   | 262      | parviloba .....              | 527      |
| maximus .....                       | 262      | pennanti .....               | 529      |
| miersi .....                        | 262      | vison .....                  | 529      |
| minor .....                         | 262      | Mustelidæ .....              | 524      |
| missouriensis .....                 | 262      | Mustelina .....              | 524      |
| oarthrus .....                      | 262      | Mustelinæ .....              | 524      |
| princeps .....                      | 262      | Mustelini .....              | 524      |
| moschatus (Bos) .....               | 845      | mustelinus (Æluroidon) ..... | 527      |
| moschatus (Ovibos) .....            | 845      | mustelinus (Hæmædon) .....   | 480      |
| moschatus (Præovibos) .....         | 846      | mustelinus (Thinocyon) ..... | 474      |
| Mososaurus .....                    | 262      | Mustellidæ .....             | 524      |
| maximiliani .....                   | 262      | mutillatus (Xenæodon) .....  | 432      |
| mourningi (Archæohippus) .....      | 682      | mutilus (Aphelops) .....     | 747      |
| mourningi (Parahippus) .....        | 682      | Myacis .....                 | 484      |
| mudgei (Colonosaurus) .....         | 262      | Myccylotyrans .....          | 374      |
| mudgei (Lestosaurus) .....          | 260      | minimus .....                | 374      |
| mudgei (Platecarpus) .....          | 260      | Myctera .....                | 296, 297 |
| mudgei (Plesiosaurus) .....         | 116      | americana .....              | 297, 297 |
| mugitans (Botaurus) .....           | 295      | mycteria (Ciconia) .....     | 296      |
| mullicoensis (Thoracosaurus) .....  | 150      | mycteria (Jabiru) .....      | 296      |
| multicuspis (Aletocyon) .....       | 513      | Mycterinæ .....              | 298      |
| multicuspis (Nothocyon) .....       | 492      | Mycterosaurus .....          | 46       |
| multicuspis (Parictops) .....       | 432      | longiceps .....              | 47       |
| multicuspis (Plagiomene) .....      | 451      | Myctomys .....               | 898      |
| multicuspis (Sinopa) .....          | 477      | borealis .....               | 898      |
| multicuspis (Stypolophus) .....     | 477      | mydas (Chelone) .....        | 82       |
| multifragum (Psittacotherium) ..... | 399      | mydas (Chelonia) .....       | 82       |
| mutilus (Aphelops) .....            | 747      | mydas (Testudo) .....        | 82       |
| multiplicatus (Allomys) .....       | 905      | Myiotis .....                | 454      |
| Multituberculata .....              | 368, 375 | subulatus .....              | 454      |
| munda (Testudo) .....               | 104      | Mylagaulidæ .....            | 907      |
| munroënsis (Phenacocælus) .....     | 789      | Mylagaulinæ .....            | 907      |
| Murenosaurus .....                  | 120      | Mylagaulini .....            | 907      |
| reedii .....                        | 120      | Mylagaulodon .....           | 907      |
| Muridæ .....                        | 889, 891 | angulatus .....              | 907      |
| Murina .....                        | 889      | Mylagaulus .....             | 907      |
| Murine .....                        | 889      | angulatus .....              | 907      |
| Murini .....                        | 889      | hallensis .....              | 907      |
| murinus (Paramys) .....             | 903      | lævis .....                  | 908      |
| murivorus (Calamagras) .....        | 268      | monodon .....                | 908      |
| Muroidæ .....                       | 889      | novellus .....               | 908      |
| Mus .....                           | 889      | paniensis .....              | 908      |
| cinereus .....                      | 895      | pristinus .....              | 908      |
| grædlandicus .....                  | 899      | proximus .....               | 908      |
| paca .....                          | 913      | sesquipedalis .....          | 908      |
| zibethicus .....                    | 901      | vetus .....                  | 908      |
| muscatinensis (Cervus) .....        | 825      | Myiodon .....                | 411      |
| muscatinensis (Rangifer) .....      | 825      | freudenbergi .....           | 412      |
| musculosus (Symphyrophus) .....     | 193      | garmani .....                | 412      |
| musculus (Ectypodus) .....          | 381      | harlani .....                | 412, 414 |
| musculus (Tetonius) .....           | 929      | missouriensis .....          | 413      |
| Mustela .....                       | 527      | nebrascensis .....           | 413      |
| americana .....                     | 527      | renidens .....               | 414      |

|   | Page          |   | Page           |
|---|---------------|---|----------------|
| <i>Myiodon</i> —Continued                         |               | <i>Nanohyus</i> .....                           | 430            |
| robustus .....                                    | 413           | poreinus .....                                  | 430            |
| sodalis .....                                     | 414           | <i>nanolophus</i> ( <i>Cænopus</i> ) .....      | 742            |
| sulcidens .....                                   | 414           | <i>Nanomeryx</i> .....                          | 755            |
| tenuiceps .....                                   | 414           | caudatus .....                                  | 755            |
| <i>Myiodontidæ</i> .....                          | 411           | <i>Nanomys</i> .....                            | 381            |
| <i>Myiodontinæ</i> .....                          | 411           | minutus .....                                   | 381            |
| <i>Mylohyus</i> .....                             | 773, 774, 775 | <i>Nanopus</i> .....                            | 10, 16         |
| browni .....                                      | 774           | caudatus .....                                  | 16             |
| exortivus .....                                   | 774           | maximus .....                                   | 16             |
| nasutus .....                                     | 774           | merriami .....                                  | 16             |
| obtusidens .....                                  | 774           | obtusus .....                                   | 10             |
| pennsylvanicus .....                              | 774           | quadratus .....                                 | 11             |
| setiger .....                                     | 773           | vetustus .....                                  | 16             |
| temerarius .....                                  | 774           | <i>Nanosauridæ</i> .....                        | 203            |
| tetragonus .....                                  | 773           | <i>Nanosaurus</i> .....                         | 188, 203       |
| <i>Mynomes</i> .....                              | 898           | agilis .....                                    | 204            |
| mordax .....                                      | 898           | rex .....                                       | 204            |
| <i>Myocyon</i> .....                              | 485           | victor .....                                    | 188            |
| <i>Myodes</i> .....                               | 899           | <i>Nanotragulus</i> .....                       | 811            |
| torquatus .....                                   | 899           | loomisi .....                                   | 811            |
| <i>myodes</i> ( <i>Trogolemur</i> ) .....         | 447           | ordinatus .....                                 | 811            |
| <i>Myoidæ</i> .....                               | 889           | nanum ( <i>Diceratherium</i> ) .....            | 744            |
| <i>Myoiden</i> .....                              | 889           | nanus ( <i>Antiacodon</i> ) .....               | 928            |
| <i>myoides</i> ( <i>Trogolemur</i> ) .....        | 447           | nanus ( <i>Astrodon</i> ) .....                 | 193            |
| <i>Myolestes</i> .....                            | 435           | nanus ( <i>Bystra</i> ) .....                   | 100            |
| dasyphelix .....                                  | 435           | nanus ( <i>Cañptosaurus</i> ) .....             | 205            |
| <i>Myomorpha</i> .....                            | 897, 899      | nanus ( <i>Ctenacodon</i> ) .....               | 878            |
| <i>Myomorphi</i> .....                            | 899           | nanus ( <i>Diplosaurus</i> ) .....              | 146            |
| <i>Myotis</i> .....                               | 454           | nanus ( <i>Goniopholis</i> ) .....              | 146            |
| subulatus .....                                   | 454           | nanus ( <i>Helalestes</i> ) .....               | 724            |
| <i>Myrmecoboides</i> .....                        | 432           | nanus ( <i>Hemiacodon</i> ) .....               | 927            |
| montanensis .....                                 | 432           | nanus ( <i>Ischyromys</i> ) .....               | 891            |
| <i>Mysops</i> .....                               | 904           | nanus ( <i>Pediocetes</i> ) .....               | 328            |
| fraternus .....                                   | 904           | nanus ( <i>Pediocetes</i> ) .....               | 328            |
| kalicola .....                                    | 904           | nanus ( <i>Pediocetes</i> ) .....               | 326            |
| minimus .....                                     | 904           | nanus ( <i>Perchocerus</i> ) .....              | 768            |
| <i>Mystacocete</i> .....                          | 571           | nanus ( <i>Pleurocætus</i> ) .....              | 193            |
| <i>Mystacoceti</i> .....                          | 571           | nanus ( <i>Pteranodon</i> ) .....               | 164            |
| <i>Mysticeta</i> .....                            | 571           | nanus ( <i>Triacodon</i> ) .....                | 479            |
| <i>Mysticete</i> .....                            | 571           | <i>Naocephalus</i> .....                        | 256            |
| <i>Mysticeti</i> .....                            | 571           | porrectus .....                                 | 256            |
| <i>mysticetoides</i> ( <i>Cetotherium</i> ) ..... | 576           | naomi ( <i>Echmatonys</i> ) .....               | 95             |
| <i>mysticetoides</i> ( <i>Megaptera</i> ) .....   | 576           | <i>Naomichelys</i> .....                        | 73             |
| <i>Mysticoceti</i> .....                          | 571           | speciosa .....                                  | 73             |
| <i>Mystococeti</i> .....                          | 571           | <i>Naosauri</i> .....                           | 57             |
| <i>Mystriosuchidæ</i> .....                       | 141           | <i>Naosauridæ</i> .....                         | 57             |
| <i>Mystriosuchius</i> .....                       | 141           | <i>Naosaurinæ</i> .....                         | 57             |
| <i>Mystriosuchus</i> .....                        | 145           | <i>Naosaurus</i> .....                          | 53, 54, 57, 58 |
| carolinensis .....                                | 145           | claviger .....                                  | 58             |
| <i>Myxophagus</i> .....                           | 516           | cruciger .....                                  | 58             |
| spelæus .....                                     | 516           | microdus .....                                  | 58             |
| <i>Næmoredus</i> .....                            | 840           | pogonias .....                                  | 58             |
| palmeri .....                                     | 840           | raymondi .....                                  | 59             |
| <i>Naiadochelys</i> .....                         | 75            | <i>Nasicornia</i> .....                         | 739            |
| ingravata .....                                   | 75            | <i>nasicornis</i> ( <i>Ceratosaurus</i> ) ..... | 176            |
| <i>nambianus</i> ( <i>Marten</i> ) .....          | 530           | <i>nasicornis</i> ( <i>Megalosaurus</i> ) ..... | 176            |
| <i>nambianus</i> ( <i>Mustela</i> ) .....         | 530           | <i>nasicornis</i> ( <i>Monoclonius</i> ) .....  | 222            |
| <i>nambianus</i> ( <i>Putorius</i> ) .....        | 530           | <i>nausau</i> ( <i>Aspideretes</i> ) .....      | 109            |
| <i>Nannhippus</i> .....                           | 691           | <i>nastus</i> ( <i>Protoceras</i> ) .....       | 814            |
| <i>Nannipus</i> .....                             | 694           | <i>nasutus</i> ( <i>Mylohyus</i> ) .....        | 774            |
| phlegon .....                                     | 694           | <i>nasutus</i> ( <i>Protoceras</i> ) .....      | 814            |
| <i>Nannosaurinæ</i> .....                         | 803           | <i>nasutus</i> ( <i>Tamias</i> ) .....          | 873            |
| <i>Nannosaurus</i> .....                          | 188, 203      | <i>nasutus</i> ( <i>Tayassu</i> ) .....         | 774            |
| victor .....                                      | 188           | <i>nasutus</i> ( <i>Tayassu</i> ) .....         | 774            |
| <i>Nannotragulus</i> .....                        | 811           | <i>natalis</i> ( <i>Clepsydraps</i> ) .....     | 58             |

|                                    | Page     |                                      | Page     |
|------------------------------------|----------|--------------------------------------|----------|
| natans (Baptanodon) .....          | 128      | Nemorhedinæ .....                    | 840      |
| natans (Cymbospondylus) .....      | 125      | Neobunodontia .....                  | 752, 761 |
| natans (Mixosaurus) .....          | 126      | neocesariensis (Thoiacosaurus) ..... | 149, 150 |
| natans (Ophthalmosaurus) .....     | 128      | Neochœrus .....                      | 915      |
| natans (Pantolestes) .....         | 426      | pinckneyi .....                      | 915      |
| Natantia .....                     | 565      | Neoclænodon .....                    | 465      |
| nataator (Hyposaurus) .....        | 147      | latidens .....                       | 465      |
| nataator (Oryzomys) .....          | 894      | montanensis .....                    | 465      |
| Natatores .....                    | 289      | silberlingi .....                    | 465      |
| Natricidæ .....                    | 269      | Neofiber .....                       | 900      |
| Natricinæ .....                    | 269      | alleni .....                         | 900      |
| Natrix .....                       | 270      | floridana .....                      | 895      |
| Nautilornis .....                  | 344      | Neogyps .....                        | 323      |
| proavitus .....                    | 344      | erians .....                         | 323      |
| Nautilornithinæ .....              | 344      | Neohipparion .....                   | 680, 691 |
| navajoicus (Arribasaurus) .....    | 49       | affine .....                         | 691      |
| navajoicus (Dimetrodon) .....      | 49       | calmarum .....                       | 684      |
| navajovicius (Dimetrodon) .....    | 49       | cragini .....                        | 692      |
| navajovicius (Dissacus) .....      | 467      | dolichops .....                      | 692      |
| navajovicius (Kritosaurus) .....   | 214      | eurystylum .....                     | 692      |
| Navajovius .....                   | 929      | gidleyi .....                        | 692      |
| kohlhaase .....                    | 929      | gratum .....                         | 692      |
| navajovius (Dissacus) .....        | 467      | ingenium .....                       | 692      |
| navajovius (Kritosaurus) .....     | 214      | isonesum .....                       | 693      |
| navajovius (Nectosaurus) .....     | 214      | lenticulare .....                    | 693      |
| navasotæ (Miohippus) .....         | 677      | leptode .....                        | 693      |
| navijocius (Dimetrodon) .....      | 49       | molle .....                          | 693      |
| nebrascense (Hyracodon) .....      | 736      | montezumæ .....                      | 693, 694 |
| nebrascensis (Daphenus) .....      | 505      | niobrarense .....                    | 693      |
| nebrascensis (Daphenus) .....      | 505      | occidentale .....                    | 693      |
| nebrascensis (Fiber) .....         | 601      | peninsulatum .....                   | 694      |
| nebrascensis (Giraffa) .....       | 834      | plicatile .....                      | 694      |
| nebrascensis (Hyracodon) .....     | 736      | princeps .....                       | 708      |
| nebrascensis (Mylodon) .....       | 413      | rectidens .....                      | 694      |
| nebrascensis (Ondatra) .....       | 901      | relictum .....                       | 696      |
| nebrascensis (Paleocastor) .....   | 884      | retrusum .....                       | 696      |
| nebrascensis (Parahippus) .....    | 682      | seversum .....                       | 696      |
| nebrascensis (Paramylodon) .....   | 413      | sinclairi .....                      | 694      |
| nebrascensis (Proamphicyon) .....  | 604, 605 | sinclairii .....                     | 694      |
| nebrascensis (Smilodon) .....      | 549      | speciosum .....                      | 697      |
| nebrascensis (Stegomastodon) ..... | 633      | sphenodus .....                      | 696      |
| nebrascensis (Stenoeffiber) .....  | 884      | tehonense .....                      | 692      |
| nebrascensis (Stylomys) .....      | 101      | whitneyi .....                       | 695      |
| nebrascensis (Testudo) .....       | 101      | Neohippus .....                      | 690      |
| nebraskensis (Hyracodon) .....     | 736      | complicatus .....                    | 703      |
| nebraskensis (Parahippus) .....    | 682      | fraternus .....                      | 708      |
| necatus (Merycodus) .....          | 831, 832 | laurentius .....                     | 703      |
| Nectoportheus .....                | 264      | leidyi .....                         | 706      |
| validus .....                      | 264      | littoralis .....                     | 706      |
| Nectosaurus .....                  | 214, 242 | niobrarensis .....                   | 708      |
| halius .....                       | 242      | occidentalis .....                   | 707      |
| navajovius .....                   | 214      | pectinatus .....                     | 708      |
| neglecta (Sturnella) .....         | 357      | princeps .....                       | 704      |
| neglectus (Microtus) .....         | 897      | semiplicatus .....                   | 708      |
| neglectus (Thescelosaurus) .....   | 207      | Neohyænodon .....                    | 480      |
| nelsoni (Amyda) .....              | 111      | horridus .....                       | 480      |
| nelsoni (Cuniculus) .....          | 913      | Neolacerta .....                     | 9        |
| nematodon (Hesperomys) .....       | 894      | missouriensis .....                  | 9        |
| nematodon (Peromyscus) .....       | 894      | neolassicus (Physeterula) .....      | 587      |
| Nemorhædus .....                   | 840      | Neomeryx .....                       | 836      |
| Nemorhedinæ .....                  | 840      | finni .....                          | 836      |
| Nemorhedus .....                   | 840      | Neomorpha .....                      | 848      |
| Nemorhedus .....                   | 840      | Neomorphinæ .....                    | 847      |
| palmeri .....                      | 840      | Neomorphus .....                     | 848      |
| Nemorhædidæ .....                  | 840      | Neophrontops .....                   | 323      |
| Nemorhædus .....                   | 840      | americanus .....                     | 323      |

|                                  | Page     |                                    | Page |
|----------------------------------|----------|------------------------------------|------|
| Neoplagiaulacidae .....          | 376      | Nimravus— <i>Continued</i>         |      |
| Neoplagiaulax .....              | 378      | brachyops .....                    | 542  |
| americanus .....                 | 379      | confertus .....                    | 543  |
| molestus .....                   | 379      | debilis .....                      | 543  |
| Neornithes .....                 | 277      | gomphodus .....                    | 543  |
| Neosciurus .....                 | 374      | major .....                        | 543  |
| carolinensis .....               | 374      | merriami .....                     | 543  |
| Neotoma .....                    | 395      | platycopsis .....                  | 542  |
| cinerea .....                    | 395      | sectator .....                     | 543  |
| floridana .....                  | 395      | niobrarense (Diceratherium) .....  | 744  |
| fossilis .....                   | 395      | niobrarense (Neohipparion) .....   | 688  |
| fuscipes .....                   | 395, 396 | niobrarensis (Camelops) .....      | 805  |
| magister .....                   | 396      | niobrarensis (Diceratherium) ..... | 744  |
| occidentalis .....               | 395      | niobrarensis (Equus) .....         | 706  |
| ozarkensis .....                 | 396      | niobrarensis (Machærodus) .....    | 547  |
| pennsylvanica .....              | 396      | niobrarensis (Machairodus) .....   | 547  |
| spelea .....                     | 396      | niobrarensis (Megalomeryx) .....   | 805  |
| Neotomine .....                  | 391      | niobrarensis (Protohippus) .....   | 688  |
| Neotragoceras .....              | 338      | niobrarensis (Stylomys) .....      | 104  |
| Neotragocerus .....              | 338      | niobrarensis (Testudo) .....       | 104  |
| improvisus .....                 | 338      | niobrarius (Cynomys) .....         | 872  |
| lindgreni .....                  | 338      | nitens (Allomys) .....             | 905  |
| Neovulpavus .....                | 484      | nitens (Eutamias) .....            | 451  |
| washakius .....                  | 485      | nitida (Leptauchenia) .....        | 789  |
| nepæolicus (Liodon) .....        | 259      | nitidum (Nycittherium) .....       | 434  |
| nepæolicus (Tylosaurus) .....    | 259      | nitidus (Camelops) .....           | 805  |
| Nephrosteon .....                | 689      | nitidus (Cimolodon) .....          | 381  |
| neptunia (Protostega) .....      | 78       | nitidus (Cimolomys) .....          | 381  |
| Neptunochelys .....              | 77       | nitidus (Paranyx) .....            | 909  |
| tuberosa .....                   | 77       | nitidus (Sciuravus) .....          | 909  |
| Nettion .....                    | 305      | nitidus (Talpavus) .....           | 484  |
| carolinense .....                | 305      | nitidus (Viverravus) .....         | 483  |
| Neurankylus .....                | 70       | nitor (Stagodon) .....             | 302  |
| baueri .....                     | 70       | nivalis (Anas) .....               | 303  |
| eximius .....                    | 70       | nivalis (Chen) .....               | 303  |
| wyomingensis .....               | 71       | nivicolens (Bootherium) .....      | 846  |
| Neurodromicus .....              | 271      | nobeli (Laoporus) .....            | 15   |
| dorsalis .....                   | 271      | nobilis (Aletornis) .....          | 332  |
| nevadanus (Camelops) .....       | 805      | nobilis (Basilemys) .....          | 38   |
| nevadanus (Cymbospondylus) ..... | 125      | nobilis (Blasmosaurus) .....       | 118  |
| nevadanus (Omphalosaurus) .....  | 129      | nobilis (Grus) .....               | 332  |
| nevadanus (Sphenophalos) .....   | 340      | nobilis (Martes) .....             | 527  |
| nevadensis (Arctomys) .....      | 371      | nobilis (Pliohippus) .....         | 697  |
| nevadensis (Bassariscus) .....   | 516      | noblei (Laoporus) .....            | 15   |
| nevadensis (Drymohippus) .....   | 379      | noctivagus (Abasarkius) .....      | 929  |
| nevadensis (Homo) .....          | 413      | Nocturni .....                     | 848  |
| nevadensis (Hypohippus) .....    | 679      | nodosa (Baena) .....               | 72   |
| nevadensis (Marmota) .....       | 371      | nodosa (Megaptera) .....           | 576  |
| nevadensis (Merycodus) .....     | 331      | Nodosauridae .....                 | 235  |
| nevadensis (Oreolagus) .....     | 366      | Nodosaurinae .....                 | 235  |
| nevadensis (Palæolagus) .....    | 366      | Nodosaurus .....                   | 236  |
| nevadensis (Parataxidea) .....   | 335      | textilis .....                     | 236  |
| nevadensis (Taxidea) .....       | 535      | nodosus (Glyptosaurus) .....       | 254  |
| nexhalli (Delphinavus) .....     | 588      | nodosus (Taphirophys) .....        | 75   |
| nexhalli (Delphinurus) .....     | 588      | Non-Ruminantia .....               | 768  |
| newtonensis (Mephitis) .....     | 538      | notabilis (Gryposaurus) .....      | 214  |
| nidificans (Batrachoides) .....  | 8        | notabilis (Kritosaurus) .....      | 214  |
| nigra (Chlidonias) .....         | 342      | Notalacerta .....                  | 7    |
| nigra (Hydrochelidon) .....      | 342      | jacksonensis .....                 | 7    |
| nigra (Mephitis) .....           | 538      | missouriensis .....                | 9    |
| nigricollis (Colymbus) .....     | 286      | Notamphibia .....                  | 7    |
| nigricollis (Podiceps) .....     | 286      | magna .....                        | 9    |
| nigridens (Carpolestes) .....    | 925      | Notharotidae .....                 | 920  |
| nigripes (Diomedea) .....        | 288      | Notharotinae .....                 | 920  |
| Nimravidae .....                 | 541      | Notharctus .....                   | 922  |
| Nimravus .....                   | 542, 543 | affinis .....                      | 922  |

|  | Page     |   | Page          |
|--|----------|---|---------------|
| <i>Notharetus—Continued</i>            |          | <i>novomehicanus</i> (Ectagonus) .....      | 400           |
| <i>anceps</i> .....                    | 922      | <i>novomehicanus</i> (Ectagonus) .....      | 400           |
| <i>cingulatus</i> .....                | 449      | <i>novomexicanus</i> (Edaphosaurus) .....   | 53            |
| <i>crassus</i> .....                   | 922      | <i>nubilis</i> (Canis) .....                | 499           |
| <i>elegans</i> .....                   | 450      | <i>nuchocarinata</i> (Trachenys) .....      | 97            |
| <i>formosus</i> .....                  | 923      | <i>numiensis</i> (Pelycodus) .....          | 923           |
| <i>gracilis</i> .....                  | 923, 924 | <i>numienus</i> (Notharctus) .....          | 923           |
| <i>matthewi</i> .....                  | 923      | <i>numienum</i> (Pelycodus) .....           | 923           |
| <i>minutus</i> .....                   | 926      | <i>numienus</i> (Notharctus) .....          | 923           |
| <i>numienum</i> .....                  | 923      | <i>numienus</i> (Pelycodus) .....           | 923           |
| <i>numenius</i> .....                  | 923      | <i>numenius</i> (Phenacodus) .....          | 605           |
| <i>osborni</i> .....                   | 923      | <i>nuptus</i> (Diacodexis) .....            | 756           |
| <i>palmeri</i> .....                   | 449      | <i>nuptus</i> (Trigonolestes) .....         | 756           |
| <i>pugnax</i> .....                    | 923      | <i>Nycterides</i> .....                     | 348           |
| <i>relictus</i> .....                  | 923      | <i>Nyctilestes</i> .....                    | 434           |
| <i>robustior</i> .....                 | 923      | <i>serotinus</i> .....                      | 435           |
| <i>rostratus</i> .....                 | 923      | <i>Nyctitheridæ</i> .....                   | 434           |
| <i>tenebrosus</i> .....                | 923      | <i>Nyctitherium</i> .....                   | 434           |
| <i>tyrannus</i> .....                  | 923      | <i>celatum</i> .....                        | 434           |
| <i>uintensis</i> .....                 | 924      | <i>curtidens</i> .....                      | 434           |
| <i>vaschensis</i> .....                | 669      | <i>nitidum</i> .....                        | 434           |
| <i>ventriculus</i> .....               | 924      | <i>priscum</i> .....                        | 435           |
| <i>Nothocyon</i> .....                 | 492      | <i>serotinum</i> .....                      | 435           |
| <i>annectens</i> .....                 | 492      | <i>velox</i> .....                          | 435           |
| <i>coloradoënsis</i> .....             | 493      | <i>Nyctodactylinae</i> .....                | 163           |
| <i>geismarianus</i> .....              | 492      | <i>Nyctodactylus</i> .....                  | 163           |
| <i>gregarius</i> .....                 | 490      | <i>gracilis</i> .....                       | 164           |
| <i>gregoni</i> .....                   | 492      | <i>Nyctosauridæ</i> .....                   | 163           |
| <i>latidens</i> .....                  | 492      | <i>Nyctosaurinae</i> .....                  | 163           |
| <i>mollis</i> .....                    | 492      | <i>Nyctosaurus</i> .....                    | 163           |
| <i>multicuspis</i> .....               | 492      | <i>gracilis</i> .....                       | 163, 164      |
| <i>lemur</i> .....                     | 492      | <i>nanus</i> .....                          | 164           |
| <i>vulpinus</i> .....                  | 493      | <i>Nyssodon</i> .....                       | 390           |
| <i>Nothodectes</i> .....               | 446      | <i>punctidens</i> .....                     | 390           |
| <i>dubius</i> .....                    | 446      | <i>oarthus</i> (Mosasaurus) .....           | 262           |
| <i>gidleyi</i> .....                   | 446      | <i>obesus</i> (Comptichnus) .....           | 10            |
| <i>Nothodon</i> .....                  | 33, 34   | <i>obesus</i> (Hoplocetus) .....            | 598           |
| <i>lentus</i> .....                    | 34       | <i>obesus</i> (Odobenus) .....              | 560           |
| <i>maximus</i> .....                   | 34       | <i>obesus</i> (Odobenus) .....              | 560           |
| <i>Nothodontidæ</i> .....              | 33       | <i>obesus</i> (Trichechus) .....            | 599           |
| <i>Nothosaurops</i> .....              | 132      | <i>obliquidens</i> (Brachypsalis) .....     | 526           |
| <i>occidens</i> .....                  | 133      | <i>obliquidens</i> (Gomphotherium) .....    | 637           |
| <i>Nothosaurus</i> .....               | 129      | <i>obliquidens</i> (Leptomeryx) .....       | 810           |
| <i>pacificus</i> .....                 | 126      | <i>obliquidens</i> (Merycochoerus) .....    | 785           |
| <i>Nothrotheriinae</i> .....           | 406      | <i>obliquidens</i> (Merychippus) .....      | 674           |
| <i>Nothrotheriinae</i> .....           | 406      | <i>obliquidens</i> (Promerycochoerus) ..... | 785           |
| <i>Nothrotherium</i> .....             | 406      | <i>obliquidens</i> (Protapirus) .....       | 729           |
| <i>chastense</i> .....                 | 406      | <i>obliquidens</i> (Prothyrocodon) .....    | 735           |
| <i>graciliceps</i> .....               | 406      | <i>obliquidens</i> (Serridentinus) .....    | 637           |
| <i>hawveri</i> .....                   | 406      | <i>obliquidens</i> (Triplopus) .....        | 735           |
| <i>shastense</i> .....                 | 406      | <i>obliquus</i> (Coryphodon) .....          | 616           |
| <i>texanum</i> .....                   | 406      | <i>obliquus</i> (Merychippus) .....         | 686           |
| <i>Notolacerta</i> .....               | 7        | <i>obliquus</i> (Odaxosaurus) .....         | 256           |
| <i>jacksonensis</i> .....              | 7        | <i>obscura</i> (Echmatenys) .....           | 95            |
| <i>missouriensis</i> .....             | 9        | <i>obscurum</i> (Gomphotherium) .....       | 637           |
| <i>Notomorphia</i> .....               | 92, 99   | <i>obscurum</i> (Manutut) .....             | 647           |
| <i>gravis</i> .....                    | 92       | <i>obscurus</i> (Batrachichnus) .....       | 7             |
| <i>testudinea</i> .....                | 90       | <i>obscurus</i> (Compseynys) .....          | 88            |
| <i>Notorostrinae</i> .....             | 623      | <i>obscurus</i> (Crocodilus) .....          | 161           |
| <i>Notosauridæ</i> .....               | 235      | <i>obscurus</i> (Dendragapus) .....         | 323           |
| <i>Nototherium</i> .....               | 406      | <i>obscurus</i> (Dibelodon) .....           | 637           |
| <i>Notungulata</i> .....               | 660      | <i>obscurus</i> (Elmys) .....               | 88            |
| <i>noveboracensis</i> (Mustela) .....  | 529      | <i>obscurus</i> (Holoys) .....              | 169           |
| <i>noveboracensis</i> (Putorius) ..... | 529      | <i>obscurus</i> (Mastodon) .....            | 639, 637, 680 |
| <i>novellus</i> (Myingaulus) .....     | 908      | <i>obscurus</i> (Serridentinus) .....       | 637           |
| <i>novomehicanus</i> (Calamodon) ..... | 400      | <i>obscurus</i> (Sorex) .....               | 441           |

|                                     | Page     |                                | Page     |
|-------------------------------------|----------|--------------------------------|----------|
| obscurus (Tetiabelodon) -----       | 637      | occiduus (Nothosaurops) -----  | 133      |
| obscurus (Tetrao) -----             | 325      | oceduuus (Plesiosaurus) -----  | 133      |
| obscurus (Thoracosaurus) -----      | 150      | occipitalis (Thomomys) -----   | 877      |
| obseurus (Triophodon) -----         | 637      | ocellatus (Glyptosaurus) ----- | 254      |
| obtusa (Eupachemys) -----           | 104      | Ochotona -----                 | 859      |
| obtusa (Parasaniwa) -----           | 252      | palatina -----                 | 859      |
| obtusa (Testudo) -----              | 104      | princeps -----                 | 860      |
| obtusata (Brachyprotoma) -----      | 532      | Ochotonidæ -----               | 859      |
| obtusata (Mephitis) -----           | 532      | Ochotora -----                 | 860      |
| obtusatus (Brachyprotoma) -----     | 532      | princeps -----                 | 860      |
| obtusidens (Dimetrodon) -----       | 56       | ochrogaster (Hypudæus) -----   | 898      |
| obtusidens (Glyptosaurus) -----     | 254      | ochrogaster (Microtus) -----   | 898      |
| obtusidens (Mesonyx) -----          | 468      | ochropus (Canis) -----         | 500      |
| obtusidens (Mylohyus) -----         | 774      | oeropus (Canis) -----          | 500      |
| obtusidens (Puercosaurus) -----     | 43       | Octacodon -----                | 758, 759 |
| obtusidens (Theropleura) -----      | 56       | gibiceps -----                 | 759      |
| obtusilobus (Stibarus) -----        | 753      | valens -----                   | 759      |
| obtusis (Dromillopus) -----         | 10       | oetonarius (Hadrianus) -----   | 100      |
| obtusus (Dromillopus) -----         | 10       | ocyrrhoë (Echmatomys) -----    | 95       |
| obtusus (Dryolestes) -----          | 372      | Odaxosaurus -----              | 256      |
| obtusus (Nanopus) -----             | 10       | obliquus -----                 | 256      |
| obtusus (Triceratops) -----         | 229      | Odobænidæ -----                | 550      |
| oalana (Testudo) -----              | 104      | Odobæus -----                  | 559      |
| occidentale (Aceratherium) -----    | 741      | rosmarinus -----               | 560      |
| occidentale (Acerotherium) -----    | 741      | rosmarus -----                 | 560      |
| occidentale (Hipparion) -----       | 693      | Odobenidæ -----                | 559      |
| occidentale (Hippotherium) -----    | 693      | Odobenotherium -----           | 560      |
| occidentale (Neohipparion) -----    | 693      | virginianum -----              | 560      |
| occidentalis (Æchmophorus) -----    | 286      | Odobenus -----                 | 559      |
| occidentalis (Æchmothorus) -----    | 286      | divergens -----                | 560      |
| occidentalis (Bison) -----          | 351      | obesus -----                   | 560      |
| occidentalis (Boavus) -----         | 268      | rossianus -----                | 560      |
| occidentalis (Cæuopus) -----        | 741      | virginianus -----              | 560      |
| occidentalis (Camelus) -----        | 799      | Od -----                       | 560      |
| occidentalis (Canis) -----          | 498, 499 | obesus -----                   | 560      |
| occidentalis (Catharista) -----     | 311      | Odontoculeus -----             | 820      |
| occidentalis (Chinaea) -----        | 533      | americanus -----               | 821      |
| occidentalis (Colodon) -----        | 726      | columbianus -----              | 821      |
| occidentalis (Coragyps) -----       | 311      | dolichopsis -----              | 821      |
| occidentalis (Eporodon) -----       | 782      | ensifer -----                  | 821      |
| occidentalis (Equus) -----          | 707      | hemionus -----                 | 821      |
| occidentalis (Eucrotaphus) -----    | 781      | lavicornis -----               | 821      |
| occidentalis (Hadrosaurus) -----    | 213      | osceola -----                  | 821      |
| occidentalis (Hoplophoneus) -----   | 544      | sellardsi -----                | 821      |
| occidentalis (Lupus) -----          | 499      | sellardsiæ -----               | 821      |
| occidentalis (Lynx) -----           | 555      | virginianus -----              | 821      |
| occidentalis (Mephitis) -----       | 538      | whitneyi -----                 | 822      |
| occidentalis (Mesatapirus) -----    | 728      | withneyi -----                 | 822      |
| occidentalis (Neohippus) -----      | 707      | Odontobæus -----               | 560      |
| occidentalis (Neotoma) -----        | 395      | Odontocæta -----               | 578      |
| occidentalis (Palmæcticus) -----    | 473      | Odontocæta -----               | 578      |
| occidentalis (Plesiocetopsis) ----- | 572      | Odontocætes -----              | 578      |
| occidentalis (Podiceps) -----       | 286      | Odontocæti -----               | 578      |
| occidentalis (Podilymbus) -----     | 286      | Odontocætoidea -----           | 578      |
| occidentalis (Podilymbus) -----     | 286      | Odontocætes -----              | 578      |
| occidentalis (Procamelus) -----     | 799      | Odontoglossæ -----             | 297      |
| occidentalis (Protolabis) -----     | 799      | Odontoholcæ -----              | 278      |
| occidentalis (Pteranodon) -----     | 163      | Odontolcæ -----                | 277      |
| occidentalis (Pterodactylus) -----  | 168      | Odontophoridæ -----            | 337      |
| occidentalis (Rhinoceros) -----     | 741      | Odontophorinæ -----            | 337      |
| occidentalis (Subhyraodon) -----    | 741      | Odontornis -----               | 331      |
| occidentalis (Thespisus) -----      | 212      | Odontornithes -----            | 377      |
| oceidua (Phocæna) -----             | 589      | Odontotormæ -----              | 331      |
| oceidus (Champsosaurus) -----       | 133      | Odemia -----                   | 308      |
| oceidus (Delphinus) -----           | 589      | perspicillata -----            | 308      |
| oceidus (Lonchodelphis) -----       | 593      | odemius (Anostira) -----       | 106      |



|                                 | Page          |                                  | Page   |
|---------------------------------|---------------|----------------------------------|--------|
| cedemius (Plastomenus) .....    | 106           | Omomys— <i>Continued</i>         |        |
| Ædicnemidæ .....                | 339           | carteri .....                    | 926    |
| Ædicnemine .....                | 339           | minutus .....                    | 926    |
| ognius (Basilemys) .....        | 88            | puellus .....                    | 926    |
| ognius (Compsemys) .....        | 88            | pusillus .....                   | 926    |
| Ogmobalena .....                | 574           | uintensis .....                  | 924    |
| Ogmodeirus .....                | 119           | vagus .....                      | 926    |
| Ogmodirus .....                 | 119           | vespertinus .....                | 926    |
| martinii .....                  | 119           | Omorhamphus .....                | 283    |
| Ogmophis .....                  | 268           | storchii .....                   | 283    |
| angulatus .....                 | 268           | Omosauridæ .....                 | 235    |
| arenarum .....                  | 268           | Omosaurus .....                  | 234    |
| compactus .....                 | 268           | armatus .....                    | 234    |
| oregonensis .....               | 268           | Omphalosauria .....              | 129    |
| Ogmorhinus .....                | 562           | Omphalosauridæ .....             | 129    |
| vetus .....                     | 562           | Omphalosauroidæ .....            | 129    |
| ogygia (Martes) .....           | 527           | Omphalosaurus .....              | 129    |
| ogygia (Mustela) .....          | 527           | nevadensis .....                 | 129    |
| ogygia (Plionictis) .....       | 527           | Onchodectes .....                | 398    |
| oharra (Hoplophoneus) .....     | 544           | onchognathus (Baptosaurus) ..... | 264    |
| ohioënsis (Castoroides) .....   | 888           | Ondatra .....                    | 900    |
| ohioticum (Tetracaulodon) ..... | 630           | annectens .....                  | 901    |
| ohioticus (Elephas) .....       | 625           | nebrascensis .....               | 901    |
| ohioticus (Mastodon) .....      | 625           | oregona .....                    | 901    |
| Ondemia .....                   | 308           | zibethica .....                  | 901    |
| perspicillata .....             | 308           | zibethicus .....                 | 901    |
| Olbodotes .....                 | 448           | onerosus (Adocus) .....          | 90     |
| Olbodotidæ .....                | 447           | Onocrotali .....                 | 289    |
| copei .....                     | 448           | Ontocetus .....                  | 598    |
| Olbotes .....                   | 448           | emmonsii .....                   | 598    |
| copei .....                     | 448           | oxyinycterus .....               | 598    |
| olcotti (Blastomeryx) .....     | 818           | Onychodectes .....               | 398    |
| Olobotidæ .....                 | 447           | rarus .....                      | 398    |
| Oligobænus .....                | 525           | tisonensis .....                 | 398    |
| Oligobunus .....                | 448, 525      | Onychodectidæ .....              | 398    |
| crassivultus .....              | 525           | Onychodectini .....              | 398    |
| darbyi .....                    | 525           | Onychomys .....                  | 892    |
| lepidus .....                   | 525           | bensoni .....                    | 892    |
| robustior .....                 | 525           | pedroënsis .....                 | 892    |
| oligobunus (Anancus) .....      | 632           | ramona .....                     | 892    |
| oligobunus (Cordillerion) ..... | 632           | torridus .....                   | 892    |
| oligobunus (Dibelodon) .....    | 631           | Onychopus .....                  | 16     |
| oligobunus (Mastodon) .....     | 631, 632      | gigas .....                      | 16     |
| oligocænus (Colymbus) .....     | 286           | onza (Felis) .....               | 553    |
| oligoceanus (Colymbus) .....    | 286           | Oodectes .....                   | 486    |
| Oligodontæ .....                | 403           | herpestoides .....               | 486    |
| olseni (Diacodexis) .....       | 756           | proximus .....                   | 486    |
| olseni (Orthogenysuchus) .....  | 156           | pugnax .....                     | 486    |
| olseni (Thryptacodon) .....     | 462           | Ophiacodon .....                 | 40, 52 |
| olsenii (Parasauromalus) .....  | 246           | mirus .....                      | 49     |
| Oligosimus .....                | 121           | Ophiacodontidæ .....             | 49     |
| grandævus .....                 | 121           | Ophideiurus .....                | 37     |
| primævus .....                  | 121           | Ophidia .....                    | 265    |
| Oligotomus .....                | 670           | Ophidii .....                    | 265    |
| cinctus .....                   | 671           | Ophiodeirus .....                | 37     |
| Olor .....                      | 300           | casei .....                      | 37     |
| americanus .....                | 301           | Ophrosaurus .....                | 121    |
| buccinator .....                | 301           | pauciporus .....                 | 121    |
| matthewi .....                  | 301           | ophryas (Brontotherium) .....    | 722    |
| palaeocygnus .....              | 301           | ophryas (Miohasileus) .....      | 722    |
| paloregonus .....               | 301           | Ophthalmosauridæ .....           | 127    |
| Omnivora .....                  | 752           | Ophthalmosaurus .....            | 127    |
| omnivorus (Phenacodus) .....    | 605           | discus .....                     | 127    |
| Omomys .....                    | 924, 926, 927 | marshi .....                     | 127    |
| ameghini .....                  | 926           | natans .....                     | 128    |
| ameghinoid .....                | 926           | reedi .....                      | 128    |

|                                  | Page     |                           | Page          |
|----------------------------------|----------|---------------------------|---------------|
| <i>Ophthalmosaurus—Continued</i> |          | <i>Oreodon—Continued</i>  |               |
| robustus                         | 128      | gracilis                  | 780           |
| opisthaca (Protoselene)          | 608      | hybridus                  | 781           |
| opisthacus (Mioclenus)           | 608      | macrorhinus               | 781           |
| opisthacus (Protoselene)         | 608      | major                     | 782           |
| Opisthias                        | 135      | periculorum               | 780           |
| rarus                            | 135      | robustum                  | 781           |
| Opisthocela                      | 188      | Oreodontes                | 779           |
| Opisthocelia                     | 188      | Oreodontidae              | 778, 779      |
| opisthomelas (Puffinus)          | 288      | Oreodontinae              | 779           |
| opisthotoma (Sinopa)             | 477      | Oreodontini               | 776           |
| Opisthotomus                     | 604      | oreodontus (Hoplophoneus) | 544           |
| astutus                          | 606      | Oreodontoides             | 779, 781, 782 |
| flagrans                         | 606      | oregonensis               | 781           |
| Opistias                         | 135      | Oreolagus                 | 866           |
| optatus (Tomarctus)              | 510      | nevadensis                | 866           |
| Oracodon                         | 381      | Oreometes                 | 755           |
| anceps                           | 381      | anceps                    | 755           |
| conulus                          | 381      | Oreortyx                  | 327           |
| orarius (Anancus)                | 632      | picta                     | 327           |
| orcina (Delphinapterus)          | 594      | orientalis (Elasmosaurus) | 118           |
| oreotti (Blastomeryx)            | 818      | orientalis (Teleopternus) | 809           |
| oreutti (Canis)                  | 500      | orientalis (Thomomys)     | 878           |
| ordinatus (Ectocynodon)          | 43       | orioensis (Castoroides)   | 888           |
| ordinatus (Hypertragulus)        | 811      | Orlitia                   | 79            |
| ordinatus (Nanotragulus)         | 811      | bornensis                 | 79            |
| ordinatus (Pariotichus)          | 43       | ornata (Anosteira)        | 98            |
| Oreamnos                         | 840      | ornata (Compsemys)        | 70            |
| americanus                       | 841      | ornata (Exocampe)         | 12            |
| montanus                         | 841      | ornatus (Anchiceratops)   | 226           |
| Oreannus                         | 840      | ornatus (Glutops)         | 70            |
| montanus                         | 840      | ornatus (Glyptops)        | 70, 89        |
| Oreax                            | 638, 639 | ornatus (Peritrosius)     | 80            |
| oregona (Ondatra)                | 901      | ornatus (Tylosteus)       | 239           |
| oregonense (Aceratherium)        | 745      | Ornithichnites            | 1             |
| oregonense (Diceratherium)       | 745      | culbertsoni               | 4             |
| oregonense (Mammot)              | 630      | dani                      | 21            |
| oregonense (Orycterotherium)     | 413      | fuliculoides              | 4             |
| oregonensis (Aphelops)           | 745      | gallinuloides             | 4             |
| oregonensis (Cynodontis)         | 491      | gigantea                  | 11            |
| oregonensis (Desmatognathus)     | 657      | gracillimus               | 4             |
| oregonensis (Desmatophoca)       | 557      | tetradaetylus             | 20            |
| oregonensis (Enhydrocyon)        | 507      | Ornithischia              | 201           |
| oregonensis (Felis)              | 553      | Ornithocephalids          | 161           |
| oregonensis (Felix)              | 553      | Ornithocephaliformes      | 160           |
| oregonensis (Galecyon)           | 491      | Ornithocephalinae         | 161           |
| oregonensis (Indaretos)          | 522      | Ornithocephalus           | 160, 161      |
| oregonensis (Indaretus)          | 522      | Ornithocheiridae          | 161           |
| oregonensis (Lophiodon)          | 663, 788 | Ornithocheirinae          | 163           |
| oregonensis (Moropus)            | 663      | Ornithocheiroidea         | 161           |
| oregonensis (Ogmophis)           | 268      | Ornithoides               | 16            |
| oregonensis (Oreodontoides)      | 781      | adamsi                    | 16            |
| oregonensis (Pteranodon)         | 163      | trifidus                  | 16            |
| oregonensis (Rhinoceros)         | 745      | Ornithoidichnites         | 1             |
| oregonensis (Stylamys)           | 101      | dananus                   | 3             |
| oregoniana (Sinclairia)          | 407      | Ornitholestes             | 183           |
| oregonus (Bassariscus)           | 516      | hermani                   | 186           |
| oregonus (Fiber)                 | 901      | hermanni                  | 186           |
| oregonus (Larus)                 | 341      | Ornithomimidae            | 181           |
| Oreocyon                         | 471      | Ornithomimines            | 181           |
| Oreodon                          | 779      | Ornithomimipus            | 16            |
| affinis                          | 780      | angustus                  | 16            |
| bullatus                         | 782      | Ornithomimus              | 16, 177, 182  |
| coloradensis                     | 780      | affinis                   | 181           |
| culbertsoni                      | 780      | altus                     | 182           |
| culbertsonii                     | 780      | grandis                   | 180, 183      |

|                                | Page     |                              | Page |
|--------------------------------|----------|------------------------------|------|
| Ornithomimus— <i>Continued</i> |          | orthopygia (Testudo)         | 104  |
| minutus                        | 183      | orthopygia (Xerobates)       | 104  |
| mirandus                       | 177      | orthostica (Mephitis)        | 533  |
| sedens                         | 183      | orthostichus (Mephitis)      | 533  |
| tenuis                         | 183      | orthostica (Mephitis)        | 533  |
| velox                          | 183      | Ortyx                        | 326  |
| Ornithopappi                   | 276      | picta                        | 326  |
| Ornithopoda                    | 202, 231 | Orycterocetus                | 597  |
| Ornithopodidae                 | 203      | cornutidens                  | 597  |
| Ornithopoidea                  | 203      | crocodilinus                 | 597  |
| Ornithopus                     | 20       | medialanticus                | 597  |
| gallinaceus                    | 20       | quadraticidens               | 597  |
| gracilior                      | 20       | Orycterotherium              | 413  |
| Ornithosauri                   | 159      | oregonense                   | 413  |
| Ornithosauria                  | 159      | Oryctomys                    | 877  |
| Ornithoscelida                 | 165      | botte                        | 878  |
| Ornithostoma                   | 162      | Oryzomys                     | 804  |
| ingens                         | 163      | nator                        | 894  |
| Ornithostomatidae              | 161      | palustris                    | 894  |
| Ornithotarsus                  | 216      | osagei (Tetracaulodon)       | 625  |
| immanis                        | 216      | osborni (Aretosaurus)        | 172  |
| Ornithura                      | 277      | osborni (Diploceras)         | 716  |
| Ornithura                      | 277      | osborni (Dolichorhynchops)   | 117  |
| Ornyctia                       | 348      | osborni (Eotitanotherium)    | 716  |
| Orohippus                      | 670      | osborni (Gomphotherium)      | 637  |
| agilis                         | 670      | osborni (Hypohippus)         | 679  |
| angustidens                    | 668      | osborni (Ischyrosmilus)      | 546  |
| atavus                         | 671      | osborni (Malthacolestes)     | 374  |
| ballardi                       | 671      | osborni (Merycodus)          | 831  |
| cinctus                        | 671      | osborni (Notharctus)         | 923  |
| cuspidatus                     | 668, 669 | osborni (Pliohippus)         | 698  |
| major                          | 671      | osborni (Saurolophus)        | 217  |
| osbornianus                    | 671      | osborni (Tetralodon)         | 637  |
| procyoninus                    | 671      | osborni (Trigonia)           | 740  |
| progressus                     | 671      | osborni (Trilophodon)        | 637  |
| pumilis                        | 671      | osborni (Trinacromerum)      | 117  |
| sylvaticus                     | 671      | osborniana (Testudo)         | 104  |
| tapirinus                      | 669      | osbornianum (Ectocyon)       | 606  |
| typicus                        | 671      | osbornianum (Ectocyon)       | 606  |
| uintanus                       | 671      | osbornianum (Hyracotherium)  | 671  |
| Oromeryx                       | 811      | osbornianus (Orohippus)      | 671  |
| plicatus                       | 811      | osbornii (Crecoides)         | 334  |
| Oronetes                       | 755      | osbornii (Crecoides)         | 334  |
| Orophosaurus                   | 121      | osceola (Cariacus)           | 821  |
| pauciporus                     | 121      | osceola (Odocoileus)         | 821  |
| Orortyx                        | 327      | Oseines                      | 354  |
| picta                          | 327      | osmonti (Bothrolabris)       | 768  |
| Orotherium                     | 668, 670 | osmonti (Percherus)          | 768  |
| cristonense                    | 668      | osmonti (Shastasaunus)       | 126  |
| index                          | 669      | osmonti (Thomomys)           | 768  |
| lovi                           | 668      | Osmotherium                  | 532  |
| uintanum                       | 671      | spelaeum                     | 532  |
| vintanum                       | 671      | ossifraga (Pachyma)          | 468  |
| orphyras (Brontotherium)       | 722      | ossifragus (Chasmaporthetes) | 539  |
| Ortalus                        | 324      | ossifragus (Dinoeyon)        | 512  |
| phengites                      | 324      | ossifragus (Mesonyx)         | 468  |
| Orthodactylus                  | 5, 16    | Osteopora                    | 613  |
| flexiloquus                    | 5        | platycephala                 | 613  |
| floriferus                     | 16       | Osteopygia                   | 76   |
| introvergens                   | 17       | borealis                     | 76   |
| linearis                       | 17       | chelydrinus                  | 76   |
| orthodon (Palaeotenus)         | 172      | emarginatus                  | 76   |
| Orthogenysuchus                | 156      | erosus                       | 76   |
| olsoni                         | 156      | gibbi                        | 76   |
| orthognathus (Lepus)           | 863      | platylomus                   | 76   |
| Orthopoda                      | 201      | ponderosus                   | 76   |

|   | Page     |  | Page     |
|---|----------|--|----------|
| <i>Osteopygis—Continued</i>             |          | <i>Ovis—Continued</i>                        |          |
| repandus .....                          | 76       | montana .....                                | 841, 842 |
| robustus .....                          | 76       | montanus .....                               | 841      |
| sopitus .....                           | 76       | scaphoceras .....                            | 843      |
| <i>Ostodolepis</i> .....                | 44, 45   | ovoidactylus ( <i>Thenaropus</i> ) .....     | 22       |
| brevispinatus .....                     | 45       | oweni ( <i>Hyposaurus</i> ) .....            | 147      |
| <i>Otaria</i> .....                     | 557, 558 | oweni ( <i>Melanodon</i> ) .....             | 374      |
| <i>Otariadæ</i> .....                   | 557      | oweni ( <i>Testudo</i> ) .....               | 101      |
| <i>Otariæ</i> .....                     | 557      | <i>Oxyacodon</i> .....                       | 602      |
| <i>Otaridæ</i> .....                    | 557      | agapetillus .....                            | 602      |
| otaridens ( <i>Hemiganus</i> ) .....    | 399      | apiculatus .....                             | 603      |
| otariidens ( <i>Wortmania</i> ) .....   | 399      | <i>Oxyæna</i> .....                          | 470      |
| <i>Otocolidae</i> .....                 | 30, 33   | æquidens .....                               | 471      |
| <i>Otocoris</i> .....                   | 354      | forcipata .....                              | 471      |
| alpestris .....                         | 354      | gulo .....                                   | 471      |
| <i>Otocorys</i> .....                   | 354      | huerfaneensis .....                          | 471      |
| alpestris .....                         | 354      | lupina .....                                 | 471      |
| <i>Otospermophilus</i> .....            | 371      | morstans .....                               | 471      |
| captus .....                            | 372      | pardalis .....                               | 471      |
| douglasii .....                         | 371      | transiens .....                              | 471      |
| fisheri .....                           | 371      | <i>Oxyænide</i> .....                        | 470      |
| gidleyi .....                           | 371      | <i>Oxyæninae</i> .....                       | 470      |
| grammurus .....                         | 371      | <i>Oxyænini</i> .....                        | 470      |
| <i>Ototriton</i> .....                  | 250      | <i>Oxyænodon</i> .....                       | 474      |
| anceps .....                            | 250      | dipodus .....                                | 475      |
| solidus .....                           | 250      | dysclerus .....                              | 475      |
| <i>Otouphepodidæ</i> .....              | 2        | dysodus .....                                | 475      |
| <i>Otouphepus</i> .....                 | 17       | dysodus .....                                | 475      |
| magnificus .....                        | 17       | <i>Oxyænoidæ</i> .....                       | 470      |
| minor .....                             | 17       | <i>Oxycænidæ</i> .....                       | 459      |
| <i>Otozoidæ</i> .....                   | 1        | <i>Oxycænus</i> .....                        | 460      |
| <i>Otozorom</i> .....                   | 17       | cuspidatus .....                             | 460      |
| <i>Otozoum</i> .....                    | 17       | simplex .....                                | 460      |
| caudatum .....                          | 17       | <i>Oxydactylus</i> .....                     | 795      |
| minus .....                             | 17       | brachycephs .....                            | 795, 796 |
| moodii .....                            | 17       | brachyodontus .....                          | 795      |
| parvum .....                            | 17       | campestris .....                             | 796      |
| <i>Otus</i> .....                       | 349      | gibbi .....                                  | 796      |
| asio .....                              | 349      | longipes .....                               | 796      |
| bendirei .....                          | 349      | longirostris .....                           | 796      |
| wilsonianus .....                       | 351      | lulli .....                                  | 796      |
| ovatus ( <i>Phlaodectes</i> ) .....     | 486      | <i>Oxyechus</i> .....                        | 336      |
| ovatus ( <i>Vulpavus</i> ) .....        | 486      | vociferus .....                              | 336      |
| overtoni ( <i>Ancylocentrum</i> ) ..... | 261      | oxymycterus ( <i>Ontocetus</i> ) .....       | 598      |
| overtoni ( <i>Brachysaurus</i> ) .....  | 261      | oxyrhinus ( <i>Lestosaurus</i> ) .....       | 260      |
| <i>Ovibos</i> .....                     | 309, 344 | oxyrhinus ( <i>Platycarpus</i> ) .....       | 260      |
| appalachicolus .....                    | 345      | oxysternum ( <i>Adocus</i> ) .....           | 90       |
| bombifrons .....                        | 343      | oxysternum ( <i>Agomphus</i> ) .....         | 90       |
| cavifrons .....                         | 343, 347 | oxysternum ( <i>Amphienys</i> ) .....        | 90       |
| mackenzianus .....                      | 348      | ozarkensis ( <i>Blarina</i> ) .....          | 442      |
| maximus .....                           | 347      | ozarkensis ( <i>Neotoma</i> ) .....          | 396      |
| moschatus .....                         | 345      | <i>Ozotheca</i> .....                        | 83       |
| proximus .....                          | 346      | paca ( <i>Agouti</i> ) .....                 | 913      |
| tyrelli .....                           | 347      | paca ( <i>Coelogenys</i> ) .....             | 913      |
| yukonensis .....                        | 346      | paca ( <i>Cuniculus</i> ) .....              | 913      |
| <i>Ovibovidae</i> .....                 | 345      | <i>Pachyæna</i> .....                        | 467      |
| <i>Ovibovinae</i> .....                 | 343      | gigantea .....                               | 467      |
| <i>Ovibus</i> .....                     | 344      | gracilis .....                               | 468      |
| <i>Ovidæ</i> .....                      | 341      | intermedia .....                             | 468      |
| <i>Ovina</i> .....                      | 341      | ossifraga .....                              | 468      |
| <i>Ovine</i> .....                      | 341      | ponderosa .....                              | 468      |
| <i>Ovis</i> .....                       | 341      | pachycephalum ( <i>Potamotherium</i> ) ..... | 589      |
| canadensis .....                        | 342      | pachycephalus ( <i>Brachypsalis</i> ) .....  | 526      |
| cervina .....                           | 342      | <i>Pachygyon</i> .....                       | 496      |
| dalli .....                             | 343      | robustus .....                               | 500      |
| mamillaris .....                        | 343      | pachydactylus ( <i>Thenaropus</i> ) .....    | 22       |

|                              | Page     |                    | Page     |
|------------------------------|----------|--------------------|----------|
| Pachyglossa                  | 245      | Palæoborus         | 313      |
| Pachygnathus                 | 86       | umbrosus           | 313      |
| borealis                     | 50       | Palæocastor        | 882, 884 |
| pachylomus (Emys)            | 96       | fossor             | 883      |
| pachyodon (Hæmognathus)      | 509      | gradatus           | 883      |
| pachyops (Anchippus)         | 688      | magnus             | 884      |
| pachyops (Hypochippus)       | 688      | nebrascensis       | 884      |
| pachyops (Merychippus)       | 688      | pansus             | 883      |
| pachyops (Protohippus)       | 688      | peniusulatus       | 883      |
| Pachypoda                    | 185      | Palæochenoides     | 291      |
| Pachypodes                   | 186      | miocenens          | 291      |
| Pachypodosauria              | 187      | mioceanus          | 291      |
| Pachypodosauroides           | 188      | Palæochorus        | 768      |
| pachypodus (Amblyopus)       | 2        | pristinus          | 768      |
| pachypus (Bathyopsis)        | 815      | socialis           | 769      |
| pachypus (Coryphodon)        | 815      | subæquans          | 769      |
| Paciculus                    | 911      | trichæus           | 769      |
| insolitus                    | 911      | Palæocrex          | 335      |
| lockingtonianus              | 911      | fax                | 335      |
| pacifica (Pliopedia)         | 558      | Palæoctenus        | 171      |
| pacifum (Aceratherium)       | 745      | Palæoctonus        | 171      |
| pacifum (Diceratherium)      | 745      | appalachianus      | 171      |
| pacifus (Antrosous)          | 455      | aulacodus          | 172      |
| pacifus (Bison)              | 852      | dumblianus         | 171      |
| pacificus (Bubo)             | 350      | orthodon           | 172      |
| pacificus (Cænopus)          | 745      | palæocygnus (Olor) | 301      |
| pacificus (Eporeodon)        | 782      | Palæognathæ        | 290      |
| pacificus (Equus)            | 707      | Palæogyys          | 312      |
| pacificus (Nothosaurus)      | 126      | prodromus          | 312      |
| pacificus (Shastasaurus)     | 126      | Palæohippidæ       | 686      |
| packardi (Chonezphus)        | 683      | Palæolagus         | 865      |
| padanicus (Thæodon)          | 391      | agapetillus        | 865      |
| Pæbrotherium                 | 793      | brachyodon         | 865      |
| Pagomys                      | 664      | haydeni            | 865      |
| hispidus                     | 664      | intermedius        | 865      |
| Pagophilus                   | 663      | leporinus          | 865      |
| grænlandica                  | 663      | nevadensis         | 866      |
| Pagophilus                   | 663      | temnodon           | 866      |
| grænlandicus                 | 663      | triplex            | 866      |
| Pagophoca                    | 663, 664 | turdidus           | 866      |
| grænlandica                  | 663, 664 | Palæolestes        | 428, 431 |
| paladentatum (Gomphotherium) | 637      | puerensis          | 428, 431 |
| paladentatum (Trilophodon)   | 637      | Palæomerycidæ      | 815      |
| Palæacodon                   | 450, 926 | Palæomerycinæ      | 815      |
| vagus                        | 926      | Palæomeryx         | 815      |
| verus                        | 450      | americanus         | 816      |
| Palæanodon                   | 422      | antelopinus        | 819      |
| ignavus                      | 422      | borealis           | 819      |
| parvulus                     | 422      | madisonius         | 820      |
| Palæanodonta                 | 421      | teres              | 816      |
| Palæarctomys                 | 868      | trilateralis       | 816      |
| macrorhinus                  | 868      | Palæonictidæ       | 470      |
| montanus                     | 868      | Palæonictidini     | 470      |
| vetus                        | 868      | Palæonictia        | 472      |
| Palæarctonyx                 | 487      | americanus         | 473      |
| meadi                        | 487      | occidentalis       | 473      |
| palæatlanticus (Balæna)      | 573      | Palæonyctis        | 473      |
| palæatlanticus (Rhegnopsis)  | 573      | Palæonornis        | 359      |
| Palæchthon                   | 928      | struthionoides     | 359      |
| minor                        | 928      | Palæonycteris      | 436      |
| Palæictops                   | 431      | palæocenus         | 436      |
| bicuspis                     | 431      | Palæophasianus     | 323      |
| Paleochoa                    | 267      | melagroides        | 323      |
| crassa                       | 267      | Palæophidæ         | 267      |
| Palæobonasa                  | 325      | Palæophinæ         | 267      |
| wyomingensis                 | 325      | Palæophis          | 267      |

|                              | Page               |  | Page   |
|------------------------------|--------------------|--|--------|
| <i>Palaephipis—Continued</i> |                    | <i>Palaetotrix—Continued</i>                       |        |
| <i>grandis</i> .....         | 267                | <i>gillii</i> .....                                | 326    |
| <i>halidanus</i> .....       | 267                | <i>Palaetheca</i> .....                            | 96     |
| <i>littoralis</i> .....      | 267                | <i>polycypha</i> .....                             | 96     |
| <i>Palaepithecinae</i> ..... | 924                | <i>terrestris</i> .....                            | 96     |
| <i>Palaepitheciini</i> ..... | 924                | <i>Palaetheka</i> .....                            | 96     |
| <i>Palaopterygii</i> .....   | 141                | <i>Palaetherium</i> .....                          | 673    |
| <i>Palaopus</i> .....        | 17                 | <i>bairdi</i> .....                                | 673    |
| <i>regularis</i> .....       | 17                 | <i>giganteum</i> .....                             | 719    |
| <i>Palaorhinus</i> .....     | 141                | <i>Palaotringa</i> .....                           | 338    |
| <i>bransonii</i> .....       | 141                | <i>littoralis</i> .....                            | 338    |
| <i>parvus</i> .....          | 141                | <i>vagans</i> .....                                | 338    |
| <i>scolopax</i> .....        | 142                | <i>vetus</i> .....                                 | 338    |
| <i>Palaoryctes</i> .....     | 428                | <i>Palamopus</i> .....                             | 12, 18 |
| <i>puercensis</i> .....      | 428                | <i>anomalous</i> .....                             | 18     |
| <i>Palaosaniwa</i> .....     | 252                | <i>clarki</i> .....                                | 18     |
| <i>canadensis</i> .....      | 252                | <i>clarkii</i> .....                               | 18     |
| <i>Palaosauropus</i> .....   | 7, 17              | <i>divaricans</i> .....                            | 18     |
| <i>antiquior</i> .....       | 17                 | <i>gracilipes</i> .....                            | 18     |
| <i>primævus</i> .....        | 17                 | <i>palmatus</i> .....                              | 18     |
| <i>sydnensis</i> .....       | 7                  | <i>rogersi</i> .....                               | 18     |
| <i>unquifer</i> .....        | 20                 | <i>rogersianus</i> .....                           | 18     |
| <i>Palaosaurus</i> .....     | 138, 145, 168, 169 | <i>palatina</i> ( <i>Ochotona</i> ) .....          | 859    |
| <i>fraserianus</i> .....     | 172                | <i>palatinum</i> ( <i>Præotherium</i> ) .....      | 859    |
| <i>sulcatus</i> .....        | 145                | <i>Palauchenia</i> .....                           | 808    |
| <i>Palaoscincus</i> .....    | 236                | <i>californica</i> .....                           | 808    |
| <i>asper</i> .....           | 236                | <i>magna</i> .....                                 | 808    |
| <i>costatus</i> .....        | 237                | <i>paleocenus</i> ( <i>Palaonycteris</i> ) .....   | 456    |
| <i>latus</i> .....           | 237                | <i>paleocenus</i> ( <i>Zanycteris</i> ) .....      | 456    |
| <i>magoder</i> .....         | 237                | <i>Palaophis</i> .....                             | 927    |
| <i>rugosus</i> .....         | 237                | <i>Palaopitheciini</i> .....                       | 924    |
| <i>Palaoshyops</i> .....     | 712                | <i>Paleopus</i> .....                              | 17     |
| <i>Palaosinopa</i> .....     | 425                | <i>regularis</i> .....                             | 17     |
| <i>didelphoides</i> .....    | 425                | <i>Paleorhinus</i> .....                           | 141    |
| <i>lutreola</i> .....        | 426                | <i>Palaosauropus</i> .....                         | 17     |
| <i>veterrima</i> .....       | 426                | <i>primævus</i> .....                              | 17     |
| <i>Palaospiza</i> .....      | 359                | <i>Palaosaurus</i> .....                           | 145    |
| <i>bella</i> .....           | 359                | <i>fraserianus</i> .....                           | 172    |
| <i>hatcheri</i> .....        | 359                | <i>sulcatus</i> .....                              | 145    |
| <i>Palaospizidæ</i> .....    | 359                | <i>uniformis</i> .....                             | 47     |
| <i>Palaostruthus</i> .....   | 359                | <i>Palaoscincus</i> .....                          | 236    |
| <i>hatcheri</i> .....        | 359                | <i>asper</i> .....                                 | 236    |
| <i>Palaosyopidæ</i> .....    | 711                | <i>pallescens</i> ( <i>Thomomys</i> ) .....        | 878    |
| <i>Palaosyopinae</i> .....   | 711                | <i>pallidicinctus</i> ( <i>Cupidonia</i> ) .....   | 326    |
| <i>Palaosyops</i> .....      | 712                | <i>pallidicinctus</i> ( <i>Tympanuchus</i> ) ..... | 325    |
| <i>agenus</i> .....          | 712                | <i>pallidus</i> ( <i>Antrozous</i> ) .....         | 455    |
| <i>brownianus</i> .....      | 712                | <i>palmaria</i> ( <i>Vulpes</i> ) .....            | 503    |
| <i>copoi</i> .....           | 712                | <i>palmatus</i> ( <i>Barypodus</i> ) .....         | 7      |
| <i>diaconus</i> .....        | 712                | <i>palmatus</i> ( <i>Palamopus</i> ) .....         | 18     |
| <i>fontinalis</i> .....      | 712                | <i>palmeri</i> ( <i>Nemorhædus</i> ) .....         | 840    |
| <i>grangeri</i> .....        | 712                | <i>palmeri</i> ( <i>Nemorhædus</i> ) .....         | 840    |
| <i>humilis</i> .....         | 712                | <i>palmeri</i> ( <i>Notharctus</i> ) .....         | 449    |
| <i>junior</i> .....          | 713                | <i>palmeri</i> ( <i>Parietobalana</i> ) .....      | 572    |
| <i>levidens</i> .....        | 713                | <i>palmipes</i> ( <i>Shepardia</i> ) .....         | 20     |
| <i>laticeps</i> .....        | 713                | <i>palmoria</i> ( <i>Vulpes</i> ) .....            | 503    |
| <i>leidy</i> .....           | 713                | <i>paloccidentalis</i> ( <i>Ardea</i> ) .....      | 295    |
| <i>longirostris</i> .....    | 713                | <i>paloregonus</i> ( <i>Cygnus</i> ) .....         | 301    |
| <i>maior</i> .....           | 713                | <i>paloregonus</i> ( <i>Olor</i> ) .....           | 301    |
| <i>major</i> .....           | 713                | <i>paludicola</i> ( <i>Poatrephes</i> ) .....      | 790    |
| <i>manteceras</i> .....      | 713                | <i>paludis</i> ( <i>Limnoscelus</i> ) .....        | 44     |
| <i>paludosus</i> .....       | 713                | <i>paludosa</i> ( <i>Hoplocheilus</i> ) .....      | 92     |
| <i>robustus</i> .....        | 713                | <i>paludosus</i> ( <i>Palaosyops</i> ) .....       | 713    |
| <i>ultimus</i> .....         | 713                | <i>palustris</i> ( <i>Lepus</i> ) .....            | 864    |
| <i>validens</i> .....        | 714                | <i>palustris</i> ( <i>Limnolagus</i> ) .....       | 865    |
| <i>Palaotetrix</i> .....     | 326                | <i>palustris</i> ( <i>Oryzomys</i> ) .....         | 864    |
| <i>gilli</i> .....           | 326                | <i>palustris</i> ( <i>Sylvilagus</i> ) .....       | 864    |

|                                 | Page     |                                  | Page          |
|---------------------------------|----------|----------------------------------|---------------|
| palustris (Vulpavus) .....      | 485      | Paradoxodon—Continued .....      |               |
| Pandion .....                   | 320      | rüttimeyeranus .....             | 461           |
| carolinensis .....              | 321      | paradoxus (Hyrachyus) .....      | 734           |
| halaëtus .....                  | 321      | Parahippus .....                 | 680, 685, 688 |
| Pandiones .....                 | 320      | agrestis .....                   | 681           |
| Pandionidæ .....                | 320      | atavus .....                     | 682           |
| Pandioninæ .....                | 320      | australis .....                  | 681           |
| pandius (Helodectes) .....      | 42       | avus .....                       | 681           |
| paniense (Hipparion) .....      | 685      | • brevidens .....                | 681           |
| paniensis (Merychippus) .....   | 685      | cognatus .....                   | 681           |
| paniensis (Merychys) .....      | 788      | coloradensis .....               | 681           |
| panensis (Mylagaulus) .....     | 908      | crenidenis .....                 | 681           |
| paniscus (Elephas) .....        | 648      | integer .....                    | 682           |
| Panolax .....                   | 861      | leonensis .....                  | 682           |
| sanctæfidei .....               | 861      | minimus .....                    | 682           |
| panolius (Parasciurus) .....    | 876      | minutalis .....                  | 682           |
| panolus (Sciurus) .....         | 875      | mourmingi .....                  | 682           |
| Panoplosaurus .....             | 237      | nebrascensis .....               | 682           |
| mirus .....                     | 237      | nebrascensis .....               | 682           |
| pansa (Testudo) .....           | 104      | parvulus .....                   | 688           |
| pansus (Chalcomys) .....        | 883      | pawniensis .....                 | 682           |
| pansus (Palæocastor) .....      | 883      | penultimus .....                 | 682           |
| pansus (Steneofiber) .....      | 883      | perditus .....                   | 681           |
| Pantodonta .....                | 613, 614 | præcurrens .....                 | 681           |
| Pantolambda .....               | 612      | primus .....                     | 682           |
| bathmodon .....                 | 613      | pristinus .....                  | 682           |
| cavirictus .....                | 613      | taxus .....                      | 682           |
| Pantolambdide .....             | 609, 612 | texanus .....                    | 682           |
| Pantolambdini .....             | 612      | tyleri .....                     | 682           |
| Pantolestes .....               | 426      | ultimus .....                    | 683           |
| elegans .....                   | 426      | Parahyus .....                   | 762           |
| intermedius .....               | 426      | aberrans .....                   | 762           |
| longicaudatus .....             | 426      | vagus .....                      | 762           |
| longicaudus .....               | 426      | Paralabis .....                  | 766           |
| longieundus .....               | 426      | matthewi .....                   | 766           |
| natans .....                    | 426      | Paralces .....                   | 820           |
| nuptus .....                    | 766      | parallelus (Anchisauripus) ..... | 3             |
| phocipes .....                  | 426      | parallelus (Grallator) .....     | 3             |
| secans .....                    | 767      | Parameryx .....                  | 812           |
| Pantolestidæ .....              | 425      | lævis .....                      | 812           |
| Pantolestoidæ .....             | 425      | proavus .....                    | 812           |
| Pantolestoidæ .....             | 425      | sulcatus .....                   | 812           |
| Pantosaurus .....               | 121      | Paramyida .....                  | 902           |
| striatus .....                  | 121      | Paramyidæ .....                  | 902           |
| Pantotheria .....               | 371, 386 | Paramylodon .....                | 411           |
| Pantotheriide .....             | 371      | nebrascensis .....               | 418           |
| Pantyliidæ .....                | 44       | Paramys .....                    | 902           |
| Pantyliiformes .....            | 44       | atwateri .....                   | 902           |
| Pantyloidea .....               | 44       | bicuspis .....                   | 902           |
| Pantylosauria .....             | 44       | buccatus .....                   | 902           |
| Pantylus .....                  | 44       | compressidens .....              | 902           |
| brevispinatus .....             | 45       | copei .....                      | 902           |
| coicodus .....                  | 44       | delicator .....                  | 902           |
| cordatus .....                  | 44       | delicatissimus .....             | 903           |
| tryptychus .....                | 45       | delicatus .....                  | 902           |
| Parabaropus .....               | 18       | excavatus .....                  | 903           |
| coloradensis .....              | 18       | grangeri .....                   | 903           |
| Paracetus .....                 | 687      | hians .....                      | 903           |
| Paracotylops .....              | 782, 783 | leptodus .....                   | 903           |
| superbus .....                  | 785      | major .....                      | 903           |
| Paradaphænus .....              | 506      | medius .....                     | 903           |
| cuspidatus .....                | 506      | murinus .....                    | 903           |
| transversus .....               | 506      | nitidus .....                    | 909           |
| Paradaphænus .....              | 506      | parvidens .....                  | 904           |
| paradoxicus (Protoreodon) ..... | 778      | petersoni .....                  | 908           |
| Paradoxodon .....               | 461      | primævus .....                   | 908           |

|                          | Page               |                                | Page   |
|--------------------------|--------------------|--------------------------------|--------|
| <i>Paramys—Continued</i> |                    | <i>Parictops—Continued</i>     |        |
| quadratius .....         | 908                | multicuspis .....              | 432    |
| robustus .....           | 908                | paridens (Helodectes) .....    | 42     |
| sciuroidea .....         | 908                | Paridigitata .....             | 751    |
| superbus .....           | 908                | paridigitatum (Argozoum) ..... | 6      |
| uintensis .....          | 908                | Parieasaurus .....             | 38     |
| undans .....             | 909                | Parietobalamea .....           | 572    |
| Parapavo .....           | 329                | palmei .....                   | 572    |
| californicus .....       | 329                | parigonus (Merychys) .....     | 788    |
| Paraphelops .....        | 748                | pariogonus (Merychys) .....    | 788    |
| rooksensis .....         | 748                | Pariosauria .....              | 38     |
| Parapsida .....          | 124, 240           | Pariosaurus .....              | 38     |
| Parasaniwa .....         | 252                | Pariotichidae .....            | 42     |
| obtusa .....             | 252                | Pariotichus .....              | 39, 42 |
| wyomingensis .....       | 252                | aduncus .....                  | 39     |
| Parasaurolophus .....    | 219                | aguti .....                    | 40     |
| walkeri .....            | 219                | angusticeps .....              | 40     |
| Parasauromalus .....     | 246                | brachyops .....                | 42     |
| olseni .....             | 246                | incisivus .....                | 40     |
| Parasaurus .....         | 121                | incisivorus .....              | 41     |
| striatus .....           | 121                | incisivus .....                | 41     |
| Parascalops .....        | 438                | isolomus .....                 | 40     |
| breweri .....            | 438                | laticeps .....                 | 42     |
| Parasciurus .....        | 874                | megalops .....                 | 43     |
| balloviatus .....        | 904                | ordinatus .....                | 43     |
| calycinus .....          | 874                | Parotyichidae .....            | 42     |
| jeffersoni .....         | 906                | Parisectolophus .....          | 727    |
| panolius .....           | 876                | latidens .....                 | 727    |
| relictus .....           | 904                | Paroligobunis .....            | 525    |
| vortmani .....           | 904                | simplexidens .....             | 525    |
| Parasuchi .....          | 140                | Paromomys .....                | 929    |
| Parasuchia .....         | 136, 137, 138, 140 | depressidens .....             | 929    |
| Parasuchoides .....      | 138                | maturus .....                  | 929    |
| Parataxidea .....        | 535                | Paronychodon .....             | 385    |
| nevadensis .....         | 535                | lacustris .....                | 385    |
| Paratheria .....         | 401                | Paroreodon .....               | 781    |
| Paratylopus .....        | 796                | marshi .....                   | 781    |
| cameloides .....         | 797                | parva (Compsemys) .....        | 89     |
| primevus .....           | 797                | parva (Crucipes) .....         | 10     |
| sternbergi .....         | 797                | parvidens (Geomys) .....       | 879    |
| wortmani .....           | 797                | parvidens (Ischyromys) .....   | 891    |
| Paraxonia .....          | 752                | parvidens (Paramys) .....      | 904    |
| pardalis (Oxyena) .....  | 471                | parvidens (Sciuravus) .....    | 904    |
| Pareiasauri .....        | 37                 | parviloba (Martes) .....       | 587    |
| Pareiasauria .....       | 37                 | parviloba (Mustela) .....      | 527    |
| Pareiosauridae .....     | 38                 | parviloba (Plionictis) .....   | 527    |
| Pareiasaurinae .....     | 38                 | parvitecta (Chelonia) .....    | 82     |
| Pareiasauriformes .....  | 37                 | parvitectus (Puppigerus) ..... | 83     |
| Pareiasauroides .....    | 37                 | parvivorus (Miacis) .....      | 485    |
| Pareiasaurus .....       | 38                 | parvivorus (Vulpavus) .....    | 485    |
| henneni .....            | 39                 | parvulus (Merychippus) .....   | 688    |
| Pareiosauria .....       | 37, 38             | parvulus (Paleanodon) .....    | 422    |
| Pareiosauridae .....     | 38                 | parvulus (Parahippus) .....    | 688    |
| Pareiosaurus .....       | 38                 | parvulus (Protohippus) .....   | 688    |
| Parelephas .....         | 41                 | parvulus (Uintasorex) .....    | 446    |
| jeffersoni .....         | 644, 646           | parvum (Cototherium) .....     | 573    |
| progressus .....         | 644                | parvum (Chairotherium) .....   | 9      |
| Paromys .....            | 892                | parvum (Chirotherium) .....    | 9      |
| milleri .....            | 892                | parvum (Eotodon) .....         | 606    |
| Pariasauria .....        | 37, 38             | parvum (Elaschoceras) .....    | 620    |
| Pariasauridae .....      | 38                 | parvum (Otosoum) .....         | 17     |
| Pariasaurus .....        | 37, 38, 39         | parvus (Basariscus) .....      | 516    |
| Parictis .....           | 526                | parvus (Botasauroides) .....   | 295    |
| primevus .....           | 526                | parvus (Cimolodon) .....       | 381    |
| Parictops .....          | 432                | parvus (Cimolomys) .....       | 381    |



|                                 | Page     |                                  | Page          |
|---------------------------------|----------|----------------------------------|---------------|
| parvus (Colymbus) .....         | 286      | Paumomys .....                   | 804           |
| parvus (Compsemys) .....        | 89       | perditus .....                   | 804           |
| parvus (Crocodylus) .....       | 154      | Pavo .....                       | 820           |
| parvus (Crucipes) .....         | 10       | californicus .....               | 820           |
| parvus (Diplophops) .....       | 880      | pawneensis (Xestops) .....       | 255           |
| parvus (Diprionomys) .....      | 881      | pawuiensis (Parahippus) .....    | 682           |
| parvus (Dromillopus) .....      | 11       | pawuiensis (Ursavus) .....       | 518           |
| parvus (Dromomeryx) .....       | 820      | Pecari .....                     | 775           |
| parvus (Ectocion) .....         | 600      | Pecora .....                     | 815, 833, 837 |
| parvus (Elosaurus) .....        | 193      | pectinatus (Equus) .....         | 708           |
| parvus (Eporeodon) .....        | 783      | pectinatus (Neohippus) .....     | 708           |
| parvus (Epihippus) .....        | 672      | pectoralis (Adocus) .....        | 90            |
| parvus (Eutypomus) .....        | 882      | pectoralis (Agomphus) .....      | 90            |
| parvus (Felis) .....            | 555      | Pedimana .....                   | 840           |
| parvus (Grus) .....             | 332      | Pediocetes .....                 | 326           |
| parvus (Harpagosaurus) .....    | 256      | lucasi .....                     | 326           |
| parvus (Heliscomys) .....       | 880      | lucasi .....                     | 326           |
| parvus (Heterotitanops) .....   | 713      | nanus .....                      | 326           |
| parvus (Lynx) .....             | 555      | phasianellus .....               | 326           |
| parvus (Moropus) .....          | 663      | Pediocetes .....                 | 326           |
| parvus (Peromyscus) .....       | 894      | columbianus .....                | 326           |
| parvus (Protoreodon) .....      | 778      | nanus .....                      | 326           |
| parvus (Tillomys) .....         | 004, 904 | phasianellus .....               | 326           |
| Pasachusia .....                | 140      | Pediocetes .....                 | 326           |
| Passalacodon .....              | 426      | columbianus .....                | 326           |
| litoralis .....                 | 426      | lucasi .....                     | 326           |
| littoralis .....                | 426      | lucasi .....                     | 326           |
| Passeres .....                  | 353      | nanus .....                      | 326           |
| Passeride .....                 | 354      | phasianellus .....               | 326           |
| Passeriformes .....             | 353      | Pedionhus .....                  | 770           |
| Passerinæ .....                 | 353      | ferus .....                      | 770           |
| Passeroides .....               | 354      | Pedionmyine .....                | 390           |
| Passeroidei .....               | 353      | Pedionys .....                   | 390           |
| paterculus (Cynodictis) .....   | 491      | elegans .....                    | 390           |
| paterculus (Galcynus) .....     | 491      | hatcheri .....                   | 390           |
| Patriofelis .....               | 471      | pedroensis (Onychomys) .....     | 892           |
| biscuspis .....                 | 472      | pedunculatus (Clepsydrops) ..... | 53            |
| coloradensis .....              | 473      | peiganus (Dysganus) .....        | 216           |
| ferox .....                     | 472      | Pelagii .....                    | 330           |
| latidens .....                  | 473      | Pelarganax .....                 | 20            |
| leidyanum .....                 | 472      | tetradactylus .....              | 20            |
| tigrina .....                   | 472      | Pelargiden .....                 | 21            |
| tigrinus .....                  | 472      | dane .....                       | 21            |
| ulta .....                      | 472, 473 | pelagius (Squalodon) .....       | 541           |
| vorax .....                     | 472      | Pelargiformes .....              | 293           |
| patrius (Phasmagyps) .....      | 312      | Pelargo-Herodii .....            | 293           |
| patrius (Archedelpis) .....     | 578      | Pelargomorphæ .....              | 293           |
| patruus (Merychippus) .....     | 686      | Pelargornithes .....             | 293           |
| paucidens (Ceratops) .....      | 224      | Pelecani .....                   | 289           |
| paucidens (Deinotie) .....      | 542      | Pelecanidae .....                | 289           |
| paucidens (Dinictis) .....      | 542      | Pelecanides .....                | 289           |
| paucidens (Hadrosaurus) .....   | 224      | Pelecaniformes .....             | 289           |
| paucidens (Hædonodon) .....     | 480      | Pelecanine .....                 | 289           |
| paucidens (Saniwa) .....        | 252      | Pelecanoides .....               | 289           |
| paucidens (Thinosaurus) .....   | 252      | Pelecanoides .....               | 289           |
| paucidens (Trachodon) .....     | 224      | Pelecanus .....                  | 290           |
| paucidens (Trigonias) .....     | 740      | erythrorhynchus .....            | 290           |
| paucidus (Ceratops) .....       | 224      | erythrorhynchus .....            | 290           |
| pauciporus (Ophrosaurus) .....  | 121      | Pelicanus .....                  | 290           |
| pauciporus (Orophosaurus) ..... | 121      | Pelocopsis .....                 | 374           |
| paulus (Hyposodus) .....        | 444, 756 | dubius .....                     | 374           |
| Paurodon .....                  | 371      | Pelidna .....                    | 337           |
| valens .....                    | 371      | alpina .....                     | 337           |
| Paurodontide .....              | 371      | Pelomeduside .....               | 74            |
| Paurodontine .....              | 371      | Pelonax .....                    | 763           |

|                                      | Page          |                                      | Page          |
|--------------------------------------|---------------|--------------------------------------|---------------|
| <i>Pelonax—Continued</i>             |               | <i>pentadactylus</i> (Colletosaurus) | 9             |
| <i>bathrodon</i> .....               | 763           | <i>pentagonus</i> (Dielonius)        | 211           |
| <i>potens</i> .....                  | 763           | <i>pentagonus</i> (Trachodon)        | 211           |
| <i>ramosus</i> .....                 | 763           | <i>penultimus</i> (Archæohippus)     | 682           |
| <i>Pelopitides</i> .....             | 207           | <i>penultimus</i> (Parahippus)       | 682           |
| <i>peloreus</i> (Pneumatoarthrus)    | 216           | <i>Peracerus</i> .....               | 747, 748      |
| <i>Pelorosaurus</i> .....            | 193           | <i>malacorhinus</i> .....            | 747           |
| <i>peltoceras</i> (Menodus)          | 722           | <i>planiceps</i> .....               | 747           |
| <i>Peltosaurus</i> .....             | 254           | <i>supercilius</i> .....             | 748           |
| <i>abbotti</i> .....                 | 254           | <i>troxelli</i> .....                | 748           |
| <i>granulosus</i> .....              | 254           | <i>Peradectes</i> .....              | 393           |
| <i>piger</i> .....                   | 255           | <i>elegans</i> .....                 | 393           |
| <i>pelvidens</i> (Chriacus)          | 461           | <i>peragrans</i> (Testudo)           | 104           |
| <i>Pelycictis</i> .....              | 533           | <i>Peralestidae</i> .....            | 371           |
| <i>lobulatus</i> .....               | 533           | <i>perangulatus</i> (Dielonius)      | 211           |
| <i>Pelycodus</i> .....               | 449, 450, 920 | <i>perangulatus</i> (Hadrosaurus)    | 211           |
| <i>angulatus</i> .....               | 449           | <i>perangulatus</i> (Trachodon)      | 211           |
| <i>frugivorus</i> .....              | 921           | <i>Peratherium</i> .....             | 392, 394      |
| <i>jarrovi</i> .....                 | 921           | <i>alternans</i> .....               | 393           |
| <i>jarrovi</i> .....                 | 921           | <i>comstocki</i> .....               | 393           |
| <i>jarrowi</i> .....                 | 921           | <i>fugax</i> .....                   | 393           |
| <i>mentalis</i> .....                | 444           | <i>huntii</i> .....                  | 393           |
| <i>nuniensis</i> .....               | 923           | <i>innominatum</i> .....             | 393           |
| <i>nunienum</i> .....                | 923           | <i>marginale</i> .....               | 393           |
| <i>nunienus</i> .....                | 923           | <i>marsupium</i> .....               | 393           |
| <i>railestoni</i> .....              | 921           | <i>merriami</i> .....                | 393           |
| <i>trigonodus</i> .....              | 921           | <i>pygmaeum</i> .....                | 393           |
| <i>tutus</i> .....                   | 921           | <i>scalare</i> .....                 | 393           |
| <i>venticolus</i> .....              | 924           | <i>titanelix</i> .....               | 393           |
| <i>Pelycorhamphus</i> .....          | 583           | <i>tricampe</i> .....                | 393           |
| <i>pertortus</i> .....               | 584           | <i>perbullatus</i> (Eporeodon)       | 782           |
| <i>Pelycosauria</i> .....            | 40, 51, 52    | <i>Perchærus</i> .....               | 768           |
| <i>Pelycosimia</i> .....             | 189           | <i>antiquus</i> .....                | 768           |
| <i>Penelopina</i> .....              | 324           | <i>lentus</i> .....                  | 768           |
| <i>penicillatus</i> (Carbo)          | 202           | <i>minor</i> .....                   | 768           |
| <i>penicillatus</i> (Phalacrocorax)  | 202           | <i>nanus</i> .....                   | 768           |
| <i>periculorum</i> (Oreodon)         | 780           | <i>osmonti</i> .....                 | 768           |
| <i>peninsulæ</i> (Blarina)           | 442           | <i>platyops</i> .....                | 768           |
| <i>peninsulatum</i> (Hipparion)      | 694           | <i>priestium</i> .....               | 768           |
| <i>peninsulatum</i> (Hippotherium)   | 694           | <i>probus</i> .....                  | 768           |
| <i>peninsulatum</i> (Neohipparion)   | 694           | <i>robustus</i> .....                | 769           |
| <i>peninsulatus</i> (Castor)         | 883           | <i>rostratus</i> .....               | 769           |
| <i>peninsulatus</i> (Chalicomys)     | 883           | <i>socialis</i> .....                | 769           |
| <i>peninsulatus</i> (Palæocastor)    | 883           | <i>subquans</i> .....                | 769           |
| <i>peninsulatus</i> (Stenocfiber)    | 883           | <i>trichanus</i> .....               | 769           |
| <i>pennanti</i> (Martes)             | 527           | <i>percrassa</i> (Clemmys)           | 94            |
| <i>pennanti</i> (Mustela)            | 527           | <i>percussor</i> (Tennocyon)         | 506           |
| <i>pennata</i> (Amyda)               | 931           | <i>perdicia</i> (Spilogale)          | 554           |
| <i>pennatus</i> (Trionyx)            | 881           | <i>Perdicidae</i> .....              | 327           |
| <i>pennsylvanica</i> (Neotoma)       | 896           | <i>perditus</i> (Equus)              | 689           |
| <i>pennsylvanicus</i> (Canis)        | 602           | <i>perditus</i> (Merychippus)        | 688           |
| <i>pennsylvanicus</i> (Clepsisaurus) | 172           | <i>perditus</i> (Pauronys)           | 894           |
| <i>pennsylvanicus</i> (Clepsosaurus) | 172           | <i>perditus</i> (Protohippus)        | 689, 688, 689 |
| <i>pennsylvanicus</i> (Olephasaurus) | 172           | <i>pergrinus</i> (Falco)             | 322           |
| <i>pennsylvanicus</i> (Dicotyles)    | 774           | <i>pergracilis</i> (Chirostenotes)   | 136           |
| <i>pennsylvanicus</i> (Microtus)     | 898           | <i>peribolotes</i> (Elephas)         | 648           |
| <i>pennsylvanicus</i> (Mus)          | 898           | <i>periculorum</i> (Merycoidodon)    | 780           |
| <i>pennsylvanicus</i> (Mylohyus)     | 774           | <i>periculorum</i> (Oreodon)         | 780           |
| <i>pennsylvanicus</i> (Tayassu)      | 774           | <i>periculosus</i> (Daphnodon)       | 508           |
| <i>pennsylvanicus</i> (Vulpes)       | 608, 606      | <i>Pericyon</i> .....                | 493           |
| <i>Pentaceratops</i> .....           | 230           | <i>socialis</i> .....                | 493           |
| <i>sternbergii</i> .....             | 230           | <i>Peridiomys</i> .....              | 880           |
| <i>Pentacodon</i> .....              | 425           | <i>rusticus</i> .....                | 880           |
| <i>inversus</i> .....                | 425           | <i>Periptychidae</i> .....           | 609           |
| <i>pantacus</i> (Protogonodon)       | 468           | <i>Periptychiformes</i> .....        | 609           |

|                                | Page     |                              | Page     |
|--------------------------------|----------|------------------------------|----------|
| Periptychinae                  | 610      | petersoni (Hyracodon)        | 736      |
| Periptychus                    | 604, 610 | petersoni (Ischyrotomus)     | 903      |
| carnidens                      | 610      | petersoni (Mesatirhinus)     | 716      |
| coarctatus                     | 610      | petersoni (Microdontosaurus) | 127      |
| fissus                         | 610      | petersoni (Moropus)          | 663      |
| rhabdodon                      | 610      | petersoni (Paramys)          | 903      |
| Perissodactyla                 | 663      | petersoni (Protylopus)       | 793      |
| Perissonychidae                | 660      | petersoni (Serridentinus)    | 638      |
| Peristeromorphae               | 344      | petersoni (Ticholeptus)      | 790      |
| Peritresius                    | 80       | petrinus (Chonespondylus)    | 125      |
| ornatus                        | 80       | petrinus (Cymbospondylus)    | 125      |
| perilatus (Tylosaurus)         | 259      | Petrochelidon                | 355      |
| pernix (Aletornis)             | 332      | lunifrons                    | 355      |
| pernix (Eohippus)              | 669      | petrolei (Emys)              | 97       |
| pernix (Kentriodon)            | 588      | petrolei (Trachemys)         | 97       |
| pernix (Pliohippus)            | 698      | petrosus (Agomphus)          | 91       |
| pernix (Protohippus)           | 698, 699 | Phænacodus                   | 604      |
| Perodipus                      | 881      | Phanicopterus                | 298      |
| agilis                         | 881      | Phalacrocorax                | 293      |
| Perognathus                    | 880      | Phalacrocoracidae            | 292      |
| armatus                        | 880      | Phalacrocorax                | 292      |
| californicus                   | 880      | idahensis                    | 292      |
| Peromyscus                     | 893      | idahensis                    | 292      |
| americanus                     | 893      | macropus                     | 292      |
| antiquus                       | 893      | marinavis                    | 292      |
| boylii                         | 893      | mediterraneus                | 292      |
| brachygnathus                  | 893      | penicillatus                 | 292      |
| canadensis                     | 894      | perspicillatus               | 293      |
| gambeli                        | 893      | vagans                       | 338      |
| gambelii                       | 893      | Phalarodon                   | 124      |
| gracilis                       | 894      | fraasi                       | 124      |
| imperfectus                    | 893      | Phalaropodidae               | 338      |
| leucopus                       | 893      | Phalaropus                   | 338      |
| loxodon                        | 893      | lobatus                      | 339      |
| maniculatus                    | 894      | Phascolestes                 | 372      |
| minimus                        | 894      | priscus                      | 373      |
| nematodon                      | 894      | vorax                        | 373      |
| parvus                         | 894      | Phascodon                    | 370      |
| Perostia                       | 66       | gidleyi                      | 370      |
| Perotherium                    | 393      | Phascolotheriidae            | 370      |
| perrini (Delphinosaurus)       | 126      | Phascolotheriinae            | 370      |
| perrini (Shastasaurus)         | 126      | phaseolinus (Diadectes)      | 34       |
| perrini (Thalattosaurus)       | 241      | phasianellus (Pediocetes)    | 325      |
| perrugosa (Brachychampsa)      | 158      | phasianellus (Pediocetes)    | 325      |
| perrugosus (Bottosaurus)       | 158      | phasianellus (Pediocetes)    | 325      |
| persimilis (Geomys)            | 879      | Phasiani                     | 324      |
| persimilis (Pseudemys)         | 97       | Phasianidae                  | 327      |
| persistens (Cenopus)           | 792      | Phasianinae                  | 328      |
| personatus (Sorex)             | 441      | Phasianus                    | 323, 328 |
| perspicillata (Anas)           | 308      | alhillae                     | 328      |
| perspicillata (Melanitta)      | 308      | americanus                   | 328      |
| perspicillata (Oedemia)        | 308      | mioceanus                    | 328      |
| perspicillata (Oidemia)        | 308      | Phaenagyps                   | 312      |
| perspicillatus (Phalacrocorax) | 293      | patritus                     | 312      |
| pertenuis (Testudo)            | 104      | Phenacocelus                 | 789      |
| pertinax (Hypohippus)          | 680      | munroensis                   | 789      |
| pertortus (Pelycorhamphus)     | 584      | typus                        | 789      |
| pervetus (Presbyornis)         | 339      | Phenacodidae                 | 604      |
| pervicax (Glyptops)            | 70       | Phenacodon                   | 604      |
| petaliferus (Glyptodon)        | 420      | Phenacodontidae              | 603      |
| Petauristidae                  | 875      | Phenacodus                   | 604      |
| petersoni (Diceratherium)      | 745      | astutus                      | 605      |
| petersoni (Ectoconodon)        | 391      | brachypternus                | 605      |
| petersoni (Eotrigonias)        | 739      | copei                        | 605      |
| petersoni (Gomphotherium)      | 638      | flagrans                     | 605      |

|                               | Page     |                          | Page     |
|-------------------------------|----------|--------------------------|----------|
| Phenacodus— <i>Continued</i>  |          | Phocodontia              | 568      |
| hemiconus                     | 605      | Phenicopter              | 297      |
| intermedius                   | 605      | Phenicopteridae          | 297      |
| macropternus                  | 753      | Phenicopteriformes       | 297      |
| numenius                      | 605      | Phenicopteroidae         | 297      |
| omnivorus                     | 606      | Phenicopteroides         | 297      |
| primavus                      | 605      | Phenicopteroides         | 297      |
| puercensis                    | 603      | Phenicopterus            | 297      |
| resartus                      | 605      | copei                    | 298      |
| robustus                      | 606      | Phalaecyon               | 514      |
| sulcatus                      | 606      | leucosteus               | 514      |
| trilobatus                    | 606      | Pholidata                | 25       |
| vortmani                      | 606      | Pholidosauridae          | 147      |
| wortmani                      | 606      | Phrynonax                | 269      |
| Phenacolemur                  | 446      | Phrynosoma               | 247      |
| citatus                       | 446      | Phyllostomatidae         | 456      |
| praecox                       | 446      | Phyllostomidae           | 456      |
| Phenacops                     | 433      | Phyllostomoidae          | 456      |
| incerta                       | 433      | phymatodes (Ziphiopsis)  | 533      |
| phengites (Ortalis)           | 324      | physaloides (Balenodon)  | 598      |
| Phenicopterus                 | 298      | physaloides (Hoplocetus) | 598      |
| philadelphia (Chiroicephalus) | 340      | physalus (Balaeoptera)   | 576      |
| philadelphia (Larus)          | 340      | Physeter                 | 598      |
| philadelphia (Sterna)         | 340      | carolinensis             | 598      |
| Philohela                     | 332      | catodon                  | 599      |
| gracilis                      | 332      | macrocephalus            | 599      |
| Philothrax                    | 507      | vetus                    | 597, 599 |
| Philotrox                     | 507      | Physeteridae             | 576, 596 |
| condoni                       | 508      | Physeterina              | 598      |
| coudoni                       | 508      | Physeterinae             | 598      |
| phippesi (Gomphotherium)      | 638      | Physeterini              | 598      |
| phippesi (Trilophodon)        | 638      | Physeteroidea            | 579      |
| Phlaocyron                    | 514      | Physeterula              | 597      |
| leucosteus                    | 514      | neoclassicus             | 597      |
| willistoni                    | 514      | Phytophagi               | 208      |
| Phlaodectes                   | 486      | Phytosauria              | 140      |
| ovatus                        | 486      | Phytosauridae            | 136, 141 |
| phlegon (Equus)               | 694      | Phytosauriformes         | 140      |
| phlegon (Hipparion)           | 694      | Phytosaurinus            | 141      |
| phlegon (Merychippus)         | 694      | Phytosauromorphi         | 137      |
| phlegon (Nannipus)            | 694      | Phytosaurus              | 142, 143 |
| phlegon (Protohippus)         | 694      | biacros                  | 144      |
| Phobosuchus                   | 156      | buceros                  | 144, 145 |
| hatcheri                      | 156      | carolinensis             | 145      |
| Phoca                         | 562, 565 | doughtyi                 | 142      |
| barbata                       | 565      | ganei                    | 144      |
| oristata                      | 565      | leali                    | 142, 145 |
| greenlandica                  | 565      | lepturus                 | 142      |
| grandlandica                  | 565      | manhattanensis           | 145      |
| greenlandica                  | 565      | priscus                  | 145      |
| hispidus                      | 564      | rostratus                | 145      |
| modesta                       | 564      | scolopax                 | 142      |
| proboidea                     | 562      | serridens                | 145      |
| vitulina                      | 564      | supercilius              | 142      |
| wymani                        | 564      | validus                  | 142, 146 |
| Phocadæ                       | 561      | Picariae                 | 352      |
| Phocæna                       | 586, 589 | Pici                     | 352      |
| leucas                        | 584      | Picidae                  | 352      |
| occidua                       | 589      | Piciformes               | 352      |
| Phocidae                      | 561      | Picinae                  | 352      |
| Phocina                       | 561      | Picoidae                 | 352      |
| Phocinae                      | 562      | Pierodius                | 385      |
| Phocini                       | 561      | silberlingi              | 385      |
| phocipes (Pantolestes)        | 426      | picta (Oreortyx)         | 327      |
| Phoeodon                      | 579      | picta (Orortyx)          | 327      |
| holmesii                      | 579      | picta (Ortyx)            | 327      |

|   | Page     |                                      | Page          |
|---|----------|--------------------------------------|---------------|
| piger ( <i>Peltosaurus</i> )            | 255      | planifrons ( <i>Lestosaurus</i> )    | 280           |
| Pilosa                                  | 403      | planifrons ( <i>Metamynodon</i> )    | 738           |
| pilulatus ( <i>Anticheiropus</i> )      | 5        | planifrons ( <i>Platecarpus</i> )    | 280           |
| pilulatus ( <i>Cheirotheroides</i> )    | 8        | planior ( <i>Cimoliasaurus</i> )     | 120           |
| pilulatus ( <i>Plesiornis</i> )         | 19       | planior ( <i>Discosaurus</i> )       | 120           |
| pinkneyi ( <i>Hydrochærus</i> )         | 915      | planirostris ( <i>Choneziphius</i> ) | 583           |
| pinkneyi ( <i>Neochærus</i> )           | 915      | Plantigrada                          | 488           |
| pinensis ( <i>Desmathyus</i> )          | 770      | Plantigrades                         | 488           |
| pineoi ( <i>Megapezia</i> )             | 16       | planus ( <i>Ziphius</i> )            | 583           |
| pinetorum ( <i>Microtus</i> )           | 900      | Plastomenida                         | 106           |
| pinetorum ( <i>Pitymys</i> )            | 900      | Plastomenidæ                         | 106           |
| pinetorum ( <i>Psammomys</i> )          | 900      | Plastomenus                          | 106           |
| Pinguinus                               | 343      | acupictus                            | 106           |
| impennis                                | 343      | catenatus                            | 106           |
| Pinnigrada                              | 556      | coalescens                           | 108           |
| Pinnipeda                               | 556      | communis                             | 106           |
| Pinnipedi                               | 556      | corrugatus                           | 106           |
| Pinnipedia                              | 555      | costatus                             | 106           |
| Pipilo                                  | 358      | fractus                              | 106           |
| Pipistrellus                            | 454      | insignis                             | 106           |
| anemophilus                             | 455      | lachrymalis                          | 106           |
| Piptomerus                              | 121      | leptomitrus                          | 106           |
| hexagonus                               | 121      | molopinus                            | 106           |
| megaloporus                             | 121      | multifoveatus                        | 107           |
| microporus                              | 121      | oedemius                             | 106           |
| Piratosaurus                            | 122      | punctulatus                          | 106           |
| plicatus                                | 122      | robustus                             | 107           |
| piscinaria ( <i>Lutra</i> )             | 538      | serialis                             | 113           |
| piscinaxia ( <i>Lutra</i> )             | 538      | tantillus                            | 107           |
| piscosus ( <i>Cymbospondylus</i> )      | 125      | thomasi                              | 107           |
| Pithanotaria                            | 558      | torrejomensis                        | 107           |
| starri                                  | 558      | trionychoides                        | 113           |
| Pitheciastes                            | 790      | visendus                             | 107           |
| breviceps                               | 790      | Plataleidæ                           | 298           |
| brevifacies                             | 790      | Plataleoidæ                          | 298           |
| decedens                                | 790      | Platanista                           | 596           |
| decidens                                | 790      | Plataniste                           | 596           |
| Pitymys                                 | 900      | Platanistidæ                         | 596           |
| pinetorum                               | 900      | Platanistinæ                         | 596           |
| pix ( <i>Sylvaticus</i> )               | 864      | Platecarpinæ                         | 259           |
| Placentalia                             | 398      | Platecarpus                          | 259, 260, 381 |
| Placerias                               | 63       | abruptus                             | 281           |
| hesternus                               | 63       | brachycephalus                       | 260           |
| placidus ( <i>Merychippus</i> )         | 689      | olidastoides                         | 260           |
| placidus ( <i>Protohippus</i> )         | 689      | coryphæus                            | 260           |
| Placosauridæ                            | 254      | crassartus                           | 260           |
| Placosaurus                             | 248      | curtirostris                         | 260           |
| Plagiaulacidæ                           | 376      | felix                                | 260           |
| Plagiaulacine                           | 376      | glandiferus                          | 260           |
| Plagiaulacoidæ                          | 376      | gracilis                             | 260           |
| Plagiaulacoidea                         | 376, 378 | ictericus                            | 260           |
| Plagiulax                               | 377      | latifrons                            | 260           |
| Plagiomene                              | 451      | latispinus                           | 260           |
| multicuspis                             | 451      | mudgei                               | 260           |
| Plagiomenidæ                            | 451      | oxyrhinus                            | 260           |
| plainvillensis ( <i>Batrachichnus</i> ) | 7        | planifrons                           | 260           |
| plainvillensis ( <i>Batrachites</i> )   | 7        | simus                                | 260           |
| Planetetherium                          | 608      | tectulus                             | 261           |
| mirabile                                | 608      | tortor                               | 263           |
| planiceps ( <i>Allomeryx</i> )          | 813      | tympantiticus                        | 261           |
| planiceps ( <i>Aphelops</i> )           | 747      | Plateosauria                         | 184           |
| planiceps ( <i>Hypertragulus</i> )      | 813      | platicopsis ( <i>Pogonodon</i> )     | 642           |
| planiceps ( <i>Hyracodon</i> )          | 736      | Platigonus                           | 772           |
| planiceps ( <i>Peraceras</i> )          | 747      | leptorhinus                          | 773           |
| planidens ( <i>Meshippus</i> )          | 674      | vetus                                | 773           |
| planifrons ( <i>Entoptychus</i> )       | 877      | Platiniste                           | 690           |

|                                    | Page     |                                    | Page     |
|------------------------------------|----------|------------------------------------|----------|
| platyrus (Elasmosaurus) .....      | 118      | Platyrrhachis—Continued            |          |
| platybrachys (Talpa) .....         | 438      | coloradensis .....                 | 250      |
| Platycaurus .....                  | 260      | coloradoensis .....                | 250      |
| platycentrus (Dimetrodon) .....    | 56       | rhambastes .....                   | 255      |
| platycephala (Osteopora) .....     | 918      | rambastes .....                    | 255      |
| platycephalum (Aceratherium) ..... | 742      | unpedalis .....                    | 255      |
| platycephalus (Amphicænopus) ..... | 742      | platyrhinus (Clurodon) .....       | 495      |
| platycephalus (Cænopus) .....      | 742      | platyrhyncha (Anas) .....          | 305      |
| platycephalus (Merycoidodon) ..... | 781      | platyrhynchos (Anas) .....         | 304      |
| platyceps (Euhapsis) .....         | 885      | platyspondylus (Baptosaurus) ..... | 204      |
| platyceps (Limnænetes) .....       | 755      | platystyle (Hipparion) .....       | 694      |
| platyceras (Brontotherium) .....   | 722      | platyrus (Elasmosaurus) .....      | 118      |
| platyceras (Titanotherium) .....   | 722      | Plautus .....                      | 543      |
| platycerus (Brontotherium) .....   | 722      | impennis .....                     | 543      |
| platycopis (Deinictis) .....       | 542      | Plectiopterna .....                | 19       |
| platycopis (Dinictis) .....        | 542      | angusta .....                      | 19       |
| platycopis (Nimravus) .....        | 542      | elegans .....                      | 19       |
| platycopis (Pogonodon) .....       | 542      | gracilis .....                     | 19       |
| Platygonus .....                   | 771, 772 | lineans .....                      | 19       |
| alemanii .....                     | 772      | minitans .....                     | 19       |
| bicalcaratus .....                 | 772      | Plegadis .....                     | 299      |
| compressus .....                   | 772      | guaruna .....                      | 299      |
| condoni .....                      | 772      | Pleistogyps .....                  | 313      |
| cumberlandensis .....              | 773      | rex .....                          | 313      |
| francisi .....                     | 773      | Plesiadapidæ .....                 | 445      |
| intermedius .....                  | 773      | Plesiadapis .....                  | 446      |
| leptorhinus .....                  | 773      | Plesiaretomys .....                | 802      |
| rex .....                          | 773      | buccatus .....                     | 802      |
| setiger .....                      | 773      | delicator .....                    | 802      |
| striatus .....                     | 773      | sciuroides .....                   | 803      |
| tetragonus .....                   | 773      | Plesioctopsis .....                | 572      |
| texanus .....                      | 773      | megalocephalus .....               | 572      |
| vetus .....                        | 773, 774 | Plesiocetus .....                  | 572      |
| ziegleri .....                     | 773      | megalocephalus .....               | 572      |
| platylomus (Osteopygis) .....      | 76       | Plesiochelys .....                 | 70       |
| platyops (Euclastes) .....         | 77       | helviderensis .....                | 70       |
| platyops (Hyotherium) .....        | 768      | Plesiometaacarpalia .....          | 816, 820 |
| platyops (Lytoloma) .....          | 77       | Plesiomys .....                    | 6, 19    |
| platyops (Perchærus) .....         | 768      | æqualipes .....                    | 6        |
| platyops (Rhetechelys) .....       | 77       | giganteus .....                    | 19       |
| Platyptelis .....                  | 112      | minimus .....                      | 6        |
| amnicola .....                     | 112      | minor .....                        | 4        |
| antiqua .....                      | 112      | mirabilis .....                    | 19       |
| extensa .....                      | 112      | pilulatus .....                    | 19       |
| ferox .....                        | 112      | quadrupes .....                    | 4        |
| heteroglyphæ .....                 | 112      | Plesiosauroi .....                 | 113      |
| leucopotamica .....                | 112      | Plesiosauroi .....                 | 113      |
| miocæna .....                      | 112      | Plesiosauridae .....               | 116      |
| postera .....                      | 112      | Plesiosauriformes .....            | 114      |
| serialis .....                     | 112      | Plesiosaurina .....                | 115      |
| trepida .....                      | 112      | Plesiosaurus .....                 | 115, 121 |
| trionychoides .....                | 113      | brevifemur .....                   | 116      |
| platyplaktra (Baïna) .....         | 72       | gouldii .....                      | 116      |
| Platypterna .....                  | 18       | gulo .....                         | 116      |
| concamerata .....                  | 18       | lockwoodii .....                   | 121      |
| deaniana .....                     | 18       | mexicanus .....                    | 116      |
| deanli .....                       | 18       | mudgei .....                       | 116      |
| delicatula .....                   | 18       | occidus .....                      | 123      |
| digitigrada .....                  | 18       | shirleyensis .....                 | 116      |
| gracillima .....                   | 18       | vaccinulensis .....                | 116      |
| recta .....                        | 19       | Plesiosoricini .....               | 440      |
| tenuis .....                       | 19       | Plesippus .....                    | 699      |
| varica .....                       | 18       | proversus .....                    | 699      |
| platypus (Dipsalidictis) .....     | 474      | simplicidens .....                 | 699      |
| platypus (Eubrontes) .....         | 12       | Plestiodon .....                   | 249      |
| Platyrrhachis .....                | 250      | anthracinus .....                  | 249      |

|                                | Page     |                                    | Page     |
|--------------------------------|----------|------------------------------------|----------|
| Pleuristion .....              | 40       | Pliohippus— <i>Continued</i>       |          |
| brachycolus .....              | 40       | edensis .....                      | 696      |
| Pleurocelidae .....            | 189      | fairbanksi .....                   | 697      |
| Pleurocelus .....              | 193      | fossulatus .....                   | 697      |
| altus .....                    | 193      | francescana .....                  | 697      |
| montanus .....                 | 193      | francescanus .....                 | 697      |
| nanus .....                    | 193      | gracilis .....                     | 677      |
| Pleurocyon .....               | 486      | interpolatus .....                 | 697      |
| magnus .....                   | 486      | leidyanus .....                    | 697      |
| medius .....                   | 486      | lulhanus .....                     | 697      |
| Pleurodeira .....              | 74       | minor .....                        | 697      |
| Pleurodira .....               | 74       | mirabilis .....                    | 697      |
| Pleurodiræ .....               | 74       | nobilis .....                      | 697      |
| Pleurodiri .....               | 74       | osborni .....                      | 698      |
| Pleurolicus .....              | 877      | pernix .....                       | 698      |
| diplophrys .....               | 877      | proversus .....                    | 699      |
| leptophrys .....               | 877      | robustus .....                     | 698      |
| sulcifrons .....               | 877      | simplicidens .....                 | 699      |
| Pleurospondylia .....          | 65       | spectans .....                     | 698      |
| Pleurosternidae .....          | 70, 71   | supremus .....                     | 698      |
| Pleurosterninae .....          | 70       | tantalus .....                     | 698      |
| Pleurosternoidæ .....          | 69       | Pliolophus .....                   | 697, 698 |
| Pleurosternum .....            | 70       | cristonensis .....                 | 698      |
| placus (Ischyromys) .....      | 891      | montanus .....                     | 699      |
| Pliauchenia .....              | 801      | Pliomastodon .....                 | 630      |
| californicus .....             | 803      | matthewi .....                     | 630      |
| gigas .....                    | 803      | Plionarctos .....                  | 518      |
| humphresiana .....             | 802      | edensis .....                      | 518      |
| humphreysiana .....            | 802      | Plonictus .....                    | 527      |
| humphresiana .....             | 802      | glareæ .....                       | 527      |
| major .....                    | 798      | ogygia .....                       | 527      |
| media .....                    | 799      | parviloba .....                    | 527      |
| merriami .....                 | 802      | Pliopedia .....                    | 558      |
| minima .....                   | 802      | pacificæ .....                     | 558      |
| minor .....                    | 799      | Pluviales .....                    | 335      |
| singularis .....               | 802      | pluvianella (Linnicolavis) .....   | 338      |
| spatula .....                  | 802      | pneumaticus (Holops) .....         | 150      |
| vera .....                     | 802      | pneumaticus (Thorcacosaurus) ..... | 150      |
| vulcanorum .....               | 802      | Pneumatoarthrus .....              | 216      |
| plicatile (Hipparion) .....    | 694      | peloreus .....                     | 216      |
| plicatile (Hippotherium) ..... | 694      | Poamys .....                       | 901      |
| plicatus (Neohipparion) .....  | 694      | rivicola .....                     | 901      |
| plicatula (Compsemys) .....    | 70       | Poatrepes .....                    | 790      |
| plicatulus (Compsemys) .....   | 89       | paludicola .....                   | 790      |
| plicatulus (Glyptops) .....    | 70       | Podokosaurus .....                 | 187      |
| plicatum (Mammut) .....        | 630      | Podiceps .....                     | 285, 286 |
| plicatus (Chirox) .....        | 380      | auritus .....                      | 285      |
| plicatus (Mastodon) .....      | 630      | californicus .....                 | 286      |
| plicatus (Oromeryx) .....      | 311      | nigricollis .....                  | 286      |
| plicatus (Priotosaurus) .....  | 122      | occidentalis .....                 | 289      |
| plicatus (Ptilodus) .....      | 380      | podiceps (Podilymbus) .....        | 286      |
| plicatus (Tillomys) .....      | 905      | podiceps (Podilymbus) .....        | 291      |
| plicodon (Helohyus) .....      | 761      | Podicipedes .....                  | 294      |
| Pliocyon .....                 | 607, 508 | Podicipedidae .....                | 295      |
| amnicola .....                 | 511      | Podicipedidiformes .....           | 295      |
| gilleyi .....                  | 508      | Podicipediformes .....             | 294      |
| meandrinus .....               | 508      | Podicipes .....                    | 284, 285 |
| marshi .....                   | 507      | auritus .....                      | 283      |
| meandrinus .....               | 508      | griseigena .....                   | 284      |
| medius .....                   | 508      | nigricollis .....                  | 286      |
| Pligonodon .....               | 158      | Podicipidae .....                  | 295      |
| priscus .....                  | 158      | Podicipinae .....                  | 295      |
| pliogryps (Aquila) .....       | 318      | Podicipitiformes .....             | 294      |
| Pliohippus .....               | 696      | Podicipoides .....                 | 295      |
| coalingensis .....             | 696      | Podilymbus .....                   | 296      |
| cumminsi .....                 | 696      | magnus .....                       | 296      |

|                             | Page |                              | Page     |
|-----------------------------|------|------------------------------|----------|
| <i>Podilymbus—Continued</i> |      | <i>Polycotylus—Continued</i> |          |
| podiceps                    | 286  | latipinnis                   | 116      |
| Podokesaurinae              | 187  | polycypha (Emys)             | 96       |
| Podokesauridae              | 187  | polycypha (Palaeotheria)     | 96       |
| Podokesaurus                | 187  | Polydectes                   | 158      |
| holokensis                  | 187  | biturgidus                   | 158      |
| Podoplia                    | 601  | Polygonax                    | 231      |
| Podylymbus                  | 286  | mortuarius                   | 231      |
| podiceps                    | 286  | Polygonodon                  | 264      |
| Poebrotheriinae             | 792  | rectus                       | 264      |
| Poebrotheriinae             | 792  | vetus                        | 264      |
| Poebrotherium               | 793  | Polymastodon                 | 383      |
| andersoni                   | 794  | attenuatus                   | 383      |
| aximium                     | 794  | fissidens                    | 384      |
| labiatum                    | 794  | filiatus                     | 384      |
| sternbergi                  | 797  | latimollis                   | 384      |
| wilsoni                     | 794  | selenodus                    | 384      |
| Poebrotherium               | 794  | tabensis                     | 384      |
| wilsoni                     | 794  | taoense                      | 384      |
| Poeciloglyptica             | 45   | taoensis                     | 384      |
| Poecilospondylus            | 48   | Polymastodontidae            | 383      |
| francisi                    | 48   | Polymastodontinae            | 383      |
| pogonias (Edaphosaurus)     | 58   | polyodon (Allognathosuchus)  | 155      |
| pogonias (Naosaurus)        | 58   | polyodon (Crocodylus)        | 155      |
| Pogonodon                   | 542  | polyodon (Crocodylus)        | 155      |
| brachyops                   | 542  | polyodon (Diplocynodus)      | 155      |
| cismontanus                 | 542  | Polyonax                     | 227, 231 |
| davisii                     | 542  | mortuarius                   | 231      |
| platicopsis                 | 542  | polyphemus (Gopherus)        | 101      |
| platycopsis                 | 542  | polyphemus (Testudo)         | 101      |
| serrulidens                 | 542  | polyphemus (Xerobates)       | 101      |
| Poecilopleuron              | 174  | polyporum (Balenopectera)    | 575      |
| valens                      | 174  | polyporum (Cetotherium)      | 675      |
| pojoaquense (Gomphotherium) | 638  | Polyprotodonta               | 388      |
| pojoaquense (Serridentinus) | 638  | Polyprotodontia              | 388      |
| pojoaquense (Trilophodon)   | 638  | Polyptychodon                | 116      |
| poledrus (Hoplichnus)       | 14   | mexicanus                    | 116      |
| Polemarchus                 | 19   | Polysticta                   | 308      |
| gigas                       | 19   | stelleri                     | 308      |
| polemarchius                | 19   | Polythorax                   | 73       |
| polemius (Lembonax)         | 80   | missouriensis                | 73       |
| Poliosauria                 | 46   | polyzelus (Anchisaurus)      | 169      |
| Poliosauridae               | 47   | polyzelus (Megadactylus)     | 169      |
| Poliosauriformes            | 46   | polyzelus (Thecodontosaurus) | 169      |
| Poliosaurinae               | 47   | Pomatodelphis                | 591      |
| Poliosaurus                 | 47   | inaequalis                   | 591      |
| uniformis                   | 47   | Pomatotherium                | 586, 586 |
| politus (Viverravus)        | 483  | pachycephalus                | 586      |
| pollux (Catopsalis)         | 384  | ponderosa (Baena)            | 98       |
| Polponax                    | 331  | ponderosa (Catapleura)       | 76       |
| mortuarius                  | 331  | ponderosa (Pachyma)          | 468      |
| Polybori                    | 331  | ponderosus (Osteopygia)      | 76       |
| Polyboridae                 | 331  | Pongidae                     | 930      |
| Polyborinae                 | 331  | Pongidae                     | 930      |
| Polyborus                   | 331  | Pontobasilus                 | 571      |
| auduboni                    | 331  | tuberculatus                 | 571      |
| cheriway                    | 331  | Pontoleon                    | 568      |
| tharus                      | 331  | magnus                       | 568      |
| Polycodus                   | 331  | Pontolis                     | 568      |
| ralstoni                    | 331  | magnus                       | 568      |
| Polycotylidae               | 116  | Pontoporia                   | 587, 588 |
| Polycotylinae               | 116  | popoagium (Lamdothierium)    | 711      |
| Polycotylus                 | 116  | Poposaurus                   | 172      |
| dolichopus                  | 116  | gracilis                     | 172      |
| ischadicus                  | 116  | porcatus (Agabelus)          | 589      |



|                                    | Page |                                   | Page          |
|------------------------------------|------|-----------------------------------|---------------|
| porcinus (Ictops) .....            | 430  | Predentata .....                  | 201           |
| porcinus (Nanohyus) .....          | 430  | prehensilis (Procamelus) .....    | 799           |
| porrectus (Naoccephalus) .....     | 256  | prenasalis (Camanoidea) .....     | 158           |
| portentus (Mesolhippus) .....      | 674  | prenasalis (Crocodilus) .....     | 168           |
| Porthochelys .....                 | 87   | prenasalis (Crocodylus) .....     | 168           |
| browni .....                       | 87   | Preodontia .....                  | 247           |
| laticeps .....                     | 87   | prentici (Gallinuloides) .....    | 333           |
| Porthocyon .....                   | 509  | prentici (Grus) .....             | 332           |
| dubius .....                       | 509  | preoccidentalis (Trigonias) ..... | 740           |
| matthewi .....                     | 509  | Preptoceras .....                 | 843           |
| pugnator .....                     | 509  | mayfieldi .....                   | 844           |
| postera (Platypeltis) .....        | 112  | sinclairi .....                   | 844           |
| posticus (Heptodon) .....          | 724  | Preshbyornis .....                | 339           |
| Postpubici .....                   | 202  | pervetus .....                    | 339           |
| Potamotherium .....                | 536  | Preshbyornithide .....            | 339           |
| lacota .....                       | 536  | pressicornis (Bobasileus) .....   | 620           |
| lycopotamicum .....                | 536  | pressicornis (Loxolophodon) ..... | 620           |
| pachycephalum .....                | 536  | Pressirostres .....               | 535           |
| robustum .....                     | 536  | pretenus (Didymictis) .....       | 483           |
| potens (Ammodon) .....             | 705  | Priceodon .....                   | 370           |
| potens (Creosaurus) .....          | 178  | ferox .....                       | 370           |
| potens (Ctenacodon) .....          | 378  | grandævus .....                   | 370           |
| potens (Dryptosaurus) .....        | 178  | hulli .....                       | 370           |
| potens (Limnocyon) .....           | 474  | robustus .....                    | 370           |
| potens (Pelonax) .....             | 705  | Priceonodon .....                 | 236           |
| potens (Protostega) .....          | 78   | crassus .....                     | 236           |
| potens (Psalodon) .....            | 378  | primævum (Lambdotherium) .....    | 711           |
| powellianus (Hypsodus) .....       | 444  | primævus (Boreodon) .....         | 380           |
| prædens (Gopherus) .....           | 101  | primævus (Homogalax) .....        | 726           |
| præclarus (Basilemys) .....        | 88   | primævus (Hoplophonus) .....      | 545           |
| præcoidens (Mesohippus) .....      | 674  | primævus (Leptaretus) .....       | 535           |
| præcox (Phenacolemur) .....        | 446  | primævus (Machairodus) .....      | 545           |
| præcurrens (Parahippus) .....      | 681  | primævus (Megacephalon) .....     | 538           |
| præcursor (Dibelodon) .....        | 688  | primævus (Miolabis) .....         | 797           |
| præcursor (Gomphotherium) .....    | 638  | primævus (Oligosinus) .....       | 121           |
| præcursor (Mammut) .....           | 638  | primævus (Palæosauropus) .....    | 17            |
| præcursor (Mastodon) .....         | 637  | primævus (Paramys) .....          | 802           |
| præcursor (Serridentinus) .....    | 638  | primævus (Paratylopus) .....      | 797           |
| præcursor (Tetrabelodon) .....     | 638  | primævus (Parietis) .....         | 526           |
| præcursor (Trilophodon) .....      | 637  | primævus (Phenacodus) .....       | 605           |
| prædator (Euoploeyon) .....        | 507  | primævus (Ptilodus) .....         | 380           |
| Prædentata .....                   | 202  | primævus (Sauropus) .....         | 17, 18        |
| præxtans (Testudo) .....           | 104  | primævus (Systemodon) .....       | 728           |
| præunatus (Dissacus) .....         | 467  | primævus (Titanoides) .....       | 613           |
| Præovibos .....                    | 340  | Primates .....                    | 915           |
| moschatus .....                    | 340  | primovus (Palæosauropus) .....    | 17            |
| Præpubici .....                    | 167  | primigenius (Bos) .....           | 852           |
| præstans (Anchitherium) .....      | 678  | primigenius (Elephas) .....       | 643           |
| præstans (Kalobatippus) .....      | 678  | primigenius (Lepus) .....         | 813           |
| præstans (Mesohippus) .....        | 678  | primigenius (Mammontes) .....     | 644           |
| præstans (Miohippus) .....         | 678  | primitivus (Megacerops) .....     | 721           |
| præstans (Telacodon) .....         | 396  | primogenius (Elephas) .....       | 643, 645, 648 |
| Præotherium .....                  | 359  | primordialis (Elephas) .....      | 650           |
| palatinum .....                    | 359  | primus (Blastomeryx) .....        | 819           |
| pratensis (Mantoceras) .....       | 715  | primus (Didymictis) .....         | 483           |
| pratensis (Megalornis) .....       | 388  | primus (Leptaretus) .....         | 533           |
| pratincola (Aluco) .....           | 348  | primus (Merychippus) .....        | 685           |
| pratincola (Strix) .....           | 348  | primus (Miohippus) .....          | 677           |
| pratincola (Tito) .....            | 349  | primus (Parahippus) .....         | 682           |
| pratincola (Tyto) .....            | 348  | princeps (Eotitanops) .....       | 712           |
| pravus (Adocus) .....              | 90   | princeps (Equus) .....            | 719           |
| precampestre (Gomphotherium) ..... | 688  | princeps (Glyptosaurus) .....     | 254           |
| precampestre (Tetralophodon) ..... | 688  | princeps (Hipparion) .....        | 719           |
| precedens (Coniophis) .....        | 271  | princeps (Hippotherium) .....     | 719           |
| precopei (Trigonias) .....         | 740  | princeps (Hyrachyus) .....        | 734           |

|                                   | Page     |                                 | Page     |
|-----------------------------------|----------|---------------------------------|----------|
| princeps (Lagomys) .....          | 880      | pristinus (Chameleo) .....      | 248      |
| princeps (Lepus) .....            | 880      | pristinus (Larus) .....         | 341      |
| princeps (Mosasaurus) .....       | 262      | pristinus (Mylagaulus) .....    | 908      |
| princeps (Neohipparion) .....     | 708      | pristinus (Palaeochcerus) ..... | 788      |
| princeps (Ochotona) .....         | 860      | pristinus (Parahippus) .....    | 682      |
| princeps (Ochotora) .....         | 860      | pristinus (Perchœrus) .....     | 768      |
| princeps (Uintatherium) .....     | 619      | pristinus (Pseudopalatus) ..... | 143      |
| princetonianus (Protolabis) ..... | 801      | pristinus (Thinohyus) .....     | 768      |
| Ptionosaurus .....                | 257      | pristinus (Tinosaurus) .....    | 248      |
| regularis .....                   | 257      | prjedalsku (Equus) .....        | 703      |
| pringer (Macrasaurus) .....       | 569      | Proamphicyon .....              | 504      |
| prisca (Amyda) .....              | 111      | nebrascensis .....              | 505      |
| prisca (Balana) .....             | 672      | proavitus (Nautilornis) .....   | 344      |
| prisca (Laopteryx) .....          | 277      | proavitus (Subhyracodon) .....  | 743      |
| priscidens (Hyracodon) .....      | 736      | proavus (Gomphotherium) .....   | 638      |
| prisciformis (Helagras) .....     | 271      | proavus (Grus) .....            | 332      |
| Priscodelphinus .....             | 580, 592 | proavus (Leptotragulus) .....   | 812      |
| conradi .....                     | 580      | proavus (Mammut) .....          | 638      |
| crassangulum .....                | 591      | proavus (Mastodon) .....        | 638      |
| crassirostris .....               | 591      | proavus (Miomastodon) .....     | 638      |
| gabbii .....                      | 589      | proavus (Rhynchotherium) .....  | 638      |
| grandævus .....                   | 592      | proavus (Trilophodon) .....     | 638      |
| harlani .....                     | 592      | proavus (Tetrabelodon) .....    | 638      |
| harlini .....                     | 592      | Probaena .....                  | 71       |
| lacertosus .....                  | 592      | sculpta .....                   | 71       |
| ruschenbergeri .....              | 594      | Probassariscus .....            | 516      |
| spinosus .....                    | 590      | antiquus .....                  | 516      |
| stenus .....                      | 592      | Probocidæ .....                 | 622      |
| uræus .....                       | 592      | Proboscidea .....               | 620      |
| priscolatrans (Canis) .....       | 500      | proboscidea (Cystophora) .....  | 622      |
| priscum (Lambdotherium) .....     | 711      | proboscidea (Phoca) .....       | 622      |
| priscum (Meniscotherium) .....    | 607      | Proboscidea .....               | 621      |
| priscum (Nyetitherium) .....      | 434      | Proboscidea .....               | 621      |
| priscus (Alticamelus) .....       | 800      | probus (Percherus) .....        | 768      |
| priscus (Ambloctonus) .....       | 473      | Procamelas .....                | 797, 800 |
| priscus (Belodon) .....           | 145      | Procamelus .....                | 797, 800 |
| priscus (Bison) .....             | 849      | altus .....                     | 800      |
| priscus (Dryolestes) .....        | 373      | angustidens .....               | 801      |
| priscus (Ereptodon) .....         | 411      | benedentatus .....              | 797      |
| priscus (Haplocanthosaurus) ..... | 192      | castilli .....                  | 737      |
| priscus (Haplocanthus) .....      | 192      | coconinensis .....              | 798      |
| priscus (Homacodon) .....         | 754      | concerptus .....                | 798      |
| priscus (Hyrachyus) .....         | 734      | edensis .....                   | 798      |
| priscus (Laopteryx) .....         | 277      | elrodi .....                    | 798      |
| priscus (Limnophops) .....        | 713      | fissidens .....                 | 801      |
| priscus (Loxolophus) .....        | 460      | gracilis .....                  | 798      |
| priscus (Megalonyx) .....         | 811      | granilis .....                  | 798      |
| priscus (Phascolistes) .....      | 373      | heterodontus .....              | 801      |
| priscus (Phytosaurus) .....       | 145      | inæquidens .....                | 798      |
| priscus (Pliogonodon) .....       | 158      | lacustris .....                 | 798      |
| priscus (Procyon) .....           | 515      | leptognathus .....              | 798      |
| priscus (Protochriacus) .....     | 400      | longurio .....                  | 798      |
| priscus (Siphonocetus) .....      | 572      | madisonius .....                | 798      |
| priscus (Telmatornis) .....       | 334      | major .....                     | 798, 803 |
| priscus (Trionyx) .....           | 111      | medius .....                    | 799      |
| prismaticus (Protochœrus) .....   | 772      | minus .....                     | 798      |
| pristina (Brachyprotoma) .....    | 582      | minor .....                     | 798      |
| pristina (Fontinalis) .....       | 359      | montanus .....                  | 801      |
| pristina (Lutra) .....            | 688      | occidentalis .....              | 799      |
| pristinum (Arototherium) .....    | 428      | prehensilis .....               | 799      |
| pristinus (Arotodus) .....        | 523      | raki .....                      | 798      |
| pristinus (Bothrolabis) .....     | 768      | robustus .....                  | 799      |
| pristinus (Brachypsalis) .....    | 588      | virginienis .....               | 805      |
| pristinus (Chameleo) .....        | 248      | procax (Toxobelys) .....        | 87       |
| pristinus (Chamaeleon) .....      | 248      | Procellaria .....               | 288      |

|                                  | Page |                                  | Page |
|----------------------------------|------|----------------------------------|------|
| Procellariidae .....             | 287  | progenium (Mammut) .....         | 630  |
| Procellariidae .....             | 288  | Proglires .....                  | 445  |
| Procellariiformes .....          | 287  | progressum (Lambdotherium) ..... | 711  |
| Procellariinae .....             | 288  | progressus (Anancus) .....       | 632  |
| Procellarioidae .....            | 287  | progressus (Elephas) .....       | 644  |
| Procellaridea .....              | 287  | progressus (Mastodon) .....      | 632  |
| Proceratinae .....               | 213  | progressus (Orohippus) .....     | 671  |
| Proceratops .....                | 223  | Prohyracodon .....               | 735  |
| montanus .....                   | 224  | uintensis .....                  | 735  |
| procerus (Alticamelus) .....     | 800  | Proictinia .....                 | 314  |
| procerus (Ursus) .....           | 519  | effera .....                     | 314  |
| Procheneosaurus .....            | 217  | gilmorei .....                   | 314  |
| Prochonas .....                  | 75   | Prolimnocyon .....               | 473  |
| sulcatus .....                   | 75   | antiquus .....                   | 473  |
| Procion .....                    | 514  | atavus .....                     | 473  |
| Procolophon .....                | 36   | robustus .....                   | 473  |
| Procolophonidae .....            | 36   | Promerycocherus .....            | 783  |
| Proculpochelys .....             | 80   | carrikeri .....                  | 784  |
| grandæva .....                   | 80   | chelydra .....                   | 784  |
| Procreodi .....                  | 459  | curvidens .....                  | 784  |
| procrispidatus (Colodon) .....   | 726  | grandis .....                    | 784  |
| Procyonidae .....                | 513  | gregoryi .....                   | 784  |
| Procyonictis .....               | 490  | hatcheri .....                   | 784  |
| vulpiceps .....                  | 490  | hollandi .....                   | 784  |
| Procyon .....                    | 514  | inflatus .....                   | 784  |
| elucus .....                     | 515  | latidens .....                   | 784  |
| litor .....                      | 515  | leidyi .....                     | 784  |
| priscus .....                    | 515  | lulli .....                      | 784  |
| psora .....                      | 515  | macrostegus .....                | 784  |
| sinus .....                      | 515  | marshi .....                     | 784  |
| sinus .....                      | 515  | microcephalus .....              | 784  |
| Procyonidae .....                | 513  | minor .....                      | 784  |
| Procyonina .....                 | 513  | montanus .....                   | 784  |
| Procyonina .....                 | 513  | obliquidens .....                | 785  |
| procyoninum (Heliotherium) ..... | 671  | pygmaeus .....                   | 785  |
| procyoninum (Heliotherium) ..... | 671  | pygmyus .....                    | 785  |
| procyoninus (Orohippus) .....    | 671  | superbus .....                   | 785  |
| Procyonictis .....               | 490  | temporalis .....                 | 785  |
| vulpiceps .....                  | 490  | thomsoni .....                   | 785  |
| Prodaphenus .....                | 484  | vantasselensis .....             | 785  |
| canavus .....                    | 488  | prodierodon (Prodaphenus) .....  | 485  |
| promierodon .....                | 485  | prodierodon (Uintacyon) .....    | 485  |
| robustus .....                   | 485  | prodierodon (Vansacyon) .....    | 485  |
| scotti .....                     | 484  | Promioelanus .....               | 808  |
| uintensis .....                  | 485  | acolytus .....                   | 808  |
| prodromus (Palaeogyps) .....     | 312  | lemuroides .....                 | 808  |
| productum (Gomphotherium) .....  | 638  | promptus (Symbos) .....          | 847  |
| productum (Mammut) .....         | 638  | Promystriacanthus .....          | 144  |
| productus (Bunolophodon) .....   | 638  | ohleri .....                     | 144  |
| productus (Mastodon) .....       | 638  | Pronomotherium .....             | 786  |
| productus (Serridentinus) .....  | 638  | altiramus .....                  | 786  |
| productus (Tetralodon) .....     | 638  | altiramus .....                  | 786  |
| productus (Trilophodon) .....    | 638  | californicum .....               | 785  |
| Proebrotherium .....             | 794  | laticeps .....                   | 786  |
| profectum (Aceratherium) .....   | 748  | madisonium .....                 | 786  |
| profectus (Aphelops) .....       | 747  | siouense .....                   | 786  |
| profectus (Leptotragulus) .....  | 812  | Pronothodectes .....             | 445  |
| profectus (Merychys) .....       | 788  | matthewi .....                   | 445  |
| profectus (Meteoroedon) .....    | 788  | Pronothotherium .....            | 406  |
| profectus (Meteoroedon) .....    | 788  | Propalaeosinopa .....            | 425  |
| profectus (Parameryx) .....      | 812  | albertensis .....                | 425  |
| profectus (Protohippus) .....    | 689  | didelphoides .....               | 425  |
| profectus (Vulpavus) .....       | 487  | proparvulus (Merychippus) .....  | 686  |
| profundus (Champsosaurus) .....  | 133  | prophylaeus (Lembonax) .....     | 80   |
| Proganosauria .....              | 240  | propinqua (Branta) .....         | 302  |

|                                 | Page     |                                  | Page     |
|---------------------------------|----------|----------------------------------|----------|
| propinquus (Mercyhippus) .....  | 684      | Protapirus— <i>Continued</i>     |          |
| propinquus (Mesochippus) .....  | 674      | validus .....                    | 729      |
| Propleura .....                 | 76       | Protelotherium .....             | 761      |
| borealis .....                  | 76       | uintense .....                   | 762      |
| crosa .....                     | 76       | Protemnocyon .....               | 504      |
| repandus .....                  | 76       | inflatus .....                   | 505      |
| sopita .....                    | 76       | Protentomodon .....              | 435      |
| Propleuridæ .....               | 75       | ursivalis .....                  | 435      |
| Propleurinae .....              | 75       | protenus (Didymictis) .....      | 482      |
| proprius (Merycochoerus) .....  | 786      | protenus (Viverravus) .....      | 482      |
| propylæus (Lembonax) .....      | 80       | Proteosauridæ .....              | 128      |
| propython (Clidastes) .....     | 263      | Proteosaurus .....               | 128, 129 |
| proriger (Leidon) .....         | 259      | Proterix .....                   | 434      |
| proriger (Liodon) .....         | 259      | loomisi .....                    | 434      |
| proriger (Nectoportheus) .....  | 259      | Proterosauri .....               | 136, 240 |
| proriger (Tylosaurus) .....     | 259      | Proterosauria .....              | 136, 240 |
| prorops (Belemnoziphius) .....  | 583      | proterus (Rhinoceros) .....      | 750      |
| prorops (Dioplodon) .....       | 585      | proterus (Teleoceras) .....      | 750      |
| prorops (Mesoplodon) .....      | 583, 585 | proterva (Cynorca) .....         | 770, 775 |
| Prorosmarus .....               | 559      | protervus (Squalodon) .....      | 770      |
| alleni .....                    | 559      | proteulophus (Mesochippus) ..... | 674      |
| Proroziphius .....              | 583, 585 | Protheria .....                  | 307      |
| chonops .....                   | 583, 585 | Prothippus .....                 | 688      |
| macrops .....                   | 583, 585 | Prothyraodon .....               | 734      |
| prorsus (Triceratops) .....     | 229      | intermedium .....                | 735      |
| Prosaurolophus .....            | 216      | obliquidens .....                | 735      |
| maximus .....                   | 217      | uintense .....                   | 735      |
| Proscalops .....                | 436      | Prothyraodontidæ .....           | 734      |
| miocænus .....                  | 436      | Protitanotherium .....           | 715      |
| secundus .....                  | 436      | emarginatum .....                | 715      |
| Prosciurus .....                | 904      | superbum .....                   | 715      |
| balloviæus .....                | 904      | Protoceas .....                  | 813      |
| jeffersoni .....                | 904      | celer .....                      | 814      |
| relictus .....                  | 904      | comptus .....                    | 814      |
| robustus .....                  | 904      | nastus .....                     | 814      |
| vestustus .....                 | 904      | nasutus .....                    | 814      |
| wortmani .....                  | 904      | Protoceratidæ .....              | 813      |
| Prosimia .....                  | 918      | Protoceratinae .....             | 813      |
| Prosimiæ .....                  | 918      | Protoceratini .....              | 813      |
| Prosimii .....                  | 918      | Protochoerus .....               | 772      |
| Prosinopa .....                 | 924      | prismaticus .....                | 772      |
| eximia .....                    | 924      | Protochriacus .....              | 460      |
| Prostenops .....                | 771      | attenuatus .....                 | 460      |
| Prosthennops .....              | 770, 931 | hyattianus .....                 | 460      |
| crassigenis .....               | 771      | simplex .....                    | 460      |
| crassigenis .....               | 771      | Protodonta .....                 | 307      |
| edensis .....                   | 771      | Protodonti .....                 | 307      |
| haroldcookii .....              | 771      | Protodontia .....                | 307      |
| longirostris .....              | 771      | Protogaulus .....                | 906      |
| serus .....                     | 771      | hippodus .....                   | 906      |
| xiphodonticus .....             | 771      | Protogonia .....                 | 803      |
| Prosthennops .....              | 771      | puercensis .....                 | 803      |
| crassigenis .....               | 771      | subquadratus .....               | 803      |
| serus .....                     | 771      | protogonioides (Ctenodon) .....  | 462      |
| Protasgras .....                | 271      | Protogonodon .....               | 462      |
| lacustris .....                 | 271      | pentacus .....                   | 463      |
| Protagrionochærus .....         | 776      | puercensis .....                 | 803      |
| annectens .....                 | 776      | stenognathus .....               | 463      |
| Protapirinae .....              | 728      | subquadratus .....               | 803      |
| protapirinus (Homogalax) .....  | 728      | Protohippinae .....              | 686, 680 |
| protapirinus (Systemodon) ..... | 728      | Protohippus .....                | 687, 686 |
| Protapirus .....                | 728      | avus .....                       | 681      |
| obliquidens .....               | 729      | castelli .....                   | 688      |
| robustus .....                  | 729      | castillei .....                  | 688      |
| simplex .....                   | 729      | castilli .....                   | 688      |
|                                 |          | castilloi .....                  | 688      |

|                              | Page          |                         | Page     |
|------------------------------|---------------|-------------------------|----------|
| Prothippus— <i>Continued</i> |               | Protoreodon             | 778      |
| coalingensis                 | 696           | medius                  | 778      |
| cuminsii                     | 696           | minor                   | 778      |
| fossulatus                   | 697           | paradoxicus             | 778      |
| gracilis                     | 677           | parvus                  | 778      |
| insignis                     | 685           | pumilus                 | 778      |
| interpolatus                 | 697           | Protoreodontidae        | 778      |
| lenticularis                 | 693           | Protoreodontinae        | 778      |
| medius                       | 684           | Protorohippus           | 667, 670 |
| minutus                      | 694           | venticolus              | 669, 670 |
| mirabilis                    | 697           | Protorosauri            | 240      |
| niobrarensis                 | 688           | Protorosauria           | 240      |
| pachyops                     | 688           | Protosauridae           | 240      |
| parvulus                     | 688           | Protosaurus             | 223      |
| perditus                     | 686, 688, 689 | belli                   | 223      |
| pernix                       | 698, 699      | Protoscelene            | 608      |
| phlegon                      | 694           | opisthaca               | 608      |
| placidus                     | 689           | opisthacus              | 608      |
| profectus                    | 689           | Protosorex              | 440      |
| proplacidus                  | 689           | crassus                 | 440      |
| retrusus                     | 689           | Protosphargidae         | 78       |
| robustus                     | 698           | Protostega              | 78       |
| secundus                     | 689           | advena                  | 78       |
| sejunctus                    | 685, 686      | copei                   | 78       |
| simus                        | 689           | gigas                   | 78       |
| sinus                        | 689           | marshii                 | 79       |
| spectans                     | 698           | neptuna                 | 78       |
| supremus                     | 698           | potens                  | 78       |
| tehonensis                   | 689           | tuberosa                | 78       |
| Protolabidae                 | 791           | Protostegidae           | 78       |
| Protolabinae                 | 791           | Protosteginae           | 78       |
| Protolabis                   | 790, 800      | Protheria               | 367      |
| angustidens                  | 801           | Protheria               | 367      |
| fissidens                    | 801           | Prototomus              | 460, 476 |
| francisii                    | 801           | hians                   | 476      |
| heterodontus                 | 801           | multicuspis             | 477      |
| inaequidens                  | 798           | secundarius             | 477      |
| longiceps                    | 801           | strenuus                | 477      |
| montanus                     | 801           | viverinus               | 477      |
| occidentalis                 | 799           | Protungulata            | 601      |
| princetonianus               | 801           | Protylopus              | 793      |
| pusillus                     | 801           | annectens               | 793      |
| saxeus                       | 801           | petersoni               | 793      |
| serus                        | 801           | prouti (Menodus)        | 719      |
| transmontanus                | 798           | prouti (Titanotherium)  | 719      |
| Protolabos                   | 801           | proutii (Menodus)       | 719      |
| Protolambda                  | 811           | proutii (Palaeotherium) | 719      |
| bathmodon                    | 618           | proutii (Titanotherium) | 719      |
| hatcheri                     | 611           | proversus (Equus)       | 699      |
| Protolambdae                 | 611           | proversus (Plesippus)   | 699      |
| Protomeryx                   | 794           | proversus (Pliohippus)  | 699      |
| cameloides                   | 797           | Proviverra              | 478      |
| campester                    | 795           | americana               | 478      |
| cedrensis                    | 795           | Proviverridae           | 475      |
| halli                        | 795           | Proviverrinae           | 475      |
| leonardi                     | 795           | Proviverrini            | 475      |
| serus                        | 801           | proximus (Mylagaulus)   | 908      |
| sternbergii                  | 797           | proximus (Odocoetes)    | 486      |
| Protomyidae                  | 890           | proximus (Ovibos)       | 846      |
| Protopsalis                  | 471           | Psalisauria             | 831      |
| tigrina                      | 478           | Psalisauridae           | 837      |
| Protoptychidae               | 878           | Psalodon                | 878      |
| Protoptychinae               | 910           | fortis                  | 878      |
| Protoptychus                 | 910           | potens                  | 878      |
| hatcheri                     | 911           | Psammomys               | 900      |

| Page  | Page  |
|---|---|
| <i>Psammomys—Continued</i>                            | <i>Pterodactyli</i> ..... 159, 160                      |
| pinetorum ..... 900                                   | <i>Pterodactylia</i> ..... 159, 160                     |
| <i>Psarocolius</i> ..... 358                          | <i>Pterodactylidæ</i> ..... 161                         |
| gubernator ..... 358                                  | <i>Pterodactyloidea</i> ..... 159, 160                  |
| <i>Psephophoridae</i> ..... 68                        | <i>Pterodactylus</i> ..... 161                          |
| <i>Psephophorus</i> ..... 69                          | occidentalis ..... 163                                  |
| calvertensis ..... 69                                 | <i>Pterodon</i> ..... 480, 481                          |
| <i>Pseudelurus</i> ..... 549                          | grandis ..... 481                                       |
| intrepidus ..... 549                                  | minutus ..... 481                                       |
| marshi ..... 550                                      | <i>Pteromyiæ</i> ..... 875, 905                         |
| sinclairi ..... 550                                   | <i>Pteromys</i> ..... 875                               |
| <i>pseudarcetos</i> ( <i>Thryptacodon</i> ) ..... 462 | <i>Pteropappi</i> ..... 281                             |
| <i>Pseudemys</i> ..... 97                             | <i>Pteropelyx</i> ..... 211, 216                        |
| calata ..... 97                                       | altidens ..... 211                                      |
| extincta ..... 97                                     | grallipes ..... 216                                     |
| floridana ..... 97                                    | marginatus ..... 214                                    |
| persimilis ..... 97                                   | selwyni ..... 212                                       |
| <i>Pseudobradypus</i> ..... 20                        | <i>Pteropodii</i> ..... 453                             |
| unguifer ..... 20                                     | <i>Pteroptochide</i> ..... 354                          |
| <i>Pseudocoreodi</i> ..... 470                        | <i>Pterosauri</i> ..... 159                             |
| <i>Pseudocynodontis</i> ..... 490                     | <i>Pterosauria</i> ..... 159, 160                       |
| gregarius ..... 490                                   | <i>Pterosaurii</i> ..... 159                            |
| lippincottianus ..... 491                             | <i>Pterosphenus</i> ..... 267                           |
| <i>Pseudogryphus</i> ..... 311, 312                   | schucherti ..... 267                                    |
| californianus ..... 312                               | <i>Patodontidae</i> ..... 378                           |
| <i>Pseudohipparion</i> ..... 688                      | <i>Patilodus</i> ..... 379                              |
| retrusum ..... 688                                    | admirabilis ..... 380                                   |
| <i>Pseudolabis</i> ..... 795                          | formosus ..... 380                                      |
| dakotensis ..... 795                                  | gracilis ..... 380, 381                                 |
| matthewi ..... 795                                    | mediævus ..... 380                                      |
| <i>Pseudolobis</i> ..... 795                          | mediævus ..... 380                                      |
| dakotensis ..... 795                                  | montanus ..... 380                                      |
| <i>Pseudopalatus</i> ..... 143                        | plicatus ..... 380                                      |
| pristinus ..... 143                                   | primævus ..... 380                                      |
| <i>Pseudopteronodon</i> ..... 481                     | serratus ..... 380                                      |
| minutus ..... 481                                     | trouessartianus ..... 380                               |
| <i>Pseudostoma</i> ..... 879                          | trouessartianus ..... 380                               |
| bursaria ..... 879                                    | <i>puccillus</i> ( <i>Hemiacodon</i> ) ..... 926        |
| floridana ..... 879                                   | <i>puccillus</i> ( <i>Homacodon</i> ) ..... 754         |
| <i>Pseudosuchia</i> ..... 138                         | <i>puccillus</i> ( <i>Omomys</i> ) ..... 926            |
| <i>Pseudotomus</i> ..... 903                          | <i>puercensis</i> ( <i>Aspideretes</i> ) ..... 109      |
| hians ..... 903                                       | <i>puercensis</i> ( <i>Champsosaurus</i> ) ..... 133    |
| robustus ..... 903                                    | <i>puercensis</i> ( <i>Compsemys</i> ) ..... 89         |
| superbus ..... 903                                    | <i>puercensis</i> ( <i>Diacodon</i> ) ..... 431         |
| <i>Psittaci</i> ..... 346                             | <i>puercensis</i> ( <i>Euprotogonia</i> ) ..... 603     |
| <i>Psittacidae</i> ..... 346                          | <i>puercensis</i> ( <i>Palæolestes</i> ) ..... 428, 431 |
| <i>Psittaciformes</i> ..... 346                       | <i>puercensis</i> ( <i>Palæoryotes</i> ) ..... 428      |
| <i>Psittacinae</i> ..... 346                          | <i>puercensis</i> ( <i>Phenacodus</i> ) ..... 603       |
| <i>Psittacomorphæ</i> ..... 346                       | <i>puercensis</i> ( <i>Protogonia</i> ) ..... 603       |
| <i>Psittacotherium</i> ..... 399                      | <i>puercensis</i> ( <i>Protogonodon</i> ) ..... 603     |
| multifragum ..... 399                                 | <i>puercensis</i> ( <i>Sooliomus</i> ) ..... 489        |
| <i>psoras</i> ( <i>Procyon</i> ) ..... 515            | <i>puercensis</i> ( <i>Tetraclenodon</i> ) ..... 603    |
| <i>Pteranodon</i> ..... 162                           | <i>Pueroosaurus</i> ..... 43                            |
| comptus ..... 162                                     | obtusidens ..... 43                                     |
| ingens ..... 163                                      | <i>Puffinæ</i> ..... 288                                |
| longiceps ..... 163                                   | <i>Puffinidæ</i> ..... 288                              |
| nanus ..... 164                                       | <i>Puffinæ</i> ..... 288                                |
| occidentalis ..... 163                                | <i>Puffinus</i> ..... 288                               |
| oregonensis ..... 163                                 | conradi ..... 288                                       |
| velox ..... 163                                       | diatomicus ..... 288                                    |
| <i>Pteranodontes</i> ..... 161                        | opisthomelas ..... 288                                  |
| <i>Pteranodontia</i> ..... 161                        | <i>pugnator</i> ( <i>Ælurodon</i> ) ..... 509           |
| <i>Pteranodontidae</i> ..... 161                      | <i>pugnator</i> ( <i>Hymnognathus</i> ) ..... 509       |
| <i>Pteranodontinæ</i> ..... 162                       | <i>pugnator</i> ( <i>Porthocyon</i> ) ..... 509         |
| <i>Pterobalana</i> ..... 375                          | <i>pugnax</i> ( <i>Notharctus</i> ) ..... 923           |

|                                 | Page     |                                    | Page     |
|---------------------------------|----------|------------------------------------|----------|
| pugnax (Oödetes) .....          | 486      | pygmæus (Zeuglodon) .....          | 579      |
| pugnax (Tinoceras) .....        | 619      | pygmyus (Promerycochærus) .....    | 785      |
| pugnax (Uintacyon) .....        | 486      | Pygopodes .....                    | 284      |
| pugnax (Uintatherium) .....     | 619      | Pygopofoimes .....                 | 285      |
| pulcher (Centetodon) .....      | 435      | Python .....                       | 267      |
| pulchra (Baëna) .....           | 73       | Pythonide .....                    | 268      |
| pulchra (Boremys) .....         | 73       | Pythonine .....                    | 268      |
| puma (Felis) .....              | 552      | Pythonomorpha .....                | 257      |
| pumilum (Aceratherium) .....    | 742      | Pythonomorphi .....                | 258      |
| pumilis (Allacodon) .....       | 378      | Pythonomorpha .....                | 257      |
| pumilis (Clidastes) .....       | 263      | Pythonomorphide .....              | 257      |
| pumilis (Eomeryx) .....         | 778      | quadrata (Testudo) .....           | 104      |
| pumilis (Graculavus) .....      | 293      | quadratidens (Orycterocetus) ..... | 597      |
| pumilis (Helohippus) .....      | 671      | quadratus (Alethesaurus) .....     | 255      |
| pumilis (Lophiodon) .....       | 671      | quadratus (Dromilopus) .....       | 11       |
| pumilis (Orohippus) .....       | 671      | quadratus (Hadrianus) .....        | 100      |
| pumilis (Protoreodon) .....     | 778      | quadratus (Nanopus) .....          | 11       |
| pumilus (Clidastes) .....       | 263      | quadratus (Paramys) .....          | 903      |
| punctatus (Adocus) .....        | 90       | quadricuspis (Sphenomeryx) .....   | 755      |
| punctatus (Isodectes) .....     | 32       | quadricuspis (Stibarus) .....      | 753      |
| punctidens (Nyssodon) .....     | 300      | quadricuspis (Leptochærus) .....   | 753      |
| punctiger (Trionyx) .....       | 112      | quadridens (Dromilopus) .....      | 11       |
| punctulatus (Plastomenus) ..... | 106      | quadridens (Dromopus) .....        | 11       |
| punctulatus (Tuditanus) .....   | 32       | quadriplectum (Subhyracodon) ..... | 735      |
| pungens (Mixodectes) .....      | 448      | quadriplectum (Anchisodon) .....   | 735      |
| pungens (Sinopa) .....          | 477      | Quadrumania .....                  | 316, 330 |
| pungens (Stypolophus) .....     | 477      | quadrupedans (Hoplichnus) .....    | 14       |
| Puppigerus .....                | 80, 81   | quadrupes (Plesiornis) .....       | 4        |
| grandævus .....                 | 80       | quartus (Merychippus) .....        | 635      |
| parvilectus .....               | 82       | quartus (Miohippus) .....          | 677      |
| Pusa .....                      | 564      | Querquedula .....                  | 304, 306 |
| hispidæ .....                   | 564      | cyanoptera .....                   | 306      |
| pusilla (Echmatemys) .....      | 95       | discors .....                      | 306      |
| pusilla (Gavia) .....           | 284      | floridana .....                    | 306      |
| pusillus (Omomys) .....         | 926      | quinquepedale (Dincium) .....      | 256      |
| pusillus (Thylacodon) .....     | 396      | quintus (Merychippus) .....        | 685      |
| putida (Chincha) .....          | 533      | quivirensis (Triisodon) .....      | 465      |
| putida (Mephitis) .....         | 533      | radians (Batimodon) .....          | 610      |
| putnanni (Terrapene) .....      | 99       | radians (Coryphodon) .....         | 616      |
| putnami (Terrapene) .....       | 99       | radulina (Anosteira) .....         | 93       |
| Putorina .....                  | 525      | radulus (Amyda) .....              | 111      |
| Putorius .....                  | 528, 529 | radulus (Trionyx) .....            | 111      |
| arizonensis .....               | 528      | raki (Procamelus) .....            | 798      |
| cicognani .....                 | 528      | Ralli .....                        | 333      |
| cicognanii .....                | 528      | Rallides .....                     | 333      |
| erminea .....                   | 529      | Rallides .....                     | 333      |
| ermineus .....                  | 529      | Ralliformes .....                  | 333      |
| erminius .....                  | 529      | Rallina .....                      | 334      |
| gracilis .....                  | 528      | Rallioidea .....                   | 333      |
| nambianus .....                 | 530      | Rallioidea .....                   | 333      |
| novelboracensis .....           | 529      | Rallus .....                       | 333, 334 |
| vison .....                     | 529      | virginianus .....                  | 334      |
| putorius (Mephitis) .....       | 534      | ralstonense (Betocion) .....       | 606      |
| putorius (Spilogale) .....      | 524      | ralstoni (Pelycodus) .....         | 921      |
| putorius (Viverra) .....        | 534      | ramona (Onychomys) .....           | 892      |
| pygmæa (Didelphis) .....        | 393      | ramosum (Brontotherium) .....      | 723      |
| pygmæa (Didelphys) .....        | 393      | ramosum (Elotherium) .....         | 765      |
| pygmæa (Peratherium) .....      | 393      | ramosus (Cosoryx) .....            | 832      |
| pygmæum (Anthracotherium) ..... | 759      | ramosus (Merycodus) .....          | 832      |
| pygmæus (Agorophius) .....      | 579      | ramosus (Pelonax) .....            | 765      |
| pygmæus (Doryodon) .....        | 579      | ramulodus (Merycodus) .....        | 832      |
| pygmæus (Elephas) .....         | 648      | Rangifer .....                     | 823      |
| pygmæus (Hemiacodon) .....      | 927      | arcticus .....                     | 584      |
| pygmæus (Promerycochærus) ..... | 785      | arcticus .....                     | 584      |
| pygmæus (Sarcolemur) .....      | 756      | caboti .....                       | 524      |

|                             | Page     |                              | Page |
|-----------------------------|----------|------------------------------|------|
| Rangifer— <i>Continued</i>  |          | reinheimeri (Amphicyon)      | 511  |
| caribou                     | 823, 825 | reiteri (Chirotherium)       | 9    |
| caribu                      | 824      | Reithrodon                   | 892  |
| groenlandicus               | 825      | megalodon                    | 892  |
| muscatinensis               | 825      | longicauda                   | 892  |
| tarandus                    | 824, 825 | Reithrodontomys              | 892  |
| Rapaces                     | 310      | longicauda                   | 892  |
| rapax (Sinopa)              | 477      | megalotis                    | 892  |
| rapax (Stypolophus)         | 477      | simplicidens                 | 892  |
| rapax (Tylosaurus)          | 259      | Reithroparamys               | 903  |
| rapidens (Bolosaurus)       | 35       | delicatissimus               | 903  |
| rapidens (Chilonyx)         | 35       | relictum (Hipparion)         | 686  |
| rapiens (Thesclus)          | 73       | relictum (Hippotherium)      | 686  |
| Raptatores                  | 310, 313 | relictum (Neohipparion)      | 686  |
| raptor (Bassarid)           | 516      | relictus (Eporeodon)         | 782  |
| raptor (Bassaniscus)        | 516      | relictus (Merychippus)       | 686  |
| Raptores                    | 310, 313 | relictus (Merychys)          | 788  |
| iaru (Cimolopteryx)         | 359      | relictus (Metoreodon)        | 788  |
| rurus (Allacodon)           | 378      | relictus (Metoreodon)        | 788  |
| rurus (Cimolopteryx)        | 359      | relictus (Notharetus)        | 923  |
| rurus (Hyopsodus)           | 757      | relictus (Parasciurus)       | 904  |
| rurus (Menacodon)           | 371      | relictus (Pelycodus)         | 923  |
| rurus (Onychodectes)        | 398      | relictus (Prosciurus)        | 904  |
| rurus (Opisthias)           | 135      | relictus (Sciurus)           | 904  |
| rurus (Stenacodon)          | 751      | relictus (Stylonus)          | 686  |
| rurus (Tapiravus)           | 729      | renidens (Mylodon)           | 414  |
| Rasores                     | 324      | repanda (Catapleura)         | 76   |
| Ratite                      | 280      | repanda (Propleura)          | 76   |
| raymondi (Edaphosaurus)     | 59       | repandus (Coryphodon)        | 616  |
| raymondi (Naosaurus)        | 59       | repandus (Osteopygis)        | 76   |
| recta (Platypterna)         | 19       | repiens (Thesclus)           | 73   |
| rectidens (Gomphotherium)   | 688      | Reptilia                     | 23   |
| rectidens (Hipparion)       | 694      | republicanum (Gomphotherium) | 639  |
| rectidens (Hippotherium)    | 694      | republicanus (Merychippus)   | 686  |
| rectidens (Neohipparion)    | 694      | republicanus (Serridentinus) | 639  |
| rectidens (Rhynehotherium)  | 638      | resartus (Eohippus)          | 689  |
| rectiformis (Dimetrodon)    | 55       | resartus (Phenacodus)        | 605  |
| rectus (Polygonodon)        | 264      | Rethedchelys                 | 77   |
| recurvicornis (Ceratops)    | 223      | reticulatus (Glyptodon)      | 420  |
| recurvicornis (Monoclonius) | 222      | retroversa (Theropleura)     | 50   |
| recurvicornis (Triceratops) | 223      | retusum (Hipparion)          | 686  |
| Recurvirostra               | 338      | retusum (Hippotherium)       | 689  |
| americana                   | 338      | retusum (Neohipparion)       | 689  |
| Recurvirostridae            | 338      | retusum (Pseudohipparion)    | 689  |
| Recurvirostrinae            | 338      | retusum (Protohippus)        | 689  |
| recurvus (Belemnoziphius)   | 585      | retusa (Cimolopteryx)        | 359  |
| redfieldianum (Argosaurus)  | 6        | retusus (Cimolopteryx)       | 359  |
| redfieldianus (Argoides)    | 6        | rex (Clidastes)              | 265  |
| redfieldii (Argoides)       | 6        | rex (Megalosaurus)           | 120  |
| redfieldii (Berycynthia)    | 6        | rex (Metamynodon)            | 738  |
| redfieldii (Ornithomimus)   | 6        | rex (Nanosaurus)             | 204  |
| reedi (Baytanodon)          | 128      | rex (Platygonus)             | 773  |
| reedi (Coelosuchus)         | 147      | rex (Pleistogyps)            | 313  |
| reedi (Eotylopus)           | 793      | rex (Telmatornis)            | 384  |
| reedii (Muranosaurus)       | 120      | rex (Tetonius)               | 929  |
| reflexum (Dinoceras)        | 619      | rex (Tyrannosaurus)          | 180  |
| reflexum (Uintatherium)     | 619      | rhabdodon (Catathlæus)       | 610  |
| regalis (Edmontosaurus)     | 213      | Rhabdodon                    | 610  |
| regalis (Hesperornis)       | 279      | mirificus                    | 610  |
| regans (Barornis)           | 284      | rhabdodon (Peripitychus)     | 610  |
| regans (Diatryma)           | 284      | Rhabdopelix                  | 164  |
| regius (Bison)              | 353      | longispinis                  | 164  |
| regularis (Palaopus)        | 17       | Rhabdosteus                  | 590  |
| regularis (Palaopus)        | 17       | latiradix                    | 590  |
| regularis (Prionosaurus)    | 257      | Rhadinorhinus                | 717  |
|                             |          | abbotti                      | 717  |



|                                 | Page     |                          | Page |
|---------------------------------|----------|--------------------------|------|
| Rhadinorhinus— <i>Continued</i> |          | Rhytina                  | 657  |
| diploconus                      | 717      | borealis                 | 657  |
| rhambastes (Cremastosaurus)     | 255      | gigas                    | 657  |
| rhambastes (Platyrhachis)       | 255      | stelleri                 | 657  |
| rhambastes (Platyrhachis)       | 255      | Rhytine                  | 657  |
| Rhamporhynchoidea               | 159      | stelleri                 | 658  |
| Rhegnopsis                      | 573      | Rhytinidae               | 657  |
| palæatlanticus                  | 573      | Rhytinodon               | 145  |
| Rheithrodon                     | 892      | Rhytidon                 | 145  |
| Rhetechelys                     | 77       | carolinensis             | 145  |
| platyops                        | 77       | Rhytitodon               | 145  |
| Rhineura                        | 250      | richardsoni (Microtus)   | 898  |
| coloradoensis                   | 250      | richmondi (Meleagris)    | 330  |
| hatcheri                        | 250      | riggsi (Megacerops)      | 721  |
| hatcherii                       | 250      | riparia (Arvicola)       | 898  |
| Rhineura                        | 250      | riparia (Baena)          | 72   |
| Rhinoceriæ                      | 738      | riparius (Anchippodus)   | 855  |
| Rhinocerine                     | 738      | riparius (Blastomeryx)   | 819  |
| rhinocerinus (Eotrigonias)      | 739      | riparius (Dyseomeryx)    | 819  |
| Rhinoceros                      | 738      | riparius (Limnocyon)     | 474  |
| crassus                         | 747      | riparius (Metarhinus)    | 717  |
| fossiger                        | 749      | riparius (Telmatocyon)   | 474  |
| hesperius                       | 744      | rivalis (Echmatemys)     | 95   |
| longipes                        | 747, 749 | riverans (Canis)         | 500  |
| matutinus                       | 747      | rivicola (Pomys)         | 901  |
| meridianus                      | 747      | rivipacis (Glyptodon)    | 420  |
| nebrascensis                    | 736      | riviveronis (Canis)      | 500  |
| occidentalis                    | 741      | robinsoni (Archæria)     | 45   |
| oregonensis                     | 745      | robusta (Stenogale)      | 536  |
| proterus                        | 760      | robustior (Hipposyus)    | 923  |
| Rhinocerosina                   | 739      | robustior (Notharetus)   | 923  |
| Rhinocerotidæ                   | 732, 738 | robustior (Oligobunus)   | 523  |
| Rhinocerotina                   | 738      | robustum (Archæotherium) | 764  |
| Rhinocerotini                   | 739      | robustum (Borocyon)      | 512  |
| Rhinocerotoida                  | 732      | robustum (Brontops)      | 721  |
| Rhinocerotoidæ                  | 732      | robustum (Brontotherium) | 721  |
| Rhinocerotoides                 | 732      | robustum (Menotherium)   | 752  |
| rhinocerus (Ceratogaulus)       | 908      | robustum (Oreodon)       | 781  |
| Rhinosaurus                     | 259      | robustum (Potamotherium) | 536  |
| micromus                        | 259      | robustum (Titanotherium) | 721  |
| Rhoptoglossa                    | 247      | robustum (Uintatherium)  | 619  |
| Rhoptoglossi                    | 247      | robustus (Achenodon)     | 782  |
| Rhizoprion                      | 580      | robustus (Agostopus)     | 2    |
| rhoadsi (Lutra)                 | 538      | robustus (Argoides)      | 6    |
| rhoadsii (Lutra)                | 538      | robustus (Baptanodon)    | 128  |
| rhynchæus (Geolabis)            | 439      | robustus (Borocyon)      | 512  |
| Rhynchocephala                  | 131      | robustus (Brontops)      | 721  |
| Rhynchocephali                  | 131      | robustus (Brontotherium) | 721  |
| Rhynchocephalia                 | 130      | robustus (Camarasaurus)  | 191  |
| Rhynchorostræus                 | 623      | robustus (Canis)         | 500  |
| Rhynchotherium                  | 634      | robustus (Daphænus)      | 505  |
| anguirivale                     | 639      | robustus (Daphænus)      | 505  |
| brevicens                       | 635      | robustus (Diacodexia)    | 757  |
| edensis                         | 631      | robustus (Diapridon)     | 384  |
| euhypodon                       | 636      | robustus (Eohyus)        | 604  |
| falconeri                       | 636      | robustus (Hadrianus)     | 100  |
| rectidens                       | 638      | robustus (Hoplophoneus)  | 545  |
| shepardi                        | 639      | robustus (Hydrochærus)   | 915  |
| Rhynchosuchidæ                  | 143      | robustus (Ischyrotomus)  | 903  |
| Rhynchocephalia                 | 131      | robustus (Laopithecus)   | 763  |
| Rhynocerotidæ                   | 738      | robustus (Larus)         | 341  |
| Rhytidiodon                     | 145      | robustus (Leptochærus)   | 752  |
| carolinensis                    | 145      | robustus (Limnocyus)     | 713  |
| Rhytidodon                      | 145      | robustus (Megacerops)    | 721  |
| carolinensis                    | 145      | robustus (Megasaurus)    | 258  |
| rostratus                       | 145      | robustus (Meniscochærus) | 884  |

|                                    | Page |  | Page          |
|------------------------------------|------|--|---------------|
| robustus (Mesocyon) -----          | 493  | rufa (Haplodontia) -----               | 906           |
| robustus (Miaces) -----            | 485  | rufus (Felis) -----                    | 555           |
| robustus (Morosaurus) -----        | 181  | ruffus (Lynx) -----                    | 555           |
| robustus (Ophthalmosaurus) -----   | 128  | rufus (Felis) -----                    | 555           |
| robustus (Osteopygis) -----        | 76   | rufus (Lynx) -----                     | 555           |
| robustus (Pachycyon) -----         | 500  | rugatus (Mastodon) -----               | 627           |
| robustus (Palaeosyops) -----       | 713  | rugatus (Ziphacodon) -----             | 488, 487      |
| robustus (Paramys) -----           | 903  | rugosa (Thecachampsia) -----           | 154           |
| robustus (Perchoerus) -----        | 789  | rugosidens (Gomphotherium) -----       | 639           |
| robustus (Phenacodus) -----        | 606  | rugosidens (Mammut) -----              | 639           |
| robustus (Plastomenus) -----       | 107  | rugosidens (Mastodon) -----            | 639           |
| robustus (Pliohippus) -----        | 698  | rugosus (Crocodylus) -----             | 154           |
| robustus (Priacodon) -----         | 370  | rugosus (Glyptosaurus) -----           | 254           |
| robustus (Procamelus) -----        | 799  | rugosus (Palaeoscincus) -----          | 237           |
| robustus (Prodaphneus) -----       | 486  | Ruminantia -----                       | 791, 833      |
| robustus (Prolimnocyon) -----      | 473  | runymedensis (Alces) -----             | 827           |
| robustus (Prosciurus) -----        | 904  | rupertianus (Elephas) -----            | 651           |
| robustus (Protapirus) -----        | 729  | Rupricapra -----                       | 841           |
| robustus (Protohippus) -----       | 698  | americana -----                        | 841           |
| robustus (Pseudotomus) -----       | 903  | Rupricaprinæ -----                     | 840           |
| robustus (Sthenetis) -----         | 536  | rurestris (Canis) -----                | 494           |
| robustus (Tinodon) -----           | 370  | rurestris (Tephrocyon) -----           | 494           |
| robustus (Titanotherium) -----     | 721  | ruschenbergeri (Delphinapterus) -----  | 594           |
| rodens (Apatemys) -----            | 445  | ruschenbergeri (Priscodelphinus) ----- | 694           |
| Rodentes -----                     | 558  | rusticus (Brachycrus) -----            | 736           |
| Rodentia -----                     | 556  | rusticus (Merycochoerus) -----         | 736           |
| Rodentii -----                     | 557  | rusticus (Peridiomys) -----            | 880           |
| rodgersi (Hyposaurus) -----        | 147  | rüttimeyeranus (Paradoxodon) -----     | 461           |
| rogersi (Palamopus) -----          | 18   | Ruthodon -----                         | 142, 145, 172 |
| rogersianus (Palamopus) -----      | 18   | carolinensis -----                     | 142, 145, 172 |
| rogersii (Hyposaurus) -----        | 147  | manhattanensis -----                   | 145           |
| rogerii (Hyposaurus) -----         | 147  | validus -----                          | 142, 145      |
| rooksensis (Paraphelops) -----     | 748  | ryani (Balanoptera) -----              | 575           |
| roosevelti (Cervalces) -----       | 325  | ryderanus (Agriochœrus) -----          | 778           |
| Rorqualus -----                    | 575  | ryderanus (Coloreodon) -----           | 778           |
| boops -----                        | 575  | Rytidodon -----                        | 145           |
| Rosariadæ -----                    | 559  | Rytina -----                           | 657           |
| Rosariidæ -----                    | 559  | borealis -----                         | 657           |
| rosmarinus (Dicynodon) -----       | 63   | Rytinæ -----                           | 657           |
| rosmarinus (Odobœnus) -----        | 560  | sabini (Xema) -----                    | 341           |
| Rosmarus -----                     | 559  | sabinii (Xema) -----                   | 341           |
| arcticus -----                     | 560  | sablunonis (Merycodus) -----           | 831           |
| obesus -----                       | 560  | sabrinus (Glaucomys) -----             | 875           |
| virginianus -----                  | 560  | Saccomyidæ -----                       | 876           |
| rosmarus (Dicynodon) -----         | 63   | Saccomyini -----                       | 880           |
| rosmarus (Odobœnus) -----          | 560  | Saccomys -----                         | 879           |
| rosmarus (Odobœnus) -----          | 560  | Saccophorus -----                      | 877           |
| rosmarus (Trichechus) -----        | 560  | bottæ -----                            | 877           |
| Rosores -----                      | 887  | sævus (Aelurodon) -----                | 495           |
| rostratum (Tomitherium) -----      | 923  | sævus (Canis) -----                    | 496           |
| rostratus (Aspinacodon) -----      | 760  | sagatus (Aspideretes) -----            | 109           |
| rostratus (Anodon) -----           | 760  | Sagittilingues -----                   | 352           |
| rostratus (Bothriodon) -----       | 760  | saincleri (Hipparion) -----            | 694           |
| rostratus (Bothriolabis) -----     | 769  | salaris (Crocodylus) -----             | 154           |
| rostratus (Entoptychus) -----      | 877  | salebrosa (Amyda) -----                | 111           |
| rostratus (Hypotamias) -----       | 760  | salebrosus (Trionyx) -----             | 111           |
| rostratus (Notharctus) -----       | 923  | salien (Hoplochelys) -----             | 92            |
| rostratus (Perchoerus) -----       | 769  | Sallomyidæ -----                       | 878           |
| rostratus (Phytosaurus) -----      | 145  | sanctæfidei (Panolax) -----            | 861           |
| rostratus (Rhytidodon) -----       | 145  | Sangamona -----                        | 880           |
| rostratus (Thimohyus) -----        | 769  | fugitiva -----                         | 880           |
| rubida (Erismatura) -----          | 308  | Saniwa -----                           | 251, 251      |
| rudis (Uintacyon) -----            | 494  | ensidens -----                         | 252           |
| rüttimeyeranus (Paradoxodon) ----- | 461  | major -----                            | 252, 251      |
| rufa (Aplodontia) -----            | 906  | Saniwa -----                           | 251           |
| rufa (Felis) -----                 | 555  | agilis -----                           | 252           |

|                                       | Page      |                                     | Page     |
|---------------------------------------|-----------|-------------------------------------|----------|
| <i>Saniwa—Continued</i>               |           | <i>Saururæ</i>                      | 276      |
| <i>crassa</i>                         | 252       | <i>saxatilis</i> (Cynaretus)        | 500      |
| <i>ensidens</i>                       | 252       | <i>saxea</i> (Clemmys)              | 94       |
| <i>grandis</i>                        | 252       | <i>saxeus</i> (Protolabis)          | 801      |
| <i>leptodus</i>                       | 252       | <i>scala</i> (Duovestigia)          | 11       |
| <i>major</i>                          | 252       | <i>scalare</i> (Peratherium)        | 393      |
| <i>paucidens</i>                      | 252       | <i>scalaris</i> (Didelphis)         | 393      |
| <i>Saniwine</i>                       | 251       | <i>Scaldicetus</i>                  | 698      |
| <i>sanjoanensis</i> (Alamosaurus)     | 201       | <i>caretii</i>                      | 698      |
| <i>santacruzensis</i> (Dusignathus)   | 558       | <i>Scalopidæ</i>                    | 435      |
| <i>saponensis</i> (Champsosaurus)     | 133       | <i>Scalopinæ</i>                    | 436      |
| <i>Sarcoclemur</i>                    | 755       | <i>Scalops</i>                      | 438      |
| <i>bicuspidis</i>                     | 755       | <i>aquaticus</i>                    | 438      |
| <i>comptus</i>                        | 439       | <i>australis</i>                    | 438      |
| <i>crassus</i>                        | 755       | <i>townsendi</i>                    | 439      |
| <i>furcatus</i>                       | 755       | <i>Scalopus</i>                     | 438      |
| <i>gracilis</i>                       | 924       | <i>aquaticus</i>                    | 438      |
| <i>mentalis</i>                       | 444       | <i>australis</i>                    | 438      |
| <i>pygmaeus</i>                       | 756       | <i>townsendii</i>                   | 439      |
| <i>sarcophagus</i> (Albertosaurus)    | 179       | <i>scalper</i> (Megalonyx)          | 410      |
| <i>sarcophagus</i> (Zatomus)          | 143       | <i>scambus</i> (Anomæpus)           | 5        |
| <i>Sarcoramphi</i>                    | 310       | <i>Scansoria</i>                    | 389      |
| <i>Sarcoramphus</i>                   | 313       | <i>Scapanus</i>                     | 439      |
| <i>Sarcoramphina</i>                  | 310       | <i>californicus</i>                 | 439      |
| <i>Sarcoramphus</i>                   | 313       | <i>latimanus</i>                    | 439      |
| <i>clarki</i>                         | 313       | <i>townsendi</i>                    | 439      |
| <i>Sarcothraustes</i>                 | 466       | <i>scaphoceras</i> (Bison)          | 843      |
| <i>antiquus</i>                       | 466       | <i>scaphoceras</i> (Bov)            | 843      |
| <i>coryphaeus</i>                     | 466       | <i>scaphoceras</i> (Ovis)           | 843      |
| <i>sargenti</i> (Bootherium)          | 846       | <i>Scaphoceros</i>                  | 847      |
| <i>sargenti</i> (Lithophis)           | 268       | <i>cavifrons</i>                    | 847      |
| <i>saskatchewanensis</i> (Sciurus)    | 875       | <i>tyrelli</i>                      | 847      |
| <i>saskatchewanensis</i> (Thespesius) | 213       | <i>tyrelli</i>                      | 847      |
| <i>saturatus</i> (Bubo)               | 550       | <i>Scaptohyus</i>                   | 763      |
| <i>Sauranodon</i>                     | 127       | <i>altidens</i>                     | 763      |
| <i>Sauravidae</i>                     | 31        | <i>Scelidosauridae</i>              | 231      |
| <i>Sauraviformes</i>                  | 31        | <i>Scelidosaurina</i>               | 232      |
| <i>Sauravus</i>                       | 31        | <i>Scelidosaurus</i>                | 232      |
| <i>Sauri</i>                          | 243       | <i>Scenodon</i>                     | 341      |
| <i>Sauria</i>                         | 25, 242   | <i>Schastasaurus</i>                | 128      |
| <i>Sauria</i>                         | 243       | <i>schiffi</i> (Diceratherium)      | 745      |
| <i>Saurii</i>                         | 243       | <i>schizoceras</i> (Illingoceros)   | 839      |
| <i>Saurischia</i>                     | 167       | <i>schizoceras</i> (Illingoceras)   | 839      |
| <i>Saurocestus</i>                    | 581       | <i>Schizodelphis</i>                | 591, 592 |
| <i>gibbesii</i>                       | 581       | <i>crassangulum</i>                 | 591      |
| <i>saurodosis</i> (Minerva)           | 351       | <i>depressus</i>                    | 591, 592 |
| <i>Saurognathus</i> (Dissacus)        | 467       | <i>Schizolophodon</i>               | 727      |
| <i>Sauroidichnites</i>                | 19        | <i>cuspidens</i>                    | 727      |
| <i>gigas</i>                          | 19        | <i>Schizotheriina</i>               | 723      |
| <i>Saurolophidae</i>                  | 216       | <i>schlosseri</i> (Microsyraps)     | 450      |
| <i>Saurolophina</i>                   | 216       | <i>schlosserianus</i> (Chriacus)    | 461      |
| <i>Saurolophus</i>                    | 217       | <i>schlosserianus</i> (Epichriacus) | 461      |
| <i>osborni</i>                        | 217       | <i>schneideri</i> (Agriotherium)    | 523      |
| <i>Sauropoda</i>                      | 188       | <i>schucherti</i> (Chelonocephalus) | 791      |
| <i>Sauropsida</i>                     | 24, 872   | <i>schucherti</i> (Cyclopidius)     | 791      |
| <i>Sauropterygia</i>                  | 113       | <i>schucherti</i> (Hadrianus)       | 100      |
| <i>Sauropterygii</i>                  | 113       | <i>schucherti</i> (Hebe)            | 354      |
| <i>Sauropus</i>                       | 7, 17, 20 | <i>schucherti</i> (Laoporus)        | 15       |
| <i>antiquior</i>                      | 17        | <i>schucherti</i> (Pterosphenus)    | 267      |
| <i>barratii</i>                       | 20        | <i>Scincidae</i>                    | 249      |
| <i>ingens</i>                         | 20        | <i>Scincoidæ</i>                    | 248      |
| <i>primævus</i>                       | 17, 18    | <i>Scincoides</i>                   | 249      |
| <i>sydnensis</i>                      | 7         | <i>Scincomorpha</i>                 | 248      |
| <i>unguifer</i>                       | 20        | <i>scitulus</i> (Tephrocyon)        | 510      |
| <i>Saurothera</i>                     | 347       | <i>scitulus</i> (Tomarctus)         | 510      |
| <i>californiana</i>                   | 347       | <i>Sciuravidae</i>                  | 909      |

|                            | Page          |                           | Page     |
|----------------------------|---------------|---------------------------|----------|
| Sciuravus                  | 902, 904, 909 | scolopax (Palseorhinus)   | 142      |
| altidens                   | 909           | scolopax (Phytosaurus)    | 142      |
| buccatus                   | 902           | Scops                     | 349      |
| depressus                  | 909           | asio                      | 349      |
| minimus                    | 904           | bendirei                  | 349      |
| nitidus                    | 909           | Scotophilus               | 464      |
| parvidens                  | 904           | scotti (Alces)            | 886      |
| undans                     | 909           | scotti (Archæotherium)    | 764      |
| Sciurida                   | 867           | scotti (Blastomeryx)      | 819      |
| Sauridae                   | 867           | scotti (Cervalces)        | 836      |
| Sciuriformes               | 867           | scotti (Elephas)          | 650      |
| Sciurii                    | 867           | scotti (Equus)            | 704, 708 |
| Sciurina                   | 868           | scotti (Isectolophus)     | 726      |
| Sciurinae                  | 868           | scotti (Micrichnus)       | 16       |
| Sciurini                   | 868           | scotti (Micrichnium)      | 16       |
| Sciuroidea                 | 867           | scotti (Prodaphenus)      | 484      |
| Sciuroidei                 | 867           | scotti (Uintacyon)        | 484      |
| sciuroides (Chalicomys)    | 883           | scottianus (Cynodontomys) | 449      |
| sciuroides (Paramys)       | 903           | scottianus (Microsops)    | 449      |
| sciuroides (Plesiarctomys) | 903           | scrotinus (Allops)        | 780      |
| sciuroides (Steneofiber)   | 883           | scudder (Thomomys)        | 878      |
| Sciuiromorpha              | 867           | sculpta (Chelydra)        | 85       |
| Sciuiromorphi              | 867           | sculpta (Probaena)        | 71       |
| Sciuiromys                 | 875           | sculpta (Trachemys)       | 97       |
| Sciuropterus               | 875           | sculptus (Halodon)        | 353      |
| alpinus                    | 875           | sculptus (Meniscoessus)   | 383      |
| klamathensis               | 875           | scutumantiquum (Amyda)    | 111      |
| volans                     | 875           | scutumantiquum (Trionyx)  | 111      |
| volucra                    | 875           | secans (Acmeodon)         | 432      |
| Sciurus                    | 873, 875, 904 | secans (Acmeodon)         | 481      |
| aberti                     | 874           | secans (Diacodexis)       | 767      |
| alholimbatus               | 874           | secans (Pantolestes)      | 767      |
| arctomyoides               | 874           | secans (Trigonolestes)    | 767      |
| hallovianus                | 904           | sectator (Nimravus)       | 543      |
| calicinus                  | 874           | sectorius (Anisonchus)    | 611      |
| californicus               | 874           | sectorius (Enhydrocyon)   | 507      |
| calycinus                  | 874           | sectorius (Hyanocyon)     | 507      |
| carolinensis               | 874           | sectorius (Tylosaurus)    | 259      |
| douglasi                   | 874           | secundaria (Sinopa)       | 477      |
| douglasii                  | 874           | secundarius (Stypolophus) | 477      |
| fossilis                   | 874           | secundus (Aëluroidon)     | 496      |
| griseus                    | 874           | secundus (Didelphodus)    | 432      |
| hudsonicus                 | 874           | secundus (Merychippus)    | 685      |
| hudsonius                  | 875           | secundus (Mesocyon)       | 498      |
| jeffersoni                 | 904           | secundus (Proscalops)     | 436      |
| panolius                   | 875           | secundus (Protohippus)    | 689      |
| relictus                   | 904           | sedens (Ornithomimus)     | 133      |
| saskatchewanensis          | 875           | soeleyanus (Hypsiprophus) | 234      |
| striatus                   | 873           | soeleyanus (Stegosaurus)  | 234      |
| tenuidens                  | 875           | segne (Uintatherium)      | 619      |
| tridecemlineatus           | 889           | segnis (Athenoclon)       | 373      |
| vetustus                   | 904           | segnis (Chamops)          | 246      |
| vortmani                   | 904           | segnis (Thinobadistes)    | 414      |
| vortmanni                  | 904           | seguis (Chamops)          | 246      |
| Soolecophagus              | 358           | sejunctus (Merychippus)   | 686      |
| affinis                    | 358           | sejunctus (Protohippus)   | 685, 686 |
| cyanocephalus              | 358           | Selenacodon               | 358      |
| gubernator                 | 358           | brevis                    | 358      |
| Scioliomys                 | 49            | fragilis                  | 358      |
| puercoensis                | 49            | Selenichnide              | 2        |
| Scolopacidae               | 336           | Selenichnus               | 20       |
| Scolopacinae               | 337           | breviusculus              | 20       |
| Scolopacoides              | 335           | falcatus                  | 20       |
| Scolopax                   | 337           | selenidens (Hyracodon)    | 796      |
| scolopax (Belodon)         | 143           | Selenodonta               | 791      |
|                            |               | Selenodontia              | 791      |

|  | Page          |                                   | Page          |
|--|---------------|-----------------------------------|---------------|
| selenodus (Polymastodon) .....         | 334           | Serridentinus—Continued .....     |               |
| sellardsi (Ardea) .....                | 295           | precursor .....                   | 638           |
| sellardsi (Odocoileus) .....           | 321           | republicanus .....                | 639           |
| sellardsi (Testudo) .....              | 105           | serrifer (Toxochelys) .....       | 87            |
| sellardsiæ (Odocoileus) .....          | 321           | serrulidens (Pogonodon) .....     | 542           |
| selwyni (Gryposaurus) .....            | 212           | serus (Dinobastis) .....          | 547           |
| selwyni (Pteropelyx) .....             | 212           | serus (Gomphotherium) .....       | 302           |
| selwyni (Trachodon) .....              | 212           | serus (Prosthenops) .....         | 771           |
| selwynianum (Biontotherium) .....      | 721           | serus (Prosthenops) .....         | 771           |
| selwynianus (Megacerops) .....         | 721           | serus (Protolabis) .....          | 801           |
| selwynianus (Menodus) .....            | 721           | serus (Protomeryx) .....          | 801           |
| semicinctus (Bathmodon) .....          | 616           | serus (Tayassu) .....             | 771           |
| semicinctus (Coryphodon) .....         | 616           | serus (Tayassu) .....             | 771           |
| semicinctus (Leptomeryx) .....         | 810           | sesquipedalis (Mylagaulus) .....  | 908           |
| semicinctus (Loxolophodon) .....       | 616           | setiger (Mylodyrus) .....         | 773           |
| semihians (Homogalax) .....            | 726           | setiger (Platygonus) .....        | 773           |
| semihians (Systemodon) .....           | 726           | Setifera .....                    | 752           |
| semipalmata (Alces) .....              | 327           | seversum (Hipparion) .....        | 688           |
| semiplicatus (Equus) .....             | 708, 708      | seversum (Hippotherium) .....     | 688           |
| semiplicatus (Neohippus) .....         | 708           | seversus (Merychippus) .....      | 686           |
| semiradicatus (Dimetrodon) .....       | 55            | seversus (Stylonus) .....         | 686           |
| senex (Moropus) .....                  | 663           | severus (Merychippus) .....       | 686           |
| senex (Tillomys) .....                 | 905           | sexscipis (Synconodon) .....      | 396           |
| septaria (Echmatemys) .....            | 95            | Seymouria .....                   | 30            |
| septaria (Emys) .....                  | 95            | babyloniensis .....               | 30, 31        |
| septentrionale (Chlamydothorium) ..... | 418           | baylonensis .....                 | 31            |
| septentrionale (Chlamytherium) .....   | 418           | Seymouriamorpha .....             | 30            |
| septentrionalis (Cathartes) .....      | 311           | Seymouriamorpha .....             | 30            |
| serialis (Plastomenus) .....           | 112           | Seymouriidae .....                | 30            |
| serialis (Platypeltis) .....           | 112           | Seymouriidae .....                | 30            |
| sericodon (Crocodilus) .....           | 154           | Shastasauridae .....              | 124           |
| sericodon (Crocodylus) .....           | 154           | Shastasaurinae .....              | 124           |
| sericodon (Thecachampsa) .....         | 154           | Shastasaurus .....                | 126           |
| serotinus (Nychitotherium) .....       | 435           | alexandria .....                  | 126           |
| serotinus (Allops) .....               | 720           | altisphimex .....                 | 126           |
| serotinus (Megacerops) .....           | 720           | altisphimex .....                 | 126           |
| serotinus (Nychitotherium) .....       | 435           | careyi .....                      | 126           |
| serotinus (Vesperugo) .....            | 435           | osmonti .....                     | 126           |
| Serpentes .....                        | 215           | pacificus .....                   | 126           |
| serpentina (Chelydra) .....            | 85            | perrini .....                     | 126, 241      |
| serpentinus (Elasmosaurus) .....       | 118           | shastense (Nothotherium) .....    | 406           |
| serpentinivale (Gomphotherium) .....   | 639           | shastensis (Catharista) .....     | 312           |
| serrator (Mergus) .....                | 309           | shastensis (Coragyps) .....       | 312           |
| serratus (Cimolomys) .....             | 380           | shastensis (Thalattosaurus) ..... | 241           |
| serratus (Crocodylus) .....            | 154           | Shastosauridae .....              | 124           |
| serratus (Ctenacodon) .....            | 378           | Shastosaurus .....                | 126           |
| serratus (Dorudon) .....               | 568           | shaughnessiana (Echmatemys) ..... | 96            |
| serratus (Exostinus) .....             | 246           | shaughnessiana (Emys) .....       | 96            |
| serratus (Halodon) .....               | 380           | shepardi (Anacrus) .....          | 639           |
| serratus (Ptilodus) .....              | 380           | shepardi (Dibelodon) .....        | 638, 639      |
| serratus (Triceratops) .....           | 230           | shepardi (Gomphotherium) .....    | 639           |
| serratus (Zeuglodon) .....             | 668           | shepardi (Mammot) .....           | 639           |
| serridens (Eurydorus) .....            | 145           | shepardi (Mastodon) .....         | 638, 639, 639 |
| serridens (Gomphotherium) .....        | 639           | shepardi (Rhychotherium) .....    | 639           |
| serridens (Mammot) .....               | 639           | shepardi (Tetralodon) .....       | 631           |
| serridens (Mastodon) .....             | 639           | shepardi (Tetralophodon) .....    | 631           |
| serridens (Phytosaurus) .....          | 145           | shepardi (Trilophodon) .....      | 631           |
| serridens (Rhychotherium) .....        | 639           | Shepardia .....                   | 30            |
| serridens (Tetralodon) .....           | 638, 639      | palmipes .....                    | 30            |
| serridens (Trilophodon) .....          | 638, 639      | shepardii (Tetralodon) .....      | 638, 639      |
| Serridentinae .....                    | 638           | shepardianus (Charadrius) .....   | 336           |
| Serridentinus .....                    | 634, 638, 638 | shepardy (Dibelodon) .....        | 639           |
| fricki .....                           | 638           | shimeki (Alces) .....             | 327           |
| leidii .....                           | 637           | shimekii (Alces) .....            | 327           |
| obliquidens .....                      | 637           | shirleyensis (Plesiosaurus) ..... | 116           |

|                                      | Page     |                                 | Page     |
|--------------------------------------|----------|---------------------------------|----------|
| shoshonensis (Canis) .....           | 506      | Simplicidentata .....           | 866      |
| shoshonensis (Daedon) .....          | 766      | Simplicidentati .....           | 867      |
| shoshonensis (Sinopa) .....          | 477      | simulans (Ælurodon) .....       | 496      |
| Shoshonius .....                     | 927      | sumum (Arctotherium) .....      | 521      |
| cooperi .....                        | 927      | sinum (Tremarctotherium) .....  | 521      |
| shufeldti (Corvus) .....             | 356      | sinus (Arctodus) .....          | 521      |
| shuleri (Tetrameryx) .....           | 336      | sinus (Coryphodon) .....        | 618      |
| sicaria (Thecachampsa) .....         | 154      | sinus (Cyclopidius) .....       | 780, 791 |
| sicarius (Crocodylus) .....          | 154      | sinus (Lestosauros) .....       | 260      |
| sicarius (Eusmilus) .....            | 545      | sinus (Pitheciastes) .....      | 791      |
| sicarius (Viverravus) .....          | 483      | sinus (Platycarpus) .....       | 260      |
| sideropellicus (Diadectes) .....     | 35       | sinus (Procyon) .....           | 515      |
| siegfriedi (Leipsanolestes) .....    | 451      | sinus (Protohippus) .....       | 689      |
| sierrensis (Megalonyx) .....         | 410      | sinapius (Amphicyon) .....      | 511      |
| Sigmodon .....                       | 894      | sinclairi (Artiodactylus) ..... | 6        |
| curtisi .....                        | 894      | sinclairi (Blastomeryx) .....   | 819      |
| hispidus .....                       | 894      | sinclairi (Bubo) .....          | 350      |
| medius .....                         | 895      | sinclairi (Cervavus) .....      | 819      |
| minor .....                          | 895      | sinclairi (Dyseomeryx) .....    | 819      |
| Sigmodontinae .....                  | 891      | sinclairi (Hipparion) .....     | 694      |
| Sigmogomphus .....                   | 884, 888 | sinclairi (Hippotherium) .....  | 694      |
| lecontei .....                       | 884, 888 | sinclairi (Metallurus) .....    | 550      |
| silberlingi (Neocladonodon) .....    | 465      | sinclairi (Neohipparion) .....  | 694      |
| silberlingi (Picrodus) .....         | 385      | sinclairi (Preptoceras) .....   | 844      |
| sillimani (Anchisauripus) .....      | 3        | sinclairi (Proptoceros) .....   | 844      |
| sillimani (Hydrarchos) .....         | 670      | sinclairi (Pseudelurus) .....   | 550      |
| sillimani (Hydrargos) .....          | 670      | Sinclairia .....                | 407      |
| sillimanium (Brontozoum) .....       | 3        | oregoniana .....                | 407      |
| Sillimanus .....                     | 20       | sinclairii (Hipparion) .....    | 694      |
| gracilior .....                      | 20       | sinclairii (Hippotherium) ..... | 694      |
| tetradaetylus .....                  | 20       | sinclairii (Neohipparion) ..... | 694      |
| Silvalaretos .....                   | 523      | singletoni (Terrapene) .....    | 99       |
| silvestre (Dromatherium) .....       | 368      | singularis (Aspideretes) .....  | 109      |
| silvestris (Elephas) .....           | 646      | singularis (Coryphodon) .....   | 616      |
| silvestris (Meleagris) .....         | 330      | singularis (Heptodon) .....     | 724      |
| Silvilagus .....                     | 384      | singularis (Hyrachus) .....     | 724      |
| simia (Baëna) .....                  | 72       | singularis (Pliauchemia) .....  | 802      |
| Simædosauria .....                   | 131      | singularis (Trionyx) .....      | 109      |
| Simædosaurus .....                   | 132      | Sinopa .....                    | 473, 476 |
| Simia .....                          | 930      | aculeata .....                  | 476      |
| Simiæ .....                          | 918      | agilis .....                    | 478      |
| Simiidae .....                       | 930, 931 | crucians .....                  | 480      |
| similis (Sorex) .....                | 441      | edax .....                      | 477      |
| Simobison .....                      | 353      | eximia .....                    | 944      |
| figginsi .....                       | 353      | gracilis .....                  | 478      |
| Simocyoninae .....                   | 504      | grangeri .....                  | 476      |
| simplex (Calamodon) .....            | 408      | hians .....                     | 476      |
| simplex (Chriacus) .....             | 480      | insectivora .....               | 476      |
| simplex (Hyopsodus) .....            | 444      | lania .....                     | 477      |
| simplex (Oxylenus) .....             | 480      | major .....                     | 476      |
| simplex (Protapirus) .....           | 729      | minor .....                     | 477, 478 |
| simplex (Protochriacus) .....        | 480      | mordax .....                    | 477      |
| simplicidens (Aceratherium) .....    | 748      | multicuspis .....               | 477      |
| simplicidens (Blarina) .....         | 442      | opisthotoma .....               | 477      |
| simplicidens (Brachypsalis) .....    | 585      | pungens .....                   | 477      |
| simplicidens (Cenopus) .....         | 745      | rapax .....                     | 477      |
| simplicidens (Chalicomys) .....      | 883      | secundaria .....                | 477      |
| simplicidens (Equus) .....           | 699      | shoshoniensis .....             | 477      |
| simplicidens (Gomphotherium) .....   | 639      | strenus .....                   | 477      |
| simplicidens (Paroligobunus) .....   | 525      | vera .....                      | 477      |
| simplicidens (Plesippus) .....       | 699      | viverrina .....                 | 477      |
| simplicidens (Pliohippus) .....      | 699      | vulpecula .....                 | 478      |
| simplicidens (Reithrodontomys) ..... | 892      | whitæ .....                     | 478      |
| simplicidens (Stenofiber) .....      | 883      | sinosus (Ambloctonus) .....     | 478      |
| simplicidens (Subhyracodon) .....    | 745      | sinuatus (Corvus) .....         | 356      |
| simplicidens (Trilophodon) .....     | 680      | sinuosus (Basilemys) .....      | 88       |

|                                 | Page          |                                  | Page     |
|---------------------------------|---------------|----------------------------------|----------|
| sinus (Procyon) .....           | 515           | Solenodontidae .....             | 427      |
| sinus (Protohippus) .....       | 689           | Solenodontini .....              | 428      |
| siouense (Pronomotherium) ..... | 786           | Solidungala .....                | 663, 664 |
| siouensis (Desmathyus) .....    | 770           | solidus (Ototriton) .....        | 250      |
| siouensis (Merychys) .....      | 788           | Solipeda .....                   | 664      |
| siouensis (Thinochys) .....     | 770           | solus (Anchisaurus) .....        | 171      |
| Siphonocetus .....              | 572           | sookensis (Cornwallius) .....    | 654      |
| clarkianus .....                | 572           | sookensis (Desmostylus) .....    | 654      |
| expansus .....                  | 572           | sopita (Propleura) .....         | 78       |
| priscus .....                   | 572           | sopitus (Osteopygis) .....       | 76       |
| siphunculus (Mesocetus) .....   | 571           | Sorex .....                      | 440      |
| Sirenia .....                   | 653           | aquaticus .....                  | 438      |
| Sireniit .....                  | 653           | breviceaudus .....               | 442      |
| Sironectes .....                | 264           | fossidens .....                  | 442      |
| anguliferus .....               | 264           | frankstounensis .....            | 441      |
| sirtalis (Coluber) .....        | 270           | fumeus .....                     | 441      |
| sirtalis (Eutania) .....        | 270           | obscurus .....                   | 441      |
| sirtalis (Thamnophis) .....     | 270           | personatus .....                 | 441      |
| Sistemodon .....                | 788           | similis .....                    | 441      |
| Sitomys .....                   | 894           | vagrans .....                    | 441      |
| americanus .....                | 894           | Soricidae .....                  | 439      |
| canadensis .....                | 894           | Soricidea .....                  | 440      |
| Sivalarctos .....               | 523           | Sorciidi .....                   | 140      |
| sivalensis (Ursus) .....        | 523           | Soricina .....                   | 440      |
| sloanii (Xenorophus) .....      | 580           | Soricinus .....                  | 434, 439 |
| Smilodon .....                  | 548           | Soricoides .....                 | 434      |
| Smilodectes .....               | 924           | Soricoides .....                 | 434      |
| gracilis .....                  | 924           | soricoides (Labidolemur) .....   | 446      |
| Smilodon .....                  | 169, 547, 548 | Soricomorpha .....               | 434      |
| californicum .....              | 548           | Spalacotheriidae .....           | 370      |
| californicus .....              | 548           | Spalacotheriinae .....           | 370      |
| fatalis .....                   | 549           | sparverius (Falco) .....         | 322      |
| floridanus .....                | 549           | Spatula .....                    | 306      |
| gracilis .....                  | 547           | clypeata .....                   | 306      |
| merceri .....                   | 547           | spatula (Platachena) .....       | 302      |
| mercerii .....                  | 547           | spatularius (Ekthonyx) .....     | 335      |
| nebrascensis .....              | 549           | speciosa (Naomichelys) .....     | 73       |
| Smilodontopsis .....            | 547           | speciosum (Hipparion) .....      | 687      |
| conardi .....                   | 547           | speciosum (Hippotherium) .....   | 687      |
| gracilis .....                  | 547           | speciosum (Neohipparion) .....   | 687      |
| mercerii .....                  | 547           | speciosus (Hippodon) .....       | 687      |
| mooreheadi .....                | 547           | speciosus (Leptomeryx) .....     | 810      |
| troglodytes .....               | 547           | speciosus (Merychippus) .....    | 687      |
| smithi (Merychys) .....         | 788           | speciosus (Mesacodon) .....      | 480      |
| smithi (Ticholeptus) .....      | 788           | speciosus (Microsops) .....      | 480      |
| snoeviana (Testudo) .....       | 104, 105      | spectabilis (Gyremys) .....      | 94       |
| snoevianus (Caryoderma) .....   | 104           | spectabilis (Leptocherus) .....  | 782      |
| snowi (Elasmosaurus) .....      | 118           | spectans (Hippidion) .....       | 698      |
| snowii (Cimoliasaurus) .....    | 120           | spectans (Hippidium) .....       | 698      |
| snowii (Cimoliasaurus) .....    | 120           | spectans (Pliohippus) .....      | 698      |
| snowii (Elasmosaurus) .....     | 118           | spectans (Protohippus) .....     | 698      |
| snyderi (Anamodon) .....        | 489           | speirianum (Tinoceras) .....     | 610      |
| snyderi (Anomodon) .....        | 489           | speirianum (Uintatherium) .....  | 619      |
| socialis (Bothrolabis) .....    | 769           | speirianus (Anaptomorphus) ..... | 445      |
| socialis (Eoporeodon) .....     | 783           | speirianus (Haplomylus) .....    | 445      |
| socialis (Hyracops) .....       | 607           | speirianus (Hyopsodus) .....     | 445      |
| socialis (Palaeocherus) .....   | 769           | speirianus (Microsops) .....     | 444      |
| socialis (Percherus) .....      | 769           | spelæa (Brachypotoma) .....      | 522      |
| socialis (Pericyon) .....       | 493           | spelæa (Neotoma) .....           | 896      |
| socialis (Thinochys) .....      | 769           | spelæa (Teonoma) .....           | 896      |
| socialis (Trigenicus) .....     | 810           | spelæum (Osmotherium) .....      | 533      |
| socius (Merychippus) .....      | 686           | spelæus (Mixophagus) .....       | 516      |
| sodalis (Aquila) .....          | 318           | spelæus (Myxophagus) .....       | 516      |
| sodalis (Mylodon) .....         | 414           | spelæus (Odocoileus) .....       | 320      |
| solaris (Crocodylus) .....      | 154           | spenceri (Monoclonius) .....     | 225      |
| Solenodon .....                 | 427           | speothen (Microtus) .....        | 896      |

|                             | Page     |                            | Page          |
|-----------------------------|----------|----------------------------|---------------|
| Speotyto                    | 351      | Squalodon                  | 580, 597, 770 |
| cunicularia                 | 351      | atlanticus                 | 581           |
| hypogaea                    | 351      | calvertensis               | 581           |
| hypugaea                    | 351      | crassus                    | 581           |
| Spermophilus                | 868      | debilis                    | 587           |
| chrysodorus                 | 869      | holmesii                   | 581           |
| douglasi                    | 871      | modestus                   | 564           |
| grammurus                   | 871      | pelagus                    | 581           |
| tridecemlineatus            | 869      | protervus                  | 770           |
| sperryi (Entoptychus)       | 877      | tiedemani                  | 581           |
| sphærodactylus (Thenaropus) | 22       | Squalodontidae             | 580           |
| Sphæropezium                | 22       | Squalodontidi              | 580           |
| thærodactylum               | 22       | Squamata                   | 240           |
| Sphargidæ                   | 68       | Squamates                  | 239           |
| Sphargidina                 | 67       | Squammata                  | 239           |
| Sphargidina                 | 68       | squankensis (Crocodylus)   | 154           |
| Sphargis                    | 68       | squankensis (Thecachampsa) | 154           |
| Sphenacodon                 | 52       | Stagodon                   | 392           |
| ferox                       | 53       | nitor                      | 392           |
| Sphenacodontidæ             | 52       | tumidus                    | 392           |
| Sphenacodontiformes         | 51       | validus                    | 392           |
| Sphenacodontina             | 52       | Stagodontidæ               | 390, 391      |
| Sphenacodontomorphi         | 46       | starri (Pithanotaria)      | 558           |
| sphenoceros (Monoclonius)   | 225      | stavelianus (Crocodylus)   | 154           |
| sphenoceros (Agathaumas)    | 225      | Steganopodes               | 289, 291      |
| sphenoceros (Monoclonius)   | 225      | Stegoceras                 | 207           |
| sphenoceros (Styracosaurus) | 225      | brevis                     | 207           |
| Sphenocœlus                 | 717      | validus                    | 208           |
| uintensis                   | 717      | Stegodon                   | 633           |
| Sphenodon                   | 131, 134 | mirificus                  | 633           |
| sphenodon (Glyptosaurus)    | 254      | Stegomastodon              | 633           |
| Sphenodontidæ               | 134      | africanæ                   | 633           |
| Sphenodontiformes           | 133      | arizonæ                    | 633           |
| Sphenodontia                | 133      | elegans                    | 633           |
| Sphenodontoidea             | 133      | merciferus                 | 633           |
| sphenodus (Hipparion)       | 686      | mirificus                  | 633           |
| sphenodus (Hippotherium)    | 686      | nebrascensis               | 633           |
| sphenodus (Merychippus)     | 686      | texanus                    | 633           |
| Sphenomeryx                 | 755      | Stegomina                  | 138           |
| quadricuspis                | 755      | Stegomosuchidæ             | 139           |
| Sphenophalos                | 840      | Stegomosuchus              | 139           |
| nevadanus                   | 840      | longipes                   | 139           |
| sphenops (Diplocynodon)     | 156      | Stegomus                   | 139           |
| sphenops (Diplocynodus)     | 156      | arcuatus                   | 139           |
| Sphenosaurus                | 149      | longipes                   | 139           |
| clavirostris                | 150      | Stegopelta                 | 232, 236      |
| spierianus (Anaptomorphus)  | 445      | landerensis                | 232           |
| Spilogale                   | 533      | Stegorhinidæ               | 599           |
| ambivalis                   | 534      | Stegosauri                 | 231, 232      |
| interrupta                  | 534      | Stegosauria                | 231           |
| perdicida                   | 534      | Stegosauridæ               | 231, 232      |
| putorius                    | 534      | Stegosauridea              | 231           |
| Spilotes                    | 289      | Stegosaurina               | 231, 232      |
| spinosus (Belosphyx)        | 590      | Stegosaurioidea            | 231           |
| spinosus (Isacanthus)       | 590      | Stegosaurioidea            | 231           |
| spinosus (Priscodelphinus)  | 590      | Stegosaurus                | 232, 233      |
| splendidus (Aspideretes)    | 109      | affinis                    | 234           |
| sponsa (Aax)                | 306      | altispinus                 | 234           |
| sponsa (Aix)                | 306      | armatus                    | 234           |
| sponsa (Anas)               | 306      | discurus                   | 234           |
| spurensis (Desmatosuchus)   | 140      | duplex                     | 234           |
| squaliceps (Hypopnous)      | 40       | longispinus                | 234           |
| squalidens (Daptophilus)    | 542      | marshi                     | 232           |
| squalidens (Deinictis)      | 542      | seeleyanus                 | 234           |
| squalidens (Dinictis)       | 542      | stenops                    | 234           |
| Squaloceti                  | 678      | stereops                   | 234           |



|   | Page     |   | Page          |
|---|----------|---|---------------|
| <i>Stegosaurus—Continued</i>                |          | <i>Stenorhynchus</i>                          | 562           |
| <i>sulcatus</i>                             | 235      | <i>Stenorhynchidæ</i>                         | 562           |
| <i>ungulatus</i>                            | 235      | <i>Stenorhynchinae</i>                        | 562           |
| <i>Stehlinus</i>                            | 447      | <i>Stenorhynchus</i>                          | 562           |
| <i>uintahensis</i>                          | 447      | <i>vetus</i>                                  | 562           |
| <i>uintensis</i>                            | 447      | <i>Stenosauria</i>                            | 188           |
| <i>steni</i> ( <i>Arctostylops</i> )        | 660      | <i>stenus</i> ( <i>Ixacanthus</i> )           | 562           |
| <i>steini</i> ( <i>Diatryma</i> )           | 283      | <i>stenus</i> ( <i>Priscodelphinus</i> )      | 562           |
| <i>stelleri</i> ( <i>Anas</i> )             | 308      | <i>Stephanosaurinae</i>                       | 217           |
| <i>stelleri</i> ( <i>Corvus</i> )           | 355      | <i>Stephanosaurus</i>                         | 213           |
| <i>stelleri</i> ( <i>Cyanocitta</i> )       | 355      | <i>casuarius</i>                              | 218           |
| <i>stelleri</i> ( <i>Eumetopias</i> )       | 558      | <i>marginatus</i>                             | 214, 218, 219 |
| <i>stelleri</i> ( <i>Hydrodamalis</i> )     | 358      | <i>Stereocephalus</i>                         | 238           |
| <i>stelleri</i> ( <i>Polysticta</i> )       | 308      | <i>tutus</i>                                  | 238           |
| <i>stelleri</i> ( <i>Rhytina</i> )          | 657, 658 | <i>Stereognathus</i>                          | 582           |
| <i>stelleri</i> ( <i>Rhytine</i> )          | 658      | <i>stereops</i> ( <i>Stegosaurus</i> )        | 234           |
| <i>Stellerus</i>                            | 657      | <i>Sterna</i>                                 | 341           |
| <i>Stemmatopus</i>                          | 581      | <i>elegans</i>                                | 342           |
| <i>cristatus</i>                            | 582      | <i>forsteri</i>                               | 342           |
| <i>Stenacodon</i>                           | 757      | <i>philadelphia</i>                           | 340           |
| <i>rarus</i>                                | 757      | <i>surinamensis</i>                           | 342           |
| <i>Steneofiber</i>                          | 582, 584 | <i>sternbergi</i> ( <i>Cardiocephalus</i> )   | 33            |
| <i>barbouri</i>                             | 582      | <i>sternbergi</i> ( <i>Cardiocephalus</i> )   | 32            |
| <i>brachyiceps</i>                          | 582      | <i>sternbergi</i> ( <i>Cardiocephalus</i> )   | 32            |
| <i>complexus</i>                            | 582      | <i>sternbergi</i> ( <i>Elamosaurus</i> )      | 118           |
| <i>fossor</i>                               | 583      | <i>sternbergi</i> ( <i>Gomphotherium</i> )    | 797           |
| <i>gradatus</i>                             | 583      | <i>sternbergi</i> ( <i>Gorgosaurus</i> )      | 178           |
| <i>hesperus</i>                             | 583      | <i>sternbergi</i> ( <i>Hierosaurus</i> )      | 239           |
| <i>montanus</i>                             | 583      | <i>sternbergi</i> ( <i>Miolabis</i> )         | 797           |
| <i>nebrascensis</i>                         | 584      | <i>sternbergi</i> ( <i>Paratylopus</i> )      | 797           |
| <i>pansus</i>                               | 583      | <i>sternbergi</i> ( <i>Poebrotherium</i> )    | 797           |
| <i>peninsulatus</i>                         | 583      | <i>sternbergi</i> ( <i>Protoneryx</i> )       | 797           |
| <i>sciuroides</i>                           | 583      | <i>sternbergi</i> ( <i>Stenodelphis</i> )     | 593           |
| <i>simplicidens</i>                         | 583      | <i>sternbergii</i> ( <i>Clidastes</i> )       | 263           |
| <i>Steneotherium</i>                        | 582      | <i>sternbergii</i> ( <i>Hierosaurus</i> )     | 239           |
| <i>Stenichnus</i>                           | 20       | <i>sternbergii</i> ( <i>Leidyosuchus</i> )    | 155           |
| <i>yakiensis</i>                            | 20       | <i>sternbergii</i> ( <i>Pentaceratops</i> )   | 230           |
| <i>stenocephalus</i> ( <i>Enhydrocyon</i> ) | 507      | <i>sternbergii</i> ( <i>Protoneryx</i> )      | 797           |
| <i>Stenodactylus</i>                        | 21       | <i>Sternella</i>                              | 347           |
| <i>curvatus</i>                             | 21       | <i>Sternidæ</i>                               | 341           |
| <i>Stenodelphinae</i>                       | 593      | <i>Sterninae</i>                              | 341           |
| <i>Stenodelphis</i>                         | 593      | <i>Steropoides</i>                            | 21            |
| <i>sternbergi</i>                           | 593      | <i>divaricatus</i>                            | 21            |
| <i>stenodon</i> ( <i>Thinosaurus</i> )      | 248      | <i>diversus</i>                               | 21            |
| <i>stenodon</i> ( <i>Tinosaurus</i> )       | 248      | <i>elegans</i>                                | 21            |
| <i>Stenogale</i>                            | 586      | <i>infelix</i>                                | 21            |
| <i>robusta</i>                              | 586      | <i>ingens</i>                                 | 21            |
| <i>stenognathus</i> ( <i>Protagonodon</i> ) | 463      | <i>loripes</i>                                | 21            |
| <i>stenolophus</i> ( <i>Mesochippus</i> )   | 675      | <i>uncus</i>                                  | 21            |
| <i>Stenomylus</i>                           | 808      | <i>Sterrhophilus</i>                          | 223, 227      |
| <i>crassipes</i>                            | 808      | <i>fiabellatus</i>                            | 228           |
| <i>gracilis</i>                             | 808      | <i>stevensi</i> ( <i>Lama</i> )               | 808           |
| <i>gracilis</i>                             | 808      | <i>stevensi</i> ( <i>Tamnoplama</i> )         | 808           |
| <i>hitchocki</i>                            | 809      | <i>stevensoniensis</i> ( <i>Eumys</i> )       | 80            |
| <i>tyleri</i>                               | 809      | <i>stevensoniensis</i> ( <i>Echinateryx</i> ) | 10            |
| <i>Stenonyx</i>                             | 21       | <i>Sthenictis</i>                             | 536           |
| <i>lateralis</i>                            | 21       | <i>dolichops</i>                              | 536           |
| <i>stenopora</i> ( <i>Toxochelys</i> )      | 87       | <i>lycopotamica</i>                           | 536           |
| <i>stenoporus</i> ( <i>Toxochelys</i> )     | 87       | <i>robustus</i>                               | 536           |
| <i>stenops</i> ( <i>Chriacus</i> )          | 461      | <i>Sthenodectes</i>                           | 714           |
| <i>stenops</i> ( <i>Clidastes</i> )         | 263      | <i>incisivus</i>                              | 714           |
| <i>stenops</i> ( <i>Stegosaurus</i> )       | 234      | <i>Stiharus</i>                               | 758           |
| <i>stenops</i> ( <i>Tinoceras</i> )         | 619      | <i>montanus</i>                               | 758           |
| <i>stenops</i> ( <i>Uintatherium</i> )      | 619      | <i>obtusilobus</i>                            | 758           |
| <i>stenopsis</i> ( <i>Cionodon</i> )        | 214      | <i>quadriceps</i>                             | 758           |
| <i>Stenopterygius</i>                       | 128, 129 | <i>stigeri</i> ( <i>Aceratherium</i> )        | 744           |

|                                    | Page     |                                    | Page          |
|------------------------------------|----------|------------------------------------|---------------|
| stigeri (Metacampopis) .....       | 745      | Stypolophus—Continued              |               |
| storchii (Omorhamphus) .....       | 283      | brevicolcarabus .....              | 478           |
| strangulatus (Diastichus) .....    | 723      | edax .....                         | 477           |
| strata (Isocampe) .....            | 15       | gracilis .....                     | 478           |
| strenua (Sinopa) .....             | 477      | hians .....                        | 476           |
| strenuus (Stypolophus) .....       | 477      | insectivorus .....                 | 476           |
| strenuus (Taphrasphys) .....       | 75       | major .....                        | 476           |
| strenuus (Taphrosphys) .....       | 75       | multicuspus .....                  | 477           |
| strepera (Anas) .....              | 305      | pungens .....                      | 477           |
| streperus (Chaulelasmus) .....     | 305      | rapax .....                        | 477           |
| Strepsirrhini .....                | 918      | secundarius .....                  | 477           |
| striatula (Zygoramma) .....        | 91       | strenuus .....                     | 477           |
| striatus (Bolosaurus) .....        | 37       | verus .....                        | 474, 477      |
| striatus (Docodon) .....           | 375      | viverrinus .....                   | 477           |
| striatus (Pantosaurus) .....       | 121      | vorax .....                        | 477           |
| striatus (Platygonus) .....        | 773      | whitae .....                       | 478           |
| striatus (Tamias) .....            | 873      | whitiae .....                      | 478           |
| stricta (Chelydrops) .....         | 86       | Styracosaurus .....                | 225           |
| Striges .....                      | 348      | albertensis .....                  | 225           |
| Strigide .....                     | 348, 349 | sphenocerus .....                  | 225           |
| strigidens (Hoplophoneus) .....    | 545      | subaequans (Bothrolabis) .....     | 769           |
| Strigiformes .....                 | 348      | subaequans (Desmathyus) .....      | 769           |
| Strigine .....                     | 348, 349 | subaequans (Palaeochœrus) .....    | 769           |
| Strigomorphæ .....                 | 348      | subaequans (Perchoerus) .....      | 769           |
| Strix .....                        | 348, 349 | subaequans (Thinchyus) .....       | 769           |
| flammeus .....                     | 351      | Subhyracodon .....                 | 735, 740      |
| Struthiomimus .....                | 182, 185 | copei .....                        | 740           |
| altus .....                        | 182      | gidleyi .....                      | 741           |
| grandis .....                      | 183      | metalophum .....                   | 741           |
| tenius .....                       | 183      | metalophus .....                   | 741           |
| struthionoides (Palæonornis) ..... | 359      | mitis .....                        | 742           |
| sturdevanti (Anomalopus) .....     | 4        | occidentalis .....                 | 741           |
| Sturnella .....                    | 357      | proavitus .....                    | 743           |
| magna .....                        | 357      | quadriplicatus .....               | 735           |
| neglecta .....                     | 357      | simplicidens .....                 | 743           |
| Stylæcodon .....                   | 373      | tridactylus .....                  | 743           |
| gracilis .....                     | 373      | trigonodus .....                   | 743           |
| validus .....                      | 373      | sublatus (Crocodylus) .....        | 154           |
| Stylæcodontidæ .....               | 372      | subquadrata (Euprotogonia) .....   | 603           |
| Stylemys .....                     | 100      | subquadratus (Coryphodon) .....    | 616           |
| calaverensis .....                 | 101      | subquadratus (Protogonia) .....    | 603           |
| capax .....                        | 101      | subquadratus (Protogonodon) .....  | 603           |
| conspicua .....                    | 101      | subquadratus (Tetraclænodon) ..... | 603           |
| nebrascensis .....                 | 101      | subsquadratus (Aspideretes) .....  | 109           |
| niobrarensis .....                 | 104      | substriata (Alamosemys) .....      | 91            |
| oregonensis .....                  | 101      | substriata (Adocus) .....          | 91            |
| Styliodon .....                    | 400      | substriata (Alamosemys) .....      | 91            |
| cylindrifer .....                  | 401      | subtapiroides (Mastodon) .....     | 637           |
| mirus .....                        | 401      | subtrigonus (Tricentes) .....      | 463           |
| Styliodontidæ .....                | 399      | subulatus (Crocodylus) .....       | 154           |
| Styliodontinæ .....                | 399      | subulatus (Crocodylus) .....       | 154           |
| Styliodontini .....                | 399      | subulatus (Ichthyosuchus) .....    | 154           |
| Styliodontidæ .....                | 399      | subulatus (Myotis) .....           | 454           |
| Stylodon .....                     | 373, 400 | subulatus (Myotis) .....           | 454           |
| Stylodontidæ .....                 | 373, 399 | subulatus (Vespertilio) .....      | 454           |
| stylodontus (Merychippus) .....    | 684      | Subungulata .....                  | 613, 614      |
| Stylonodon .....                   | 400      | successor (Anancus) .....          | 632           |
| Stylonus .....                     | 684      | successor (Mastodon) .....         | 632           |
| calamarius .....                   | 684      | Suchoprius .....                   | 172           |
| isonesus .....                     | 685      | sulacodus .....                    | 172           |
| relictus .....                     | 686      | cyphodon .....                     | 172           |
| severus .....                      | 686      | sulcidens .....                    | 172           |
| Stypolophus .....                  | 473, 478 | Suidæ .....                        | 761, 762, 766 |
| aculeatus .....                    | 478      | Suiformes .....                    | 753           |
| agilis .....                       | 478      | Suina .....                        | 753, 761, 766 |
| brevicalcaratus .....              | 478      | Suine .....                        | 767           |

|                              | Page     |                            | Page     |
|------------------------------|----------|----------------------------|----------|
| Sula                         | 291, 292 | sursiplana (Balænoptera)   | 575      |
| atlantica                    | 291      | Sus                        | 766      |
| loxostyla                    | 291      | americana                  | 861      |
| willetti                     | 292      | Sustenodactylus            | 21       |
| sulcata (Taxidea)            | 535      | curvatus                   | 21       |
| sulcatus (Antrodemus)        | 174      | swainsoni (Buteo)          | 316      |
| sulcatus (Camelops)          | 805      | sycceras (Megacerops)      | 720      |
| sulcatus (Centemodon)        | 145      | Sycium                     | 899      |
| sulcatus (Holomeniscus)      | 805      | cloacinum                  | 899      |
| sulcatus (Labrosaurus)       | 174      | sydenensis (Palæosauropus) | 7        |
| sulcatus (Leptotragulus)     | 812      | sydnensis (Baropezia)      | 7        |
| sulcatus (Palæosaurus)       | 145      | sydnensis (Sauropus)       | 7        |
| sulcatus (Palæosaurus)       | 145      | Syllomus                   | 80       |
| sulcatus (Parameryx)         | 812      | crispatus                  | 80       |
| sulcatus (Phenacodus)        | 806      | sylvaticum (Lophiotherium) | 671      |
| sulcatus (Prochionias)       | 75       | sylvaticus (Amnippus)      | 671      |
| sulcatus (Stegosaurus)       | 235      | sylvaticus (Lepus)         | 864      |
| sulcatus (Tanolabis)         | 384      | sylvaticus (Orohippus)     | 671      |
| sulcatus (Taphrophys)        | 75       | sylvestre (Agathaumas)     | 231      |
| sulcatus (Triceratops)       | 230      | sylvestre (Dromatherium)   | 368      |
| sulcidens (Mylodon)          | 414      | sylvestre (Dromotherium)   | 368      |
| sulcidens (Suchoprion)       | 172      | sylvestris (Agathaumas)    | 222, 231 |
| sulciferus (Crocodilus)      | 164      | sylvestris (Bison)         | 852      |
| sulciferus (Crocodylus)      | 154      | sylvestris (Glyptosaurus)  | 254      |
| sulcifrons (Pleurolicus)     | 877      | sylvestris (Harpalodon)    | 463, 485 |
| Sulidæ                       | 291      | sylvestris (Miacid)        | 485      |
| Sulides                      | 291      | Sylvilagus                 | 864      |
| Sulinæ                       | 291      | auduboni                   | 864      |
| Suloidæ                      | 291      | audubonii                  | 864      |
| sumani (Merychippus)         | 686      | bachmani                   | 864      |
| Suoidæ                       | 761      | cinerascens                | 864      |
| Suoidea                      | 761      | floridanus                 | 864      |
| supaiensis (Tridentichnus)   | 22       | palustris                  | 864      |
| superba (Meleagris)          | 380      | pix                        | 864      |
| superbum (Archæotherium)     | 762      | Symbordon                  | 718      |
| superbum (Elotherium)        | 762      | montanus                   | 718      |
| superbum (Protitanotherium)  | 715      | Symborodon                 | 718, 720 |
| superbus (Amphicyon)         | 511      | acer                       | 718      |
| superbus (Daphanodon)        | 508      | altirostris                | 718      |
| superbus (Daphanodon)        | 508      | hucen                      | 722      |
| superbus (Daphænus)          | 509      | copei                      | 718      |
| superbus (Meleagris)         | 380      | hypoceras                  | 722      |
| superbus (Merycochoerus)     | 785      | montanus                   | 718      |
| superbus (Paracotylops)      | 785      | torvus                     | 718      |
| superbus (Paramys)           | 903      | Symbos                     | 846      |
| superbus (Promerycochoerus)  | 785      | australis                  | 847      |
| superbus (Pseudotomus)       | 903      | cavifrons                  | 847      |
| superbiliosus (Aphelops)     | 748      | promptus                   | 847      |
| superbiliosus (Peraoeras)    | 749      | tyrelli                    | 847      |
| superbiliosus (Phytosaurus)  | 142      | tyrelli                    | 847      |
| superbiliosus (Teleoeras)    | 748      | Symmetrodonta              | 370      |
| superior (Dolichorhinus)     | 716      | Symphypoda                 | 169      |
| superior (Mesatirhinus)      | 716      | Symphypophus               | 198      |
| superstes (Amphidon)         | 371      | musculosus                 | 192      |
| superstes (Eotocion)         | 606      | viemala                    | 201      |
| supremus (Camarasaurus)      | 191      | viemala                    | 201      |
| supremus (Camarosaurus)      | 191      | Symphysosaurus             | 193      |
| supremus (Hadrohyus)         | 791      | Synapsida                  | 22, 45   |
| supremus (Merychippus)       | 698      | Synaptomys                 | 899      |
| supremus (Morosaurus)        | 191      | annexus                    | 899      |
| supremus (Pliohippus)        | 698      | australis                  | 899      |
| supremus (Protohippus)       | 698      | borealis                   | 899      |
| surgens (Heloura)            | 14       | cooperi                    | 899      |
| surinamensis (Chlidonias)    | 342      | Synconodon                 | 296      |
| surinamensis (Hydrochelidon) | 342      | sexcuspis                  | 296      |
| surinamensis (Sterna)        | 342      |                            |          |

|                         | Page          |                             | Page     |
|-------------------------|---------------|-----------------------------|----------|
| Syndyoceras             | 814           | Tapendæ                     | 727      |
| cooki                   | 814           | Taphrasphys                 | 75       |
| Synoplotherium          | 468, 469      | strenuus                    | 75       |
| lanius                  | 469           | Taphrosaurus                | 121      |
| vorax                   | 469           | lockwoodi                   | 121      |
| syntheticus (Adocus)    | 90            | Taphrosphys                 | 74       |
| Synthliboramphus        | 344           | dares                       | 74       |
| antiquus                | 344           | leslianus                   | 75       |
| Syrnium                 | 348           | longinuchus                 | 75       |
| Systemodon              | 687, 688, 726 | molops                      | 75       |
| etsagicus               | 689           | nodosus                     | 75       |
| primævus                | 726           | strenuus                    | 75       |
| protapirinus            | 726           | sulcatus                    | 75       |
| semhians                | 727           | tapiacitis (Meniscotherium) | 607      |
| tapirinus               | 689           | Tapiravus                   | 729      |
| tabensis (Polymastodon) | 384           | rarus                       | 729      |
| Tæniodonta              | 397           | validus                     | 729      |
| Tæniodontia             | 398           | Tapirella                   | 731      |
| Tæniolabis              | 383, 384      | haysi                       | 731      |
| sulcatus                | 384           | Tapiridæ                    | 723, 727 |
| Tagassu                 | 773, 775      | Tapiri                      | 728      |
| lenis                   | 775           | Tapirina                    | 727      |
| tetragonus              | 773           | Tapirine                    | 728      |
| Tagassuidæ              | 770           | Tapirini                    | 728      |
| tajacu (Tayassu)        | 775           | tapirinum (Hyacotherium)    | 689      |
| Taligra                 | 609           | tapirinus (Eohippus)        | 689      |
| Talpa                   | 436           | tapirinus (Orohippus)       | 689      |
| incerta                 | 438           | tapirinus (Systemodon)      | 689      |
| platybrachys            | 438           | Tapiroidea                  | 723      |
| Talpavidæ               | 435           | Tapiroidea                  | 723      |
| Talpavus                | 434           | tapiroides (Mastodon)       | 636      |
| nitidus                 | 434           | tapiroides (Tetracaulodon)  | 636      |
| Talpidæ                 | 435           | tapiroides (Tracaulodon)    | 636      |
| Talpina                 | 435           | Tapiomorpha                 | 723      |
| Talpinæ                 | 435           | Tapirulus                   | 724      |
| Talpini                 | 435           | Tapirus                     | 729, 730 |
| talpivorus (Aphelophis) | 263           | americanus                  | 731      |
| talpoides (Cricetus)    | 373           | californicus                | 731      |
| talpoides (Thomomys)    | 373           | haysi                       | 731      |
| Tamias                  | 369, 372      | haysii                      | 731      |
| ohrysoideus             | 369           | merriami                    | 731      |
| levidens                | 373           | tarijensis                  | 731      |
| nasutus                 | 373           | tennesseæ                   | 731      |
| striatus                | 373           | terrestris                  | 731      |
| Tamiasciurus            | 374           | veroensis                   | 731      |
| hudsonicus              | 374           | Tarandus                    | 323      |
| Tamidiæ                 | 368           | tarandus (Cervus)           | 323      |
| Tanaodon                | 372           | tarandus (Rangifer)         | 324      |
| agilis                  | 372           | Tardigrada                  | 403      |
| Tantalus                | 397           | tardus (Agomphus)           | 191      |
| tantalus (Pliohippus)   | 698           | tarijensis (Tapirus)        | 731      |
| tantillus (Plastomenus) | 107           | Tarsidæ                     | 925      |
| Tanupolama              | 308           | Tarsiformes                 | 924      |
| stevensi                | 308           | Tarsiidæ                    | 924, 925 |
| Tanyops                 | 729           | Tarsiini                    | 924      |
| undans                  | 729           | Tarsioidea                  | 924      |
| Tanyorhinus             | 716           | Tarsioidea                  | 924, 925 |
| blairi                  | 716           | Tarsius                     | 925      |
| bridgeri                | 716           | Tarsodactylus               | 21       |
| harundivorax            | 716           | caudatus                    | 21       |
| Tanystropheus           | 186           | expansus                    | 21       |
| bauri                   | 186           | Tarsoplectrus               | 19       |
| longicollis             | 186           | angustus                    | 19       |
| willistoni              | 186           | elgans                      | 19       |
| taoensis (Polymastodon) | 384           | Tathiodon                   | 372      |
|                         |               | agilis                      | 372      |

|                                   | Page               |                                   | Page     |
|-----------------------------------|--------------------|-----------------------------------|----------|
| Tatu                              | 410                | Teleoceras— <i>Continued</i>      |          |
| Tatusia                           | 415, 416           | major                             | 749, 750 |
| tatusia ( <i>Metacheiromys</i> )  | 422                | malacorhinus                      | 747      |
| Tatusiidae                        | 415                | medicorhinus                      | 750      |
| Tatusinae                         | 416                | minor                             | 750      |
| tau ( <i>Equus</i> )              | 703, 709           | proterius                         | 750      |
| Taurotragus                       | 838                | supercilius                       | 748      |
| americanus                        | 839                | Teleoceratinae                    | 748      |
| Taxeopoda                         | 601                | Teleodus                          | 720      |
| Taxidea                           | 534                | avus                              | 720      |
| americana                         | 535                | Teleopterus                       | 809      |
| nevadensis                        | 535                | orientalis                        | 809      |
| robusta                           | 535                | Teleorhinus                       | 147      |
| sulcata                           | 535                | browni                            | 147      |
| taxus                             | 535                | Teleorhinus                       | 147      |
| Taxideinae                        | 534                | Telmalestes                       | 922      |
| Taxidinae                         | 534                | crassus                           | 922      |
| taxoides ( <i>Elurodon</i> )      | 496, 507           | Telmatherium                      | 712, 713 |
| taxoides ( <i>Euoplocyon</i> )    | 507                | accola                            | 714      |
| taxus ( <i>Altippus</i> )         | 682                | advocata                          | 714      |
| taxus ( <i>Meles</i> )            | 535                | advocatum                         | 714      |
| taxus ( <i>Parahippus</i> )       | 682                | altidens                          | 714      |
| taxus ( <i>Taxidea</i> )          | 535                | boreale                           | 712      |
| taxus ( <i>Ursus</i> )            | 535                | cornutum                          | 715      |
| Taxymys                           | 904                | cultridens                        | 714      |
| lucaris                           | 904                | diplocnum                         | 717      |
| Tayassidae                        | 770                | hyomathum                         | 716      |
| Tayassinae                        | 769                | incisivum                         | 714      |
| Tayassu                           | 771, 775, 774, 775 | marshii                           | 714      |
| hesperius                         | 775                | megarhinum                        | 718      |
| lenis                             | 775                | ultimum                           | 714      |
| nasutus                           | 774                | validum                           | 714      |
| obtusidens                        | 774                | vallidens                         | 714      |
| pennsylvanicus                    | 774                | Telmatocyon                       | 473      |
| serus                             | 771                | riparius                          | 474      |
| tajacu                            | 775                | Telmatolestes                     | 922      |
| tetragonus                        | 773                | crassus                           | 922      |
| Tayassuidae                       | 769                | Telmatornis                       | 324      |
| Tayassuinae                       | 769                | affinis                           | 324      |
| Tayassus                          | 771, 774, 775      | priscus                           | 324      |
| hesperius                         | 775                | rex                               | 324      |
| nasutus                           | 774                | Telmatotherium                    | 712, 713 |
| serus                             | 771                | boreale                           | 712      |
| tetragonus                        | 773                | cornutum                          | 716      |
| taylori ( <i>Bison</i> )          | 852                | temerarius ( <i>Canis</i> )       | 494      |
| taylori ( <i>Citellus</i> )       | 869                | temerarius ( <i>Mylohyus</i> )    | 774      |
| taylori ( <i>Trigonia</i> )       | 740                | temerarius ( <i>Tephrocyon</i> )  | 494      |
| Tecophora                         | 69                 | temminckii ( <i>Macrochelys</i> ) | 85       |
| tectulus ( <i>Lestosauros</i> )   | 261                | temminckii ( <i>Chelone</i> )     | 85       |
| tectulus ( <i>Platycarpus</i> )   | 261                | temminckii ( <i>Chelonura</i> )   | 85       |
| tehonense ( <i>Hipparion</i> )    | 692                | temminckii ( <i>Chelydra</i> )    | 85       |
| tehonense ( <i>Neohipparion</i> ) | 692                | temminckii ( <i>Macrochelys</i> ) | 85       |
| tehonensis ( <i>Prothippus</i> )  | 689                | temminckii ( <i>Macrolemmys</i> ) | 85       |
| tehuano ( <i>Dicrocerus</i> )     | 832                | temminckii ( <i>Macrolemmys</i> ) | 85       |
| tehuano ( <i>Merycodus</i> )      | 832                | temminckii ( <i>Macrochelys</i> ) | 85       |
| Telaodon                          | 396                | Temnoctyon                        | 493, 506 |
| lavis                             | 396                | altigenis                         | 506      |
| praetans                          | 396                | coryphaeus                        | 493      |
| Telemetacarpalia                  | 816                | ferox                             | 506      |
| Teleoceras                        | 749                | percussor                         | 506      |
| bicornutus                        | 750                | venator                           | 506      |
| crassus                           | 747                | wallovianus                       | 506      |
| feliceis                          | 749                | temnodon ( <i>Cynodontis</i> )    | 491      |
| fossiger                          | 749                | temnodon ( <i>Palaeolagus</i> )   | 866      |
| hicksi                            | 750                | Tennotrionyx                      | 112      |
| jemezianus                        | 747                | manducans                         | 112      |

|                                   | Page     |                                | Page       |
|-----------------------------------|----------|--------------------------------|------------|
| temporalis (Merycochoerus) .....  | 785      | Terrapene—Continued            |            |
| tenax (Dryolestes) .....          | 373      | putnami .....                  | 99         |
| tenebrosus (Crocodilus) .....     | 149      | singletoni .....               | 99         |
| tenebrosus (Holops) .....         | 149      | whitneyi .....                 | 99         |
| tenebrosus (Notharctus) .....     | 923      | Tetraphene .....               | 98         |
| tenebrosus (Thoracosaurus) .....  | 149      | terrenus (Arctoryctes) .....   | 429        |
| tener (Leptacodon) .....          | 432      | terrestris (Emys) .....        | 98         |
| tener (Ichthyornis) .....         | 232      | terrestris (Palæotheca) .....  | 96         |
| Tenrecidæ .....                   | 427      | terrestris (Tapirus) .....     | 731        |
| Tenrecoidæ .....                  | 426      | tertius (Merychippus) .....    | 685        |
| tenuiceps (Mylodon) .....         | 414      | teste (Coryphodon) .....       | 618        |
| tenuidens (Sciurus) .....         | 375      | testis (Coryphodon) .....      | 616        |
| tenuipes (Yalavis) .....          | 360      | Testudina .....                | 65         |
| tenuirostris (Microconodon) ..... | 368      | Testudinæ .....                | 99         |
| tenuirostris (Micronodon) .....   | 368      | Testudinata .....              | 64, 99     |
| tenuirostris (Tyttonus) .....     | 368      | Testudinea .....               | 99         |
| tenuis (Batodon) .....            | 392      | testudinea (Echmatemys) .....  | 96         |
| tenuis (Grallator) .....          | 13       | testudinea (Emys) .....        | 96         |
| tenuis (Ictops) .....             | 430      | testudinea (Notomorphia) ..... | 96         |
| tenuis (Miolabis) .....           | 796      | Testudinei .....               | 99         |
| tenuis (Ornithomimus) .....       | 183      | Testudinix .....               | 83         |
| tenuis (Platypterna) .....        | 19       | Testudinina .....              | 83         |
| tenuis (Struthiomimus) .....      | 183      | Testudines .....               | 64         |
| tenuissimus (Harpedactylus) ..... | 13       | Testudinidæ .....              | 83, 98, 99 |
| tenuitectus (Bolbodon) .....      | 35       | Testudininae .....             | 99         |
| Teonoma .....                     | 895      | Testudo .....                  | 101, 102   |
| cinerea .....                     | 895      | amphithorax .....              | 102        |
| occidentalis .....                | 895      | angusticeps .....              | 104        |
| spæa .....                        | 898      | anna .....                     | 102        |
| Tephrocyon .....                  | 494, 509 | arenivaga .....                | 102        |
| confertus .....                   | 510      | atascosa .....                 | 101        |
| hippophagus .....                 | 509, 510 | brevisterna .....              | 102        |
| kelloggi .....                    | 494      | brontops .....                 | 103        |
| marshi .....                      | 510      | campester .....                | 103        |
| mortifer .....                    | 510      | corsoni .....                  | 100        |
| rurestris .....                   | 494      | crassiscutata .....            | 103        |
| scitulus .....                    | 510      | culbertsoni .....              | 101        |
| temerarius .....                  | 494      | cultrata .....                 | 103        |
| vafer .....                       | 495      | cyclopygia .....               | 104        |
| Teratormithidæ .....              | 313      | distans .....                  | 103        |
| Teratornis .....                  | 313      | edæ .....                      | 103        |
| merriami .....                    | 313      | emiliæ .....                   | 103        |
| teres (Cosoryx) .....             | 818      | equicomæ .....                 | 103        |
| teres (Dicrocerus) .....          | 818      | exornata .....                 | 103        |
| teres (Iguanavus) .....           | 246      | farri .....                    | 108        |
| teres (Meryodius) .....           | 818      | ferox .....                    | 112        |
| teres (Paleomeryx) .....          | 818      | francisi .....                 | 103        |
| Terminonaris .....                | 147      | gilberti .....                 | 108        |
| terrærubræ (Meniscotherium) ..... | 607      | gilbertii .....                | 103        |
| terrærubræ (Meniscotherium) ..... | 607      | hadriana .....                 | 100        |
| Terrapene .....                   | 98       | hayi .....                     | 103        |
| anguillulata .....                | 98       | hexagonata .....               | 103        |
| anguillulatus .....               | 99       | hollandi .....                 | 103        |
| antipex .....                     | 98       | impensa .....                  | 103        |
| bulverda .....                    | 98       | incisa .....                   | 103        |
| canaliculata .....                | 98       | inuitata .....                 | 103        |
| carolina .....                    | 98       | kletiana .....                 | 103        |
| clausa .....                      | 98       | laticaudata .....              | 104        |
| eurypygia .....                   | 98, 99   | laticuneæ .....                | 104        |
| formosa .....                     | 99       | ligonia .....                  | 104        |
| impressa .....                    | 99       | lucæ .....                     | 104        |
| innoxia .....                     | 99       | mohavensis .....               | 104        |
| longinsula .....                  | 99       | munda .....                    | 104        |
| marzocchi .....                   | 99       | mydas .....                    | 88         |
| putnami .....                     | 99       |                                |            |

|  | Page     |  | Page     |
|--|----------|--|----------|
| <i>Testudo</i> —Continued                  |          | <i>tetradactylus</i> ( <i>Dolichopodus</i> )   | 10       |
| <i>nebrascensis</i>                        | 101      | <i>tetradactylus</i> ( <i>Ornithichnites</i> ) | 20       |
| <i>niobrarenensis</i>                      | 104      | <i>tetradactylus</i> ( <i>Sillimanius</i> )    | 20       |
| <i>obtusa</i>                              | 104      | <i>tetragonus</i> ( <i>Mylohyus</i> )          | 773      |
| <i>ocalana</i>                             | 104      | <i>tetragonus</i> ( <i>Platygonus</i> )        | 773      |
| <i>orthopygia</i>                          | 104      | <i>tetragonus</i> ( <i>Tagasu</i> )            | 773      |
| <i>osborniana</i>                          | 104      | <i>tetragonus</i> ( <i>Tayassu</i> )           | 773      |
| <i>oweni</i>                               | 101      | <i>tetragonus</i> ( <i>Tayassus</i> )          | 773      |
| <i>pansa</i>                               | 104      | <i>Tetralophodon</i>                           | 630, 634 |
| <i>peragrans</i>                           | 104      | <i>barbouri</i>                                | 635      |
| <i>pertenuis</i>                           | 104      | <i>campester</i>                               | 635      |
| <i>polyphemus</i>                          | 101      | <i>euhypodon</i>                               | 636      |
| <i>præxtans</i>                            | 104      | <i>giganteum</i>                               | 637      |
| <i>quadrata</i>                            | 104      | <i>ligoniferus</i>                             | 637      |
| <i>sellardsi</i>                           | 105      | <i>precampester</i>                            | 638      |
| <i>snoviana</i>                            | 104, 105 | <i>Tetrameryx</i>                              | 836      |
| <i>thomsoni</i>                            | 105      | <i>shuleri</i>                                 | 836      |
| <i>turgida</i>                             | 105      | <i>Tetrao</i>                                  | 325      |
| <i>uintensis</i>                           | 105      | <i>californica</i>                             | 327      |
| <i>unabuna</i>                             | 105      | <i>californicus</i>                            | 327      |
| <i>undabuna</i>                            | 105      | <i>obscurus</i>                                | 325      |
| <i>undata</i>                              | 105      | <i>virginianus</i>                             | 327      |
| <i>vaga</i>                                | 105      | <i>Tetronotus</i>                              | 325, 328 |
| <i>Tetoni</i>                              | 920      | <i>Tetraonina</i>                              | 325      |
| <i>ambiguus</i>                            | 929      | <i>texanum</i> ( <i>Glyptotherium</i> )        | 421      |
| <i>homunculus</i>                          | 929      | <i>texanum</i> ( <i>Nothrotherium</i> )        | 406      |
| <i>musculus</i>                            | 929      | <i>texanus</i> ( <i>Anchippus</i> )            | 682      |
| <i>rex</i>                                 | 929      | <i>texanus</i> ( <i>Bison</i> )                | 852      |
| <i>Tetrabelodon</i>                        | 631, 634 | <i>texanus</i> ( <i>Canis</i> )                | 500      |
| <i>abeli</i>                               | 635      | <i>texanus</i> ( <i>Dromomeryx</i> )           | 820      |
| <i>andium</i>                              | 631      | <i>texanus</i> ( <i>Parahippus</i> )           | 682      |
| <i>brevicens</i>                           | 635      | <i>texanus</i> ( <i>Platygonus</i> )           | 773      |
| <i>campester</i>                           | 635      | <i>texanus</i> ( <i>Stegomastodon</i> )        | 633      |
| <i>campestre</i>                           | 635      | <i>texensis</i> ( <i>Geomys</i> )              | 879      |
| <i>cimarronis</i>                          | 636      | <i>texensis</i> ( <i>Trichosaurus</i> )        | 59       |
| <i>dinothioides</i>                        | 636, 638 | <i>texensis</i> ( <i>Trispyndylus</i> )        | 60       |
| <i>euhypodon</i>                           | 636      | <i>texianus</i> ( <i>Elephas</i> )             | 647      |
| <i>euhypodon</i>                           | 636      | <i>textilis</i> ( <i>Nodosaurus</i> )          | 236      |
| <i>floridanus</i>                          | 636      | <i>therodactylum</i> ( <i>Spharodactylum</i> ) | 22       |
| <i>giganteus</i>                           | 637      | <i>therodactylum</i> ( <i>Spharoposium</i> )   | 22       |
| <i>lulli</i>                               | 637      | <i>Thalactos</i>                               | 521      |
| <i>osborni</i>                             | 637      | <i>maritimus</i>                               | 521      |
| <i>obscurus</i>                            | 637      | <i>Thalassaretus</i>                           | 521      |
| <i>præcursor</i>                           | 638      | <i>Thalassemide</i>                            | 75       |
| <i>proavus</i>                             | 638      | <i>Thalassemyde</i>                            | 75       |
| <i>productus</i>                           | 638      | <i>Thalassemydide</i>                          | 75       |
| <i>serridens</i>                           | 636, 639 | <i>Thalassemydoides</i>                        | 75, 81   |
| <i>shepardii</i>                           | 639      | <i>Thalassemyde</i>                            | 75       |
| <i>willistoni</i>                          | 639      | <i>Thalassurus</i>                             | 342      |
| <i>Tetracaulodon</i>                       | 635      | <i>elegans</i>                                 | 342      |
| <i>bucklandi</i>                           | 635      | <i>Thalassochella</i>                          | 83       |
| <i>haysii</i>                              | 635      | <i>carotta</i>                                 | 83       |
| <i>kochii</i>                              | 635      | <i>Thalassochelys</i>                          | 82       |
| <i>mastodontoides</i>                      | 637      | <i>carotta</i>                                 | 83       |
| <i>ohiotium</i>                            | 638, 639 | <i>corticata</i>                               | 83       |
| <i>osagei</i>                              | 635      | <i>Thalattosaurus</i>                          | 341, 368 |
| <i>tapiroides</i>                          | 635      | <i>Thalattosauromorphi</i>                     | 341      |
| <i>tetracaulodon</i> ( <i>Mastodon</i> )   | 635      | <i>Thalattosauride</i>                         | 341      |
| <i>tetracaulodon</i> ( <i>Missourium</i> ) | 637      | <i>Thalattosauroides</i>                       | 341      |
| <i>Tetraceratops</i>                       | 56       | <i>Thalattosaurus</i>                          | 341      |
| <i>insignis</i>                            | 56       | <i>alexandri</i>                               | 341      |
| <i>Tetraclenodon</i>                       | 603      | <i>perrini</i>                                 | 341      |
| <i>minor</i>                               | 603      | <i>shastensis</i>                              | 341      |
| <i>puercensis</i>                          | 603      | <i>Thamnophis</i>                              | 370      |
| <i>subquadratus</i>                        | 603      | <i>sirtalis</i>                                | 370      |

|                                     | Page               |                                   | Page     |
|-------------------------------------|--------------------|-----------------------------------|----------|
| tharus (Polyborus) .....            | 321                | Thinocyon—Continued               |          |
| Thecachamps .....                   | 151, 152           | medius .....                      | 474      |
| antiqua .....                       | 153                | minimus .....                     | 474      |
| contusor .....                      | 153                | mustelinus .....                  | 474      |
| marylandica .....                   | 154                | velox .....                       | 474      |
| rugosa .....                        | 154                | Thinohyus .....                   | 768      |
| sericodon .....                     | 154                | antiquus .....                    | 768      |
| sicaria .....                       | 154                | decedens .....                    | 769      |
| squankensis .....                   | 154                | lentus .....                      | 768      |
| Thecodontia .....                   | 187, 188           | minor .....                       | 768      |
| Thecodontosauri .....               | 188                | osmonti .....                     | 768      |
| Thecodontosauria .....              | 188                | pristinus .....                   | 768      |
| Thecodontosauridæ .....             | 189                | rostratus .....                   | 769      |
| Thecodontosaurus .....              | 188, 189, 189      | siouxensis .....                  | 770      |
| fraserianus .....                   | 172                | socialis .....                    | 769      |
| gibbidens .....                     | 169                | subæquans .....                   | 769      |
| polyzelus .....                     | 169                | trichænus .....                   | 769      |
| Thecophora .....                    | 69                 | Thinolestes .....                 | 922      |
| Thenaropus .....                    | 8, 22              | anceps .....                      | 922      |
| heterodactylus .....                | 9                  | Thinopus .....                    | 22       |
| leptodactylus .....                 | 22                 | antiquus .....                    | 22       |
| macnaughtoni .....                  | 22                 | Thinosaurus .....                 | 251      |
| ovoidactylus .....                  | 22                 | agilis .....                      | 252      |
| pachydactylus .....                 | 22                 | crassus .....                     | 252      |
| spherodactylus .....                | 22                 | grandis .....                     | 252      |
| theodori (Bathyglyptus) .....       | 45                 | lepidus .....                     | 243      |
| Theranopus .....                    | 22                 | leptodus .....                    | 252      |
| macnaughtoni .....                  | 22                 | paucidens .....                   | 252      |
| Therapsida .....                    | 60, 61             | stenodon .....                    | 243      |
| Thereturus .....                    | 135                | Thinothorium .....                | 776      |
| antiquus .....                      | 135                | annulatum .....                   | 776      |
| Theria .....                        | 385                | Thiocyon .....                    | 474      |
| Theriodontia .....                  | 51, 60, 61         | medius .....                      | 474      |
| theristocaulodon (Missourium) ..... | 228                | Thlædon .....                     | 391      |
| theristocaulodon (Missurium) .....  | 227                | padanicus .....                   | 391      |
| Therocephalia .....                 | 61                 | Thlædontidæ .....                 | 390      |
| Theromora .....                     | 28, 29, 40, 51, 52 | thomasi (Trionyx) .....           | 107      |
| Theromorpha .....                   | 48, 61             | thomasi (Plastomenus) .....       | 107      |
| Therophagi .....                    | 168                | Thomomys .....                    | 877      |
| Theropleura .....                   | 47, 50             | beecheyi .....                    | 878      |
| grandis .....                       | 50                 | bottæ .....                       | 878      |
| obtusidens .....                    | 50                 | bulbivorous .....                 | 878      |
| retroversa .....                    | 50                 | clausius .....                    | 878      |
| triangulata .....                   | 50                 | fuscus .....                      | 878      |
| uniformis .....                     | 47                 | leucodon .....                    | 877, 878 |
| Theropoda .....                     | 167                | mieron .....                      | 878      |
| Theropsida .....                    | 61                 | monticola .....                   | 878      |
| Therosauria .....                   | 208, 208           | monticolus .....                  | 878      |
| Thescelosaurus .....                | 207                | occipitalis .....                 | 878      |
| Thescelosaurus .....                | 207                | orientalis .....                  | 878      |
| neglectus .....                     | 207                | paleocens .....                   | 878      |
| warreni .....                       | 207                | scudderi .....                    | 878      |
| Thescelus .....                     | 73                 | talpoides .....                   | 878      |
| insiliens .....                     | 73                 | thompsoni (Ictops) .....          | 481      |
| rapiens .....                       | 73                 | thomsoni (Alligator) .....        | 157      |
| repiens .....                       | 73                 | thomsoni (Cynodesmus) .....       | 492      |
| Thespesius .....                    | 212, 215           | thomsoni (Eutypomys) .....        | 882      |
| agilis .....                        | 215                | thomsoni (Ictops) .....           | 481      |
| edmontoni .....                     | 212                | thomsoni (Promerycochoerus) ..... | 785      |
| occidentalis .....                  | 212                | thomsoni (Testudo) .....          | 105      |
| saskatchewanensis .....             | 213                | thooides (Cynodesmus) .....       | 492      |
| Thinobadistes .....                 | 414                | Thoracosauri .....                | 149      |
| segnis .....                        | 414                | Thoracosauridæ .....              | 149      |
| Thinocyon .....                     | 474                | Thoracosaurus .....               | 149      |
| cladensis .....                     | 474                | basiffusus .....                  | 149      |



|  | Page          |   | Page     |
|--|---------------|---|----------|
| <i>Thoracosaurus—Continued</i>                   |               | <i>Tinoceras—Continued</i>                          |          |
| <i>basitruncatus</i> .....                       | 149           | <i>distans</i> .....                                | 618      |
| <i>brevispinus</i> .....                         | 149           | <i>galeatus</i> .....                               | 620      |
| <i>brinispinus</i> .....                         | 150           | <i>grandis</i> .....                                | 618      |
| <i>cordatus</i> .....                            | 149           | <i>hians</i> .....                                  | 618      |
| <i>dekayi</i> .....                              | 150           | <i>ingens</i> .....                                 | 618      |
| <i>gualialis</i> .....                           | 150           | <i>jugum</i> .....                                  | 618      |
| <i>glyptodon</i> .....                           | 150           | <i>lacustre</i> .....                               | 619      |
| <i>grandis</i> .....                             | 150           | <i>latum</i> .....                                  | 619      |
| <i>meirsanus</i> .....                           | 150           | <i>longiceps</i> .....                              | 619      |
| <i>mullicensis</i> .....                         | 150           | <i>pugnax</i> .....                                 | 619      |
| <i>neocessariensis</i> .....                     | 150           | <i>speirianum</i> .....                             | 619      |
| <i>obscurus</i> .....                            | 150           | <i>stenops</i> .....                                | 619      |
| <i>pneumaticus</i> .....                         | 150           | <i>vagans</i> .....                                 | 619      |
| <i>tenebrosus</i> .....                          | 149           | <i>Tinoceridæ</i> .....                             | 617      |
| <i>Thryosternum</i> .....                        | 93            | <i>Tinoceros</i> .....                              | 617      |
| <i>Thryptacodon</i> .....                        | 462           | <i>Tinodon</i> .....                                | 370      |
| <i>antiquus</i> .....                            | 462           | <i>bellus</i> .....                                 | 371      |
| <i>olseni</i> .....                              | 462           | <i>ferox</i> .....                                  | 370      |
| <i>pseudarctos</i> .....                         | 462           | <i>lepidus</i> .....                                | 371      |
| <i>Thylacodon</i> .....                          | 396           | <i>robustus</i> .....                               | 370      |
| <i>pusillus</i> .....                            | 396           | <i>Tinodontidæ</i> .....                            | 370      |
| <i>Thyreophora</i> .....                         | 231           | <i>Tinodontinae</i> .....                           | 370      |
| <i>Thyreophoridae</i> .....                      | 231           | <i>Tinopus</i> .....                                | 22       |
| <i>tichoceras</i> ( <i>Brontotherium</i> ) ..... | 721           | <i>antiquus</i> .....                               | 22       |
| <i>tichoceras</i> ( <i>Megacerops</i> ) .....    | 721           | <i>Tinosaurus</i> .....                             | 248      |
| <i>Ticholeptus</i> .....                         | 787, 789      | <i>lepidus</i> .....                                | 248      |
| <i>bannackensis</i> .....                        | 789           | <i>pristinus</i> .....                              | 248      |
| <i>brachymelis</i> .....                         | 790           | <i>stenodon</i> .....                               | 248      |
| <i>breviceps</i> .....                           | 790           | <i>tisonensis</i> ( <i>Onychodectes</i> ) .....     | 398      |
| <i>harrisonensis</i> .....                       | 787           | <i>titanelix</i> ( <i>Peratherium</i> ) .....       | 398      |
| <i>hypsoodus</i> .....                           | 790           | <i>Titanoides</i> .....                             | 613      |
| <i>petersoni</i> .....                           | 790           | <i>primævus</i> .....                               | 613      |
| <i>smithi</i> .....                              | 788           | <i>titanopelopatidus</i> ( <i>Eubrontes</i> ) ..... | 12       |
| <i>zygomatius</i> .....                          | 790           | <i>Titanophis</i> .....                             | 287      |
| <i>Tichosteus</i> .....                          | 186           | <i>Titanops</i> .....                               | 712, 722 |
| <i>æquifacies</i> .....                          | 186           | <i>borealis</i> .....                               | 712      |
| <i>lucasanus</i> .....                           | 187           | <i>curtus</i> .....                                 | 722      |
| <i>tiedemani</i> ( <i>Squalodon</i> ) .....      | 581           | <i>elatus</i> .....                                 | 722      |
| <i>tigrina</i> ( <i>Patriofelis</i> ) .....      | 472           | <i>medius</i> .....                                 | 722      |
| <i>tigrina</i> ( <i>Protopsalis</i> ) .....      | 472           | <i>Titanotheria</i> .....                           | 711      |
| <i>tigrinus</i> ( <i>Patriofelis</i> ) .....     | 472           | <i>Titanosaurus</i> .....                           | 194      |
| <i>Tillodonta</i> .....                          | 853           | <i>immanis</i> .....                                | 194      |
| <i>Tillodonti</i> .....                          | 854           | <i>Titanotheridæ</i> .....                          | 717      |
| <i>Tillodontia</i> .....                         | 397, 854      | <i>Titanotheriidæ</i> .....                         | 717      |
| <i>Tillodontidæ</i> .....                        | 355, 854      | <i>Titanotheriini</i> .....                         | 717      |
| <i>Tillomys</i> .....                            | 904           | <i>Titanotheroides</i> .....                        | 711      |
| <i>lucaris</i> .....                             | 904           | <i>Titanotherioidea</i> .....                       | 711      |
| <i>parvidens</i> .....                           | 904           | <i>Titanotheriomys</i> .....                        | 888, 891 |
| <i>parvus</i> .....                              | 804, 904, 905 | <i>vetulior</i> .....                               | 891      |
| <i>plicatus</i> .....                            | 905           | <i>Titanotherium</i> .....                          | 718      |
| <i>senex</i> .....                               | 905           | <i>dispar</i> .....                                 | 721      |
| <i>Tillotheridæ</i> .....                        | 855           | <i>elatum</i> .....                                 | 722      |
| <i>Tillotheriidæ</i> .....                       | 855           | <i>giganteum</i> .....                              | 719      |
| <i>Tillotheriinae</i> .....                      | 855           | <i>heloceras</i> .....                              | 719      |
| <i>Tillotherium</i> .....                        | 855           | <i>helocerus</i> .....                              | 719      |
| <i>fodiens</i> .....                             | 856           | <i>ingens</i> .....                                 | 719      |
| <i>hyracoides</i> .....                          | 856           | <i>platyceras</i> .....                             | 722      |
| <i>latidens</i> .....                            | 856           | <i>prouti</i> .....                                 | 719      |
| <i>timida</i> ( <i>Chrysemys</i> ) .....         | 96            | <i>proutii</i> .....                                | 719      |
| <i>Tinoceras</i> .....                           | 617           | <i>robustum</i> .....                               | 721      |
| <i>affine</i> .....                              | 618           | <i>trigoniae</i> .....                              | 719      |
| <i>anceps</i> .....                              | 618           | <i>trigonoceras</i> .....                           | 719      |
| <i>annectens</i> .....                           | 618           | <i>trigonocerus</i> .....                           | 349      |
| <i>cornutus</i> .....                            | 620           | <i>Titanotheroidea</i> .....                        | 711      |
| <i>crassifrons</i> .....                         | 618           |   |          |

|                                | Page     |                             | Page     |
|--------------------------------|----------|-----------------------------|----------|
| Tito                           | 348      | Toxochelys—Continued        |          |
| pratincola                     | 348      | bauri                       | 86       |
| tlascalæ (Rhynchotherium)      | 639      | brachyrhina                 | 86       |
| tlascalæ (Rhynchotherium)      | 639      | elkader                     | 86       |
| tlaxcalæ (Gomphotherium)       | 639      | latiremis                   | 86       |
| tlaxcalæ (Rhynchotherium)      | 639      | procax                      | 87       |
| trascalæ (Rhynchotherium)      | 639      | serrifer                    | 87       |
| tolmanensis (Cheneosaurus)     | 217      | stenopora                   | 87       |
| Tomaretus                      | 509      | stenoporus                  | 87       |
| brevirostris                   | 509      | toxodon (Megalonix)         | 410      |
| confertus                      | 510      | Toxodontia                  | 660      |
| hippophagus                    | 510      | Tracaulodon                 | 625      |
| marshi                         | 510      | godetmani                   | 625      |
| mortifer                       | 510      | koahie                      | 625      |
| optatus                        | 510      | tapiroides                  | 625      |
| scitulus                       | 510      | Trachemys                   | 97       |
| Tomiosaurus                    | 45       | bisornata                   | 97       |
| casei                          | 45       | delicata                    | 97       |
| Tomioipsis                     | 417      | euglypha                    | 97       |
| ferruminatus                   | 417      | hilli                       | 97       |
| Tomistoma                      | 148, 149 | jarmani                     | 97       |
| americana                      | 149      | nuchocarinata               | 97       |
| americanum                     | 149      | petrolei                    | 97       |
| Tomistomida                    | 148      | sculpta                     | 97       |
| Tomitherium                    | 921      | trulla                      | 97       |
| affine                         | 922      | Trachodon                   | 209, 213 |
| rostratum                      | 923      | altidens                    | 210      |
| tutum                          | 921      | annectens                   | 212      |
| Toniornis                      | 279      | breviceps                   | 211      |
| altus                          | 279      | calamarius                  | 211      |
| Toretocnemus                   | 125      | cavatus                     | 209      |
| californicus                   | 125      | foulkii                     | 209      |
| Torosauridæ                    | 220      | longiceps                   | 211      |
| Torosaurus                     | 225      | marginatus                  | 212      |
| gladius                        | 225      | minor                       | 209      |
| latus                          | 226      | mirabilis                   | 211      |
| Tortecnemus                    | 126      | paucidens                   | 214      |
| torquatus (Colymbus)           | 224      | pentagonus                  | 211      |
| torquatus (Dicrostonyx)        | 220      | perangulatus                | 211      |
| torrejonensis (Compsemys)      | 89       | tripos                      | 209      |
| torrejonensis (Macherosanurus) | 256      | selwyni                     | 212      |
| torrejonensis (Plastomenus)    | 107      | Trachodontia                | 208      |
| torridus (Onychomys)           | 292      | Trachodontidæ               | 208, 209 |
| torta (Marmota)                | 271      | Trachodontina               | 208, 209 |
| tortor (Clidastes)             | 263      | trachops (Choneziphius)     | 283      |
| tortor (Platocarpus)           | 263      | Trachyceratops              | 221      |
| tortulus (Megalonix)           | 410      | Trachydermi                 | 252      |
| tortus (Castor)                | 284      | Trachydon                   | 110      |
| tortus (Dipoides)              | 284      | Tragoceras                  | 239      |
| tortus (Eucautor)              | 284      | Tragoceros                  | 239      |
| torvus (Menodus)               | 718      | Tragocerus                  | 239      |
| torvus (Symborodon)            | 718      | Tragulidæ                   | 215      |
| Torycholes                     | 86       | tragulina                   | 215      |
| latiremis                      | 86       | traguloideæ                 | 215      |
| Totanus                        | 337      | traguloidea                 | 215      |
| melanoleucas                   | 338      | tragulus (Machseromeryx)    | 217      |
| townsendi (Scalops)            | 479      | transiens (Oryzopsis)       | 271      |
| townsendi (Urocyon)            | 503      | transmontanus (Leptomeryx)  | 210      |
| townsendii (Lepus)             | 263      | transmontanus (Miolabis)    | 796      |
| Toxichnus                      | 22       | transmontanus (Protolabis)  | 796      |
| inaequalis                     | 22       | transversus (Heteromeryx)   | 213      |
| Toxochelydæ                    | 86       | transversus (Hypertragulus) | 213      |
| Toxochelydina                  | 86       | transversus (Paradaphenus)  | 506      |
| Toxochelydæ                    | 86       | Tremarctina                 | 517, 522 |
| Toxochelys                     | 86       | Tremarctos                  | 521, 522 |

|                              | Page     |                                 | Page          |
|------------------------------|----------|---------------------------------|---------------|
| Tremarctotherium             | 521      | Tricleidus                      | 119           |
| californicum                 | 521      | laramiensis                     | 119           |
| simum                        | 522      | Triconodon                      | 369           |
| trepida (Platypeltis)        | 112      | bisulcus                        | 369           |
| trepidus (Callospermophilus) | 370      | ferox                           | 370           |
| Tretosphys                   | 589      | Triconodonta                    | 369           |
| gabbii                       | 589      | Triconodontia                   | 369           |
| Tretulias                    | 573      | Triconodontidae                 | 369           |
| buccatus                     | 573      | Triconodontinae                 | 369           |
| Triacodon                    | 476, 478 | tricostatus (Hypertragulus)     | 813           |
| aculeatus                    | 476      | tricuspe (Peratherium)          | 393           |
| fallax                       | 478      | tricuspis (Didelphis)           | 383           |
| fallox                       | 478      | tridactylum (Acatherium)        | 743           |
| grandis                      | 477, 479 | tridactylum (Diceratherium)     | 743           |
| nanus                        | 479      | tridactylus (Barypodus)         | 7             |
| Triænopus                    | 22       | tridactylus (Cænopus)           | 741, 742, 743 |
| baileyanus                   | 22       | tridactylus (Leptacatherium)    | 743           |
| baileyi                      | 22       | tridactylus (Subhyracodon)      | 743           |
| leptodactylus                | 22       | tridecemlineatus (Citellus)     | 869           |
| triangulata (Theropleura)    | 50       | tridecemlineatus (Sciurus)      | 869           |
| Tribelesodontidae            | 103      | tridecemlineatus (Spermophilus) | 869           |
| tricarnata (Baptomys)        | 92       | Tridentichnus                   | 22            |
| tricarinata (Dermatemys)     | 92       | supaiensis                      | 22            |
| Tricentes                    | 462      | Tridentipes                     | 21            |
| crassicollellens             | 462      | ingens                          | 21            |
| subtrigonus                  | 462      | insignis                        | 21            |
| Triceratops                  | 227      | unus                            | 21            |
| alticornis                   | 228      | trifidus (Hylomys)              | 16            |
| atticornis                   | 228      | trifidus (Ornithoides)          | 16            |
| brevicornis                  | 228      | trifrons (Agrioceros)           | 778           |
| brevicornus                  | 228      | Trigonieus                      | 810           |
| calicormis                   | 228      | nummifer                        | 810           |
| calicornis                   | 228      | socialis                        | 810           |
| elatus                       | 228      | Trigonomias                     | 739           |
| flabellatus                  | 228      | figginsi                        | 740           |
| galeus                       | 229      | gregoryi                        | 740           |
| galicornis                   | 228      | hypostylus                      | 740           |
| horridus                     | 229      | nanolophus                      | 742           |
| ingens                       | 229      | osborni                         | 740, 742      |
| obtusus                      | 229      | paucidentis                     | 740           |
| prorsus                      | 229      | precepei                        | 740           |
| recurvicornis                | 223      | preoccidentalis                 | 740           |
| serratus                     | 230      | secundus                        | 740           |
| sulcatus                     | 230      | taylori                         | 740           |
| Triceratopus                 | 227      | wellsi                          | 740           |
| trichæus (Bothrolabis)       | 769      | trigonomias (Titanotherium)     | 719           |
| trichæus (Palaeoceros)       | 769      | trigonocephalus (Eporeodon)     | 793           |
| trichæus (Periceros)         | 769      | trigonoceus (Menodus)           | 719           |
| trichæus (Thinohys)          | 769      | trigonoceus (Titanotherium)     | 719           |
| Trichasaurus                 | 59       | trigonoceus (Titanotherium)     | 719           |
| texensis                     | 59       | trigonodus (Leptacatherium)     | 741           |
| Trichechidae                 | 559, 558 | trigonodus (Cænopus)            | 741           |
| Trichechiformes              | 558      | trigonodus (Polycodus)          | 921           |
| Trichechina                  | 559      | Trigonolestes                   | 753, 756      |
| Trichechini                  | 559      | brachystomus                    | 756           |
| Trichocheus                  | 559, 558 | chaceusis                       | 756           |
| antiquus                     | 556      | etragicus                       | 753, 756      |
| divergens                    | 560      | metisicus                       | 756           |
| giganteus                    | 559      | nuptus                          | 756           |
| latirostris                  | 559      | secans                          | 756           |
| mannatus                     | 559      | Trigonoleptidae                 | 433           |
| obesus                       | 560      | trigonostylus (Mecichippus)     | 675           |
| rosmarus                     | 560      | Trihamus                        | 23            |
| Trichecidæ                   | 559      | elegans                         | 23            |
| Trhecina                     | 559      | magnus                          | 23            |
| Trichosaurus                 | 59       | trihedron (Antrodemus)          | 174           |

|                                 | Page     |                                   | Page               |
|---------------------------------|----------|-----------------------------------|--------------------|
| trihedron (Dryptosaurus) .....  | 174      | Trionychii .....                  | 105, 107           |
| trihedron (Laelaps) .....       | 174      | Trionychiidae .....               | 107                |
| trihedron (Megalosaurus) .....  | 174      | Trionychum .....                  | 105, 107           |
| trihedrus (Clorhynchus) .....   | 216      | Trionychoidae .....               | 105                |
| Trisodon .....                  | 465      | Trionychoides .....               | 105                |
| bichumatus .....                | 465      | trionychoides (Anosteira) .....   | 113                |
| gaudriani .....                 | 465      | trionychoides (Anostura) .....    | 113                |
| gaudryani .....                 | 465      | trionychoides (Plastomenus) ..... | 113                |
| heilprinianus .....             | 465, 466 | trionychoides (Platypeltis) ..... | 113                |
| quivrensis .....                | 465      | Trionycidae .....                 | 105, 107           |
| Trisodontidae .....             | 465      | Trionycidae .....                 | 107                |
| Trisodontinae .....             | 465      | Trionyx .....                     | 107, 108, 110, 112 |
| trilateralis (Dierocerus) ..... | 510      | admirabilis .....                 | 110                |
| trilateralis (Merycodus) .....  | 510      | aëquus .....                      | 110                |
| trilateralis (Paleomeryx) ..... | 516      | baiei .....                       | 110                |
| trilobatus (Phenacodus) .....   | 605      | cariosus .....                    | 110                |
| Trilophodon .....               | 624, 634 | cellulosus .....                  | 111                |
| abeli .....                     | 635      | coalescens .....                  | 108                |
| breviens .....                  | 635      | concentricus .....                | 111                |
| campester .....                 | 635      | ciassus .....                     | 111                |
| cinarronis .....                | 635      | egregius .....                    | 111                |
| edensis .....                   | 631      | ferox .....                       | 112                |
| euhypodon .....                 | 636      | foveatus .....                    | 108                |
| euphyodon .....                 | 636      | franciscæ .....                   | 111                |
| floridanus .....                | 636      | guttatus .....                    | 109                |
| giganteus .....                 | 637      | halophilus .....                  | 111                |
| hicksi .....                    | 631      | heteroglytus .....                | 112                |
| leidii .....                    | 637      | leptonitus .....                  | 108                |
| ligoniferus .....               | 637      | leucopotamicus .....              | 112                |
| lulli .....                     | 637      | lima .....                        | 111                |
| morrilli .....                  | 637      | minus .....                       | 111                |
| obscurus .....                  | 637      | pennatus .....                    | 631                |
| osborni .....                   | 637      | prixeus .....                     | 111                |
| paludentatum .....              | 637      | punctiger .....                   | 112                |
| philippi .....                  | 637      | radula .....                      | 111                |
| pojanquensis .....              | 637      | salebrosus .....                  | 111                |
| præcursor .....                 | 637      | seutumantiquum .....              | 111                |
| prævus .....                    | 638      | serinus .....                     | 112                |
| productus .....                 | 638      | singularis .....                  | 109                |
| serridens .....                 | 635, 639 | thomasi .....                     | 107                |
| shepardi .....                  | 631, 639 | tritor .....                      | 111                |
| simplicidens .....              | 639      | uintaensis .....                  | 111                |
| tulli .....                     | 637      | vagus .....                       | 108, 109, 110      |
| willstoni .....                 | 639      | ventricosus .....                 | 111                |
| Trilophodontidae .....          | 623      | virginianus .....                 | 111                |
| Trilophosaurus .....            | 36       | Trioracodon .....                 | 360                |
| buettneri .....                 | 36       | bicaeus .....                     | 369                |
| trilophus (Adjidaumo) .....     | 381      | triplex (Palaeolagus) .....       | 366                |
| trilophus (Adjidaumus) .....    | 381      | triplex (Xiphopeza) .....         | 23                 |
| trilophus (Gymnonycthus) .....  | 381      | Triplopidae .....                 | 734                |
| Trinaeromerium .....            | 117      | Triplopodidae .....               | 734                |
| anonymum .....                  | 117      | Triplopodinae .....               | 734                |
| bentonianum .....               | 117      | Triplopus .....                   | 735, 734, 735      |
| latimanus .....                 | 117      | annarorum .....                   | 735                |
| osborni .....                   | 117      | cubitalis .....                   | 735                |
| Tringa .....                    | 332, 337 | grangeri .....                    | 735                |
| alpina .....                    | 337      | obliquidens .....                 | 735                |
| bella .....                     | 338      | tripos (Hadrosaurus) .....        | 209                |
| Tringaria .....                 | 337      | tripos (Trachodon) .....          | 309                |
| Tringina .....                  | 337      | Tripriodon .....                  | 332                |
| Trionidae .....                 | 107      | caperatus .....                   | 332                |
| Trionyes .....                  | 105, 107 | colatus .....                     | 332                |
| Trionychia .....                | 105      | Trisodon .....                    | 465                |
| Trionychidae .....              | 105      | trispondylus .....                | 69, 604            |
| Trionychidae .....              | 107      | texensis .....                    | 59                 |
| Trionychidae .....              | 107      |                                   |                    |

|                                      | Page |                                  | Page     |
|--------------------------------------|------|----------------------------------|----------|
| Tritemnodon .....                    | 478  | turbatans (Ammobatrachus) .....  | 2        |
| agile .....                          | 478  | turgida (Testudo) .....          | 105      |
| agilis .....                         | 478  | turgidunculus (Mioclenus) .....  | 608      |
| whitiae .....                        | 478  | turgidus (Agomphus) .....        | 91       |
| tritior (Amyda) .....                | 111  | turgidus (Mioclenus) .....       | 008      |
| tritior (Aspidonectes) .....         | 111  | turgidus (Palaeolagus) .....     | 886      |
| tritior (Trionyx) .....              | 111  | turriculorum (Tintianus) .....   | 927      |
| Trituberculata .....                 | 371  | tutum (Tomitherium) .....        | 921      |
| Trituberculati .....                 | 371  | tutus (Euoplocephalus) .....     | 238      |
| troglydites (Smilodontopsis) .....   | 547  | tutus (Euoplocephalus) .....     | 238      |
| Trogolemur .....                     | 447  | tutus (Euoplocephalus) .....     | 238      |
| myodes .....                         | 447  | tutus (Pelycodus) .....          | 921      |
| myoides .....                        | 447  | tutus (Sterecephalus) .....      | 238      |
| Trogostus .....                      | 855  | tyleri (Megacerops) .....        | 721      |
| Trogosus .....                       | 855  | tyleri (Parahippus) .....        | 682      |
| castoridens .....                    | 855  | tyleri (Stenomylus) .....        | 809      |
| minor .....                          | 855  | Tylopoda .....                   | 791      |
| vetulus .....                        | 855  | Tylopodidae .....                | 791      |
| Troodontidae .....                   | 207  | Tylosaurinae .....               | 258      |
| Troodon .....                        | 207  | Tylosaurus .....                 | 258      |
| brevis .....                         | 207  | congruus .....                   | 259      |
| formosus .....                       | 207  | dyspelor .....                   | 259      |
| validus .....                        | 207  | laticaudus .....                 | 259      |
| tropicum (Mammut) .....              | 632  | micromus .....                   | 259      |
| tiopicus (Anancus) .....             | 632  | neprolieus .....                 | 259      |
| tropicus (Cordillarion) .....        | 632  | perlatus .....                   | 259      |
| tropicus (Dibelodon) .....           | 632  | proriger .....                   | 259      |
| tropicus (Mastodon) .....            | 632  | rapax .....                      | 259      |
| Tropidonotus .....                   | 270  | sectorius .....                  | 259      |
| troessartianus (Ptilodus) .....      | 380  | Tylosteus .....                  | 239      |
| troessartianus (Ptilodus) .....      | 380  | ornatus .....                    | 239      |
| troxelli (Peraceras) .....           | 748  | tympanicus (Platecarpus) .....   | 261      |
| Trucifelis .....                     | 648  | Tympanuchus .....                | 326      |
| fatalis .....                        | 648  | lulli .....                      | 326      |
| floridanus .....                     | 648  | pallidicinctus .....             | 326      |
| trulla (Trachemys) .....             | 97   | pallidicinctus (Cupidonia) ..... | 326      |
| truncatus (Chriacus) .....           | 461  | typhoidus (Buteo) .....          | 316      |
| truquianum (Aceratherium) .....      | 745  | typicus (Equus) .....            | 703      |
| truquianum (Diceratherium) .....     | 745  | typicus (Orohippus) .....        | 671      |
| truquianus (Cænopus) .....           | 745  | Typopus .....                    | 23       |
| tryptychus (Pantylus) .....          | 45   | abnormis .....                   | 23       |
| tuberatus (Anchisauripus) .....      | 3    | gracilis .....                   | 23       |
| tuberatus (Brontozoum) .....         | 3    | Typothoracidae .....             | 138      |
| tuberatus (Eubrontes) .....          | 3    | Typothorax .....                 | 138      |
| tuberculatus (Bottosaurus) .....     | 158  | occelinarum .....                | 138      |
| tuberculatus (Glyptosaurus) .....    | 254  | typus (Bathrodon) .....          | 450      |
| tuberculatus (Helodermoides) .....   | 254  | typus (Ichthyomys) .....         | 891      |
| tuberculatus (Pontobasiliscus) ..... | 571  | typus (Microsops) .....          | 450      |
| tuberosa (Cybele) .....              | 8    | typus (Pheacocelus) .....        | 789      |
| tuberosa (Neptunochelys) .....       | 78   | Tyrannosauridae .....            | 174, 179 |
| tuberosa (Protostega) .....          | 77   | Tyrannosaurinae .....            | 179      |
| tuberosus (Anchisauripus) .....      | 3    | Tyrannosaurus .....              | 179      |
| tuberosus (Eubrontes) .....          | 3    | amplus .....                     | 180      |
| tubifer (Aceratherium) .....         | 745  | rex .....                        | 180      |
| tubifer (Anchisodon) .....           | 745  | tyrannus (Limnotherium) .....    | 921      |
| tubifer (Cænopus) .....              | 745  | tyrannus (Notharctus) .....      | 923      |
| Tubinares .....                      | 287  | tyrelli (Ovibos) .....           | 847      |
| tuitus (Citellus) .....              | 369  | tyrelli (Saphoceros) .....       | 847      |
| tulli (Trilophodon) .....            | 887  | tyrelli (Saphoceros) .....       | 847      |
| tumidus (Hadrianus) .....            | 100  | tyrelli (Syndus) .....           | 847      |
| tumidus (Stagodon) .....             | 392  | Tyttloconus .....                | 593      |
| Tupain .....                         | 461  | Tyttloconus .....                | 593      |
| Tupaioidea .....                     | 461  | tenuicostis .....                | 593      |
| Tupaiaidæ .....                      | 461  | tysonii (Zarhachis) .....        | 596      |
| Tupajidæ .....                       | 461  | Tyto .....                       | 348      |
| Tupavidæ .....                       | 461  | perinta .....                    | 348      |

|                          | Page |                           | Page     |
|--------------------------|------|---------------------------|----------|
| Tyto—Continued           |      | uintense (Achanodon)      | 761      |
| pratincola               | 348  | uintense (Elotherium)     | 761      |
| Tytonidae                | 348  | uintense (Protelotherium) | 761      |
| Uceratherium             | 844  | uintense (Prothyracon)    | 785      |
| Uintacolotherium         | 619  | uintensis (Achanodon)     | 762      |
| blaynei                  | 619  | uintensis (Anptomorphus)  | 824      |
| Uintacyon                | 484  | uintensis (Dromocyon)     | 469      |
| acutus                   | 484  | uintensis (Echmatemys)    | 96       |
| bathygnaethus            | 484  | uintensis (Epihippus)     | 672      |
| brevirostris             | 486  | uintensis (Epitriplopus)  | 735      |
| canavus                  | 486  | uintensis (Harpagolestes) | 469      |
| edax                     | 484  | uintensis (Homogalax)     | 727      |
| jugulans                 | 484  | uintensis (Hyopsodus)     | 444      |
| major                    | 484  | uintensis (Manteceras)    | 715      |
| massetericus             | 484  | uintensis (Mesonyx)       | 489      |
| promierodon              | 485  | uintensis (Miacis)        | 435      |
| pugnax                   | 486  | uintensis (Microsops)     | 924      |
| rudis                    | 484  | uintensis (Notharctus)    | 924      |
| scotti                   | 484  | uintensis (Notomompha)    | 96       |
| vorax                    | 484  | uintensis (Omomys)        | 924      |
| vulpinus                 | 485  | uintensis (Orohippus)     | 672      |
| Uintacyonidae            | 481  | uintensis (Paramys)       | 903      |
| uintaensis (Trionyx)     | 111  | uintensis (Prodaphenus)   | 485      |
| uintahensis (Stehlinius) | 447  | uintensis (Sphenocaulus)  | 717      |
| Uintanius                | 927  | uintensis (Stehlinius)    | 447      |
| turriculorum             | 927  | uintensis (Testudo)       | 105      |
| uintanus (Aminippus)     | 671  | Uintornis                 | 358      |
| uintanus (Orohippus)     | 671  | lucaris                   | 358      |
| uintanus (Orotherium)    | 671  | Ulias                     | 573      |
| Uintasaurus              | 192  | moratus                   | 573      |
| douglasi                 | 192  | ulta (Patriofelis)        | 472, 478 |
| Uintasorex               | 446  | ultimus (Telmatherium)    | 714      |
| parvulus                 | 446  | ultimus (Archaeohippus)   | 688      |
| Uintatheridae            | 617  | ultimus (Eucomodon)       | 379      |
| Uintatheriidae           | 617  | ultimus (Leurospondylus)  | 119      |
| Uintatherium             | 617  | ultimus (Manteceras)      | 718      |
| affine                   | 618  | ultimus (Miohippus)       | 688      |
| agreste                  | 618  | ultimus (Paleosyops)      | 718      |
| alticeps                 | 618  | ultimus (Parahippus)      | 688      |
| anceps                   | 618  | umbellus (Bonasa)         | 335      |
| annectens                | 618  | umbellus (Tetrao)         | 385      |
| cornutum                 | 620  | umbrosus (Cathartes)      | 313      |
| crassifrons              | 618  | umbrosus (Paleoborus)     | 313      |
| cuneum                   | 618  | umbrosus (Vultur)         | 313      |
| distans                  | 618  | unabunda (Testudo)        | 105      |
| grande                   | 618  | Uncoia                    | 547, 558 |
| hians                    | 618  | inexpectata               | 558      |
| ingens                   | 618  | merceri                   | 547      |
| jugum                    | 618  | uncus (Steropoides)       | 21       |
| lacustre                 | 619  | uncus (Tridentipes)       | 21       |
| laticeps                 | 619  | undabuna (Testudo)        | 105      |
| latifrons                | 619  | undans (Paramys)          | 909      |
| latum                    | 619  | undans (Sciuravus)        | 909      |
| leidlanum                | 619  | undans (Tanyops)          | 729      |
| leidyanum                | 619  | undata (Baena)            | 73       |
| longiceps                | 619  | undata (Testudo)          | 105      |
| lucare                   | 619  | undatum (Chiermon)        | 78       |
| mirabile                 | 619  | unguifer (Barillopus)     | 6        |
| princeps                 | 619  | unguifer (Baropus)        | 6        |
| pugnax                   | 619  | unguifer (Paleosauropus)  | 20       |
| reflexum                 | 619  | unguifer (Pseudobradypus) | 20       |
| robustum                 | 619  | unguifer (Sauropus)       | 20       |
| segne                    | 619  | Ungulata                  | 600      |
| spelrianum               | 619  | Ungulati                  | 600      |
| stenops                  | 619  | ungulatus (Stegosaurus)   | 234, 235 |
| vagans                   | 619  | unicornis (Cranioceas)    | 840      |

|                                       | Page     |  | Page          |
|---------------------------------------|----------|--|---------------|
| unicum (Epoicotherium) .....          | 422      | vaga (Testudo) .....                     | 105           |
| unicum (Xenotherium) .....            | 422      | vagans (Aspideretes) .....               | 109           |
| uniformis (Paleosaurus) .....         | 47       | vagans (Homacodon) .....                 | 754           |
| uniformis (Poliosaurus) .....         | 47       | vagans (Limopus) .....                   | 16            |
| uniformis (Theropleura) .....         | 47       | vagans (Macelognathus) .....             | 187           |
| unipedale (Diacium) .....             | 255      | vagans (Palaeotringa) .....              | 338           |
| unipedalis (Cremastosaurus) .....     | 255      | vagans (Phalacrocorax) .....             | 338           |
| unipedalis (Platyrrhachis) .....      | 255      | vagans (Tinoceras) .....                 | 619           |
| uræus (Priscodelphinus) .....         | 592      | vagans (Trionyx) .....                   | 108, 109, 110 |
| Uria .....                            | 343      | vagans (Untatherium) .....               | 619           |
| affinis .....                         | 343      | vagans (Xestops) .....                   | 255           |
| antiqua .....                         | 343      | vagrans (Hesperhys) .....                | 771           |
| Uriine .....                          | 343      | vagrans (Sorex) .....                    | 441           |
| Urinator .....                        | 224      | vagus (Limnopis) .....                   | 15            |
| Urocyon .....                         | 503      | vagus (Omomys) .....                     | 926           |
| californicus .....                    | 503      | vagus (Palaeocodon) .....                | 929           |
| cinereoargenteus .....                | 503      | vagus (Parahysus) .....                  | 762           |
| cinereoargenteus .....                | 503      | valens (Antrodemus) .....                | 184           |
| latidentatus .....                    | 503      | valens (Didelphis) .....                 | 394           |
| townsendi .....                       | 503      | valens (Megalosaurus) .....              | 174           |
| virginianus .....                     | 503      | valens (Octacodon) .....                 | 759           |
| Uronaites .....                       | 121      | valens (Paurodon) .....                  | 371           |
| Uronautes .....                       | 121      | valens (Poecilopleuron) .....            | 174           |
| cetiformis .....                      | 121      | validum (Brontosourum) .....             | 3             |
| urophasianus (Centrocerus) .....      | 326      | validum (Telmatherium) .....             | 714           |
| Ursavus .....                         | 518      | validus (Ælurodon) .....                 | 495           |
| pawniensis .....                      | 518      | validus (Belodon) .....                  | 143, 145      |
| Ursida .....                          | 517      | validus (Brontops) .....                 | 721           |
| Ursidæ .....                          | 516, 517 | validus (Clidastes) .....                | 284           |
| ursidens (Anacodon) .....             | 464      | validus (Eohippus) .....                 | 669           |
| Ursina .....                          | 517      | validus (Helohysus) .....                | 761           |
| Ursine .....                          | 517      | validus (Ichthyornis) .....              | 282           |
| Ursini .....                          | 517      | validus (Macheroptomopis) .....          | 144           |
| Ursinidæ .....                        | 517      | validus (Megalonyx) .....                | 410           |
| ursinus (Ælurodon) .....              | 518      | validus (Mesohippus) .....               | 677           |
| ursinus (Amphicyon) .....             | 518      | validus (Miohippus) .....                | 677           |
| ursinus (Canis) .....                 | 518      | validus (Nectoporthicus) .....           | 264           |
| ursinus (Dinocyon) .....              | 518      | validus (Phytosaurus) .....              | 142, 145      |
| ursinus (Hemicyon) .....              | 518      | validus (Protopirus) .....               | 729           |
| ursinus (Pliocyon) .....              | 518      | validus (Rhytidodon) .....               | 145           |
| ursivalis (Protentomodon) .....       | 435      | validus (Rutiodon) .....                 | 142, 145      |
| Uro-Canidi .....                      | 488      | validus (Stagodon) .....                 | 392           |
| Ursoidæ .....                         | 488      | validus (Stegoceras) .....               | 208           |
| Ursus .....                           | 518, 521 | validus (Stylacodon) .....               | 373           |
| americanus .....                      | 520      | validus (Tapiravus) .....                | 729           |
| amplidens .....                       | 519      | validus (Troödon) .....                  | 208           |
| arctos .....                          | 520      | valisineria (Marila) .....               | 307           |
| floridanus .....                      | 520      | vallidens (Mantecoceras) .....           | 714           |
| haplodon .....                        | 522      | vallidens (Palaeomyops) .....            | 714           |
| maritimus .....                       | 521      | vallidens (Telmatherium) .....           | 714           |
| procerus .....                        | 519      | vanrossemi (Limosa) .....                | 338           |
| vitabilis .....                       | 519      | vantasselensis (Promerycochocerus) ..... | 785           |
| Urubitinga .....                      | 318      | Varanidæ .....                           | 251           |
| enecta .....                          | 318      | Varanina .....                           | 251           |
| utahensis (Glyptops) .....            | 70       | Varanoides .....                         | 251           |
| utahensis (Hadrianus) .....           | 100      | Varanoöps .....                          | 48            |
| utterbackii (Haplacanthosaurus) ..... | 192      | brevirostris .....                       | 48            |
| utterbackii (Haplocanthosaurus) ..... | 192      | Varanops .....                           | 48            |
| vaccinsulensis (Champsosaurus) .....  | 116      | brevirostris .....                       | 48            |
| vaccinsulensis (Plesiosaurus) .....   | 116      | Varanosaurus .....                       | 47            |
| vacondæ (Camelops) .....              | 805      | acutirostris .....                       | 48            |
| vafer (Canis) .....                   | 494      | brevirostris .....                       | 48            |
| vafer (Compsemys) .....               | 89       | Varanus .....                            | 251           |
| vafer (Leptocyon) .....               | 494      | variabilis (Hylomys) .....               | 15            |
| vafer (Tephrocyon) .....              | 495      | varians (Menops) .....                   | 722           |
| vaga (Lutra) .....                    | 587      | varica (Platypterna) .....               | 18            |

|                                    | Page     |                                  | Page     |
|------------------------------------|----------|----------------------------------|----------|
| varioloſa (Baſilemys) .....        | 88       | Vespertilio .....                | 454      |
| varioloſus (Adocus) .....          | 88       | fuſcuſ .....                     | 455      |
| varioloſus (Baſilemys) .....       | 88       | grandiſ .....                    | 455      |
| vaſaccieneſe (Hyracotherium) ..... | 669      | gryphuſ .....                    | 454      |
| vaſaccieneſiſ (Eohippuſ) .....     | 669      | ſubulatuſ .....                  | 454      |
| vaſachieneſe (Lophiotherium) ..... | 669      | Veſpertilionea .....             | 454      |
| vaſachienuſ (Notharetuſ) .....     | 669      | Veſpertilionee .....             | 454      |
| Vaſſacyon .....                    | 485      | Veſpertilionide .....            | 454      |
| promicrodon .....                  | 485      | Veſpertilionina .....            | 454      |
| venticlanuſ (Cleſpyſauſuſ) .....   | 172      | Veſpertilionina .....            | 454      |
| vebbianuſ (Goniopholiſ) .....      | 148      | Veſpertilionini .....            | 454      |
| vebbianuſ (Hypoſauſuſ) .....       | 148      | Veſpertilionoida .....           | 453      |
| vobbii (Hypoſauſuſ) .....          | 148      | Verpertilionoidea .....          | 453      |
| vogetuſ (Aſpidereteſ) .....        | 110      | veſpertinuſ (Omomyſ) .....       | 926      |
| velleroſuſ (Microtuſ) .....        | 388      | Veſperugo .....                  | 454      |
| vellicanuſ (Merychippuſ) .....     | 687      | anemofiliuſ .....                | 455      |
| vellicatuſ (Archæobeluſ) .....     | 60       | anemophiluſ .....                | 455      |
| velox (Accipiter) .....            | 315      | ſerotinuſ .....                  | 455      |
| velox (Clidasteſ) .....            | 268      | veterior (Iſchyromyſ) .....      | 891      |
| velox (Dromocyon) .....            | 489      | veterior (Titanotheriomyſ) ..... | 891      |
| velox (Dromopuſ) .....             | 11       | veterrima (Palæoſinopa) .....    | 426      |
| velox (Edeſtoſauſuſ) .....         | 284      | vetuluſ (Anchippoduſ) .....      | 855      |
| velox (Falco) .....                | 315      | vetuluſ (Trogouſuſ) .....        | 856      |
| velox (Graculavuſ) .....           | 293      | vetuſ (Amphicyon) .....          | 605      |
| velox (Limnocyon) .....            | 474      | vetuſ (Arctomyſ) .....           | 808      |
| velox (Limoſauſuſ) .....           | 288      | vetuſ (Daphneuſ) .....           | 605      |
| velox (Nyetitherium) .....         | 435      | vetuſ (Daphneuſ) .....           | 605      |
| velox (Ornithomimuſ) .....         | 183      | vetuſ (Heliceomyſ) .....         | 880      |
| velox (Pteranodon) .....           | 168      | vetuſ (Hypolaгуſ) .....          | 866      |
| velox (Thinocyon) .....            | 474      | vetuſ (Lepuſ) .....              | 866      |
| velox (Zarhachiſ) .....            | 596      | vetuſ (Lobodon) .....            | 562      |
| venator (Tenmocyon) .....          | 506      | vetuſ (Mylagauluſ) .....         | 908      |
| ventanuſ (Coryphodon) .....        | 616      | vetuſ (Ogmorhinuſ) .....         | 562      |
| ventanuſ (Didelphoduſ) .....       | 432      | vetuſ (Palæarctomyſ) .....       | 868      |
| venticolluſ (Hyracotherium) .....  | 669      | vetuſ (Palæotringa) .....        | 338      |
| venticolluſ (Eohippuſ) .....       | 669      | vetuſ (Phyſeteſ) .....           | 597      |
| venticolluſ (Notharetuſ) .....     | 924      | vetuſ (Platigonuſ) .....         | 773, 774 |
| venticolluſ (Pelyooduſ) .....      | 924      | vetuſ (Platygonoſuſ) .....       | 773, 773 |
| venticolluſ (Protorohippuſ) .....  | 669, 670 | vetuſ (Polygonodon) .....        | 264      |
| ventorum (Heptodon) .....          | 724      | vetuſ (Stenorhynchuſ) .....      | 568      |
| ventricoſa (Amyda) .....           | 111      | vetuſtuſ (Cimoliaſauſuſ) .....   | 180      |
| ventricoſuſ (Trionyx) .....        | 111      | vetuſtuſ (Dicoſauſuſ) .....      | 120      |
| venuſtuſ (Hipparion) .....         | 694      | vetuſtuſ (Nanopuſ) .....         | 16       |
| venuſtuſ (Hippotherium) .....      | 694      | vetuſtuſ (Proſciuruſ) .....      | 904      |
| venuſtuſ (Neohipparion) .....      | 695      | vetuſtuſ (Sciuruſ) .....         | 804      |
| venuſtuſ (Aleſtornis) .....        | 332      | viamala (Dyſtropheuſ) .....      | 201      |
| venuſtuſ (Antiacodon) .....        | 754      | viemala (Dyſtropheuſ) .....      | 201      |
| venuſtuſ (Delphinodon) .....       | 588      | viemala (Symphyrophuſ) .....     | 201      |
| venuſtuſ (Erethiſon) .....         | 385      | vicariuſ (Hyopſoduſ) .....       | 444      |
| venuſtuſ (Fulica) .....            | 388      | vieti (Compſemyſ) .....          | 89       |
| venuſtuſ (Hyſtrioopeſ) .....       | 385      | victor (Dicrocyonodon) .....     | 375      |
| venuſtuſ (Hyſtrix) .....           | 385      | victor (Diplocyonodon) .....     | 375      |
| venuſtuſ (Laodon) .....            | 373      | victor (Hallopaeſ) .....         | 188      |
| vera (Carnivora) .....             | 488      | victor (Hallopaeſ) .....         | 188      |
| vera (Pſilauchenia) .....          | 802      | victor (Ichthyornis) .....       | 282      |
| vera (Sinopa) .....                | 477      | victor (Nannoaſauſuſ) .....      | 188      |
| vereduſ (Bathornia) .....          | 389      | victor (Nannoaſauſuſ) .....      | 188      |
| vermontana (Beluga) .....          | 694      | vietuſ (Compſemyſ) .....         | 89       |
| vermontanuſ (Delphinapteruſ) ..... | 594      | vigoratuſ (Adocus) .....         | 96       |
| vero (Lariuſ) .....                | 341      | vigoratuſ (Blaſtomeryx) .....    | 819      |
| veroneſiſ (Tapiruſ) .....          | 731      | vigoratuſ (Dromomeryx) .....     | 819      |
| veroniſ (Felis) .....              | 554      | vineariuſ (Graphiodon) .....     | 598      |
| veruſ (Limnocyon) .....            | 474, 479 | vineſelovi (Clepyſydropſ) .....  | 53       |
| veruſ (Microſyope) .....           | 450      | vintanuſ (Orotherium) .....      | 671      |
| veruſ (Palæacodon) .....           | 480      | Viperide .....                   | 270      |
| veruſ (Stypolophuſ) .....          | 474, 477 | virgaſectuſ (Epiaphelopſ) .....  | 746      |



|                                    | Page          |                                  | Page     |
|------------------------------------|---------------|----------------------------------|----------|
| virginiana (Amyda) .....           | 111           | volans (Glaucomyx) .....         | 875      |
| virginiana (Dama) .....            | 822           | volans (Sciuropterus) .....      | 875      |
| virginiana (Didelphis) .....       | 394           | vorax (Aspideretes) .....        | 110      |
| virginiana (Didelphys) .....       | 394           | vorax (Crocodilus) .....         | 154      |
| virginiana (Mazama) .....          | 822           | vorax (Crocodylus) .....         | 154      |
| virginiana (Trionyx) .....         | 111           | vorax (Didelphodon) .....        | 391      |
| virginianum (Odobenotherium) ..... | 560           | vorax (Didelphops) .....         | 391      |
| virginianus (Bubo) .....           | 350           | vorax (Dromocyon) .....          | 469      |
| virginianus (Canis) .....          | 603           | vorax (Dryolestes) .....         | 373      |
| virginianus (Cariacus) .....       | 821           | vorax (Mesonyx) .....            | 469      |
| virginianus (Cervus) .....         | 822           | vorax (Patriofelis) .....        | 472      |
| virginianus (Colinus) .....        | 327           | vorax (Phascolestes) .....       | 373      |
| virginianus (Dorcelaphus) .....    | 322           | vorax (Stypolophus) .....        | 477      |
| virginianus (Odobenotherium) ..... | 560           | vorax (Synoplotherium) .....     | 488      |
| virginianus (Odobenus) .....       | 560           | vorax (Umtacyon) .....           | 484      |
| virginianus (Odocoileus) .....     | 821           | vortmani (Phenacodus) .....      | 914      |
| virginianus (Rosmarus) .....       | 480           | vortmani (Sciurus) .....         | 914      |
| virginians (Rallus) .....          | 334           | vortmanni (Parasciurus) .....    | 904      |
| virginianus (Tetrao) .....         | 327           | vulcanorum (Pliauchenia) .....   | 802      |
| virginianus (Trichechus) .....     | 560           | vulgaris (Macropterna) .....     | 18       |
| virginianus (Trionyx) .....        | 111           | Vulpavida .....                  | 481      |
| virginianus (Urocyon) .....        | 503           | Vulpavus .....                   | 486, 714 |
| virginianus (Vulpes) .....         | 503           | australis .....                  | 486      |
| virginiensis (Camelops) .....      | 805           | brevirostris .....               | 486      |
| virginiensis (Procamelus) .....    | 805           | canavus .....                    | 486      |
| viridis (Chelone) .....            | 82            | completus .....                  | 486      |
| visendus (Plastomenus) .....       | 107           | hargeri .....                    | 486      |
| visheri (Caimanoidea) .....        | 158           | marshii .....                    | 714      |
| vison (Lutreola) .....             | 529           | ovatus .....                     | 486      |
| vison (Mustela) .....              | 529           | palustris .....                  | 486, 487 |
| vison (Putorius) .....             | 529           | parvivorus .....                 | 486      |
| vitabilis (Euaretos) .....         | 519           | profectus .....                  | 487      |
| vitabilis (Ursus) .....            | 519           | vulpecula (Sinops) .....         | 478      |
| vitakeri (Auchenia) .....          | 805           | vulpes (Canis) .....             | 502      |
| vitakerianus (Auchenia) .....      | 805           | Vulpes .....                     | 502      |
| vitakerianus (Camelops) .....      | 804, 805      | cascadensis .....                | 502      |
| vitakerianus (Holomeniscus) .....  | 805           | fulva .....                      | 502      |
| vitulina (Phoca) .....             | 564           | fulvus .....                     | 502      |
| vitulinus (Calocephalus) .....     | 564           | latidentata .....                | 503      |
| vitulinus (Callocephalus) .....    | 564           | palmaria .....                   | 503      |
| vitus (Daphcnus) .....             | 505           | palmoria .....                   | 503      |
| viverinus (Stypolophus) .....      | 477           | pennsylvanicus .....             | 502, 503 |
| Viverravidae .....                 | 482           | virginianus .....                | 503      |
| Viverra .....                      | 534           | vulpioeps (Procyonodictis) ..... | 490      |
| putorius .....                     | 534           | vulpinus (Amphicyon) .....       | 483      |
| Viverravine .....                  | 482           | vulpinus (Harpalodon) .....      | 483      |
| Viverravus .....                   | 482, 483      | vulpinus (Miacis) .....          | 485      |
| acutus .....                       | 483           | vulpinus (Nothocyon) .....       | 484      |
| altidens .....                     | 483           | vulpinus (Umtacyon) .....        | 486      |
| curtidens .....                    | 483           | vulpinus (Viverravus) .....      | 483      |
| dawkinsianus .....                 | 483           | Vultur .....                     | 311, 312 |
| gracilis .....                     | 478, 483, 487 | aura .....                       | 311      |
| haydenianus .....                  | 483           | californianus .....              | 312      |
| leptomylus .....                   | 483           | clarki .....                     | 313      |
| massetericus .....                 | 484           | umbrosus .....                   | 313      |
| minutus .....                      | 483           | Vulturidae .....                 | 310      |
| nitidus .....                      | 483           | Vulturina .....                  | 310      |
| politus .....                      | 483           | Vulturoidea .....                | 310      |
| protenus .....                     | 482, 483      | walcotti (Allops) .....          | 729      |
| sicarius .....                     | 483           | walcottianus (Hyopsodus) .....   | 444      |
| vulpinus .....                     | 483           | walkeri (Parasaurolophus) .....  | 219      |
| viverrina (Sinops) .....           | 477           | wallovianus (Tennocyon) .....    | 506      |
| viverrinus (Stypolophus) .....     | 477           | wanlessi (Araucotherium) .....   | 764      |
| voeiferus (Ægialitis) .....        | 336           | warreni (Meryodius) .....        | 323      |
| voeiferus (Charadrius) .....       | 336           | warreni (Theselosaurus) .....    | 267      |
| voeiferus (Oxyechus) .....         | 336           | warrenii (Cervus) .....          | 823      |

|                                       | Page |  | Page     |
|---------------------------------------|------|--|----------|
| wartheni ( <i>Allognathosuchus</i> )  | 155  | wortmani ( <i>Hyopsodus</i> )            | 444      |
| Wasatchia                             | 753  | wortmani ( <i>Leptacetus</i> )           | 535      |
| dorseyana                             | 753  | wortmani ( <i>Paratylopus</i> )          | 787      |
| grangeri                              | 753  | wortmani ( <i>Phenacodus</i> )           | 606      |
| lystensis                             | 753  | wortmani ( <i>Prosciurus</i> )           | 904      |
| washakensis ( <i>Manteoceras</i> )    | 715  | Wortmania                                | 399      |
| Washakius                             | 927  | otariidens                               | 399      |
| insignis                              | 927  | wortmanni ( <i>Hyopsodus</i> )           | 444      |
| washakius ( <i>Miacis</i> )           | 485  | wymani ( <i>Clidastes</i> )              | 264      |
| washakius ( <i>Neovulpavus</i> )      | 485  | wymani ( <i>Delphinodon</i> )            | 588      |
| washingtoni ( <i>Elephas</i> )        | 650  | wymani ( <i>Edestosaurus</i> )           | 264      |
| washingtonii ( <i>Lepus</i> )         | 863  | wymani ( <i>Phoca</i> )                  | 564      |
| webbi ( <i>Hyposaurus</i> )           | 146  | wymanianus ( <i>Chelichnus</i> )         | 9        |
| weilli ( <i>Jaburu</i> )              | 297  | wyomingensis ( <i>Baptmys</i> )          | 92       |
| wellsi ( <i>Blastomeryx</i> )         | 819  | wyomingensis ( <i>Chrysemys</i> )        | 96       |
| wellsi ( <i>Trigonias</i> )           | 740  | wyomingensis ( <i>Echmatemys</i> )       | 96       |
| westii ( <i>Clidastes</i> )           | 264  | wyomingensis ( <i>Emys</i> )             | 95, 96   |
| westoni ( <i>Mesochippus</i> )        | 675  | wyomingensis ( <i>Gallinuloides</i> )    | 325      |
| westoni ( <i>Miohippus</i> )          | 675  | wyomingensis ( <i>Neurankylus</i> )      | 71       |
| Wetmoregyps                           | 317  | wyomingensis ( <i>Palaeobonasa</i> )     | 325      |
| daggetti                              | 317  | wyomingensis ( <i>Parasaniwa</i> )       | 252      |
| wheatleyi ( <i>Megalonyx</i> )        | 410  | Xacanthus                                | 592      |
| wheeleri ( <i>Crocodylus</i> )        | 154  | Xanthocephalus                           | 357      |
| wheelerianus ( <i>Elurodon</i> )      | 496  | xanthocephalus                           | 357      |
| wheelerianus ( <i>Canis</i> )         | 491  | xanthocephalus ( <i>Ioterus</i> )        | 357      |
| whites ( <i>Sinopa</i> )              | 478  | xanthocephalus ( <i>Xanthocephalus</i> ) | 357      |
| whites ( <i>Stypolophus</i> )         | 478  | Xema                                     | 341      |
| whitei ( <i>Hyloidichnus</i> )        | 14   | sabini                                   | 341      |
| whitfordi ( <i>Dromomeryx</i> )       | 820  | sabinii                                  | 341      |
| whitfordi ( <i>Eusmilus</i> )         | 545  | Xenacodon                                | 432      |
| whithordi ( <i>Dromomeryx</i> )       | 820  | mutilatus                                | 432      |
| whitiae ( <i>Sinopa</i> )             | 478  | Xenarthra                                | 401      |
| whitiae ( <i>Tritemnodon</i> )        | 478  | Xenochelys                               | 92       |
| whitneyi ( <i>Athene</i> )            | 350  | formosa                                  | 92       |
| whitneyi ( <i>Dama</i> )              | 322  | Xenodontinae                             | 269      |
| whitneyi ( <i>Hipparion</i> )         | 695  | Xenorophus                               | 580      |
| whitneyi ( <i>Micrathene</i> )        | 350  | sloanii                                  | 580      |
| whitneyi ( <i>Micropallas</i> )       | 350  | xenos ( <i>Diasparactus</i> )            | 38       |
| whitneyi ( <i>Nechipparion</i> )      | 695  | Xenotherium                              | 422      |
| whitneyi ( <i>Odocoileus</i> )        | 822  | unicum                                   | 422      |
| whitneyi ( <i>Terrapene</i> )         | 99   | Xerobates                                | 101, 104 |
| wielandi ( <i>Lytoloma</i> )          | 77   | orthopygia                               | 104      |
| willetti ( <i>Sula</i> )              | 291  | polyphemys                               | 101      |
| willistoni ( <i>Bassariscops</i> )    | 516  | Xestops                                  | 255      |
| willistoni ( <i>Bison</i> )           | 849  | gracilis                                 | 255      |
| willistoni ( <i>Colophysis</i> )      | 188  | lentus                                   | 255      |
| willistoni ( <i>Gomphotherium</i> )   | 639  | microdus                                 | 255      |
| willistoni ( <i>Goniocephalus</i> )   | 335  | minutus                                  | 255      |
| willistoni ( <i>Phlaocyon</i> )       | 514  | miuntis                                  | 255      |
| willistoni ( <i>Serridentinus</i> )   | 659  | pawneensis                               | 255      |
| willistoni ( <i>Tanystropheus</i> )   | 186  | vagens                                   | 255      |
| willistoni ( <i>Tetrabelodon</i> )    | 659  | xiphodonticus ( <i>Prosthenops</i> )     | 771      |
| willistoni ( <i>Trilophodon</i> )     | 659  | Xiphii                                   | 588      |
| willoughbyi ( <i>Cardiocephalus</i> ) | 38   | Xiphini                                  | 588      |
| willoughbyi ( <i>Gymnarthrus</i> )    | 32   | Xiphopexa                                | 23       |
| wilsoni ( <i>Carolinohelys</i> )      | 80   | triplex                                  | 23       |
| wilsoni ( <i>Poebrotherium</i> )      | 794  | yakensis ( <i>Stenichnus</i> )           | 20       |
| wilsonianus ( <i>Asio</i> )           | 351  | Yalavis                                  | 360      |
| wilsonianus ( <i>Otus</i> )           | 351  | tenuipes                                 | 360      |
| Winfieldia                            | 50   | yukonensis ( <i>Arctotherium</i> )       | 522      |
| hilli                                 | 50   | yukonensis ( <i>Ovibos</i> )             | 846      |
| wingensis ( <i>Acompsosaurus</i> )    | 140  | Zalambdodonta                            | 425      |
| withneyi ( <i>Odocoileus</i> )        | 822  | Zalophus                                 | 587      |
| woodwardi ( <i>Morphnus</i> )         | 516  | Zamenis                                  | 269      |
| woodworthi ( <i>Dromopus</i> )        | 11   | constrictor                              | 269      |
| wortmani ( <i>Coryphodon</i> )        | 616  | Zenelodon                                | 168      |

|                            | Page     |                                  | Page     |
|----------------------------|----------|----------------------------------|----------|
| Zanclodontidæ .....        | 168, 170 | Zeuglodontidæ .....              | 569      |
| Zanclodontoidæ .....       | 168      | Zeuglodontinæ .....              | 569      |
| Zanycteris .....           | 456      | zibethica (Ondatra) .....        | 901      |
| paleocenus .....           | 456      | zibethicus (Fiber) .....         | 901      |
| Zaphalis .....             | 181      | zibethicus (Lemmus) .....        | 901      |
| abradus .....              | 181      | zibethicus (Mus) .....           | 901      |
| Zapodidæ .....             | 909      | ziegleri (Platygonus) .....      | 773      |
| Zapodinae .....            | 909      | Ziphacodon .....                 | 483, 487 |
| Zapsalis .....             | 181      | rugatus .....                    | 483, 487 |
| abradens .....             | 181      | Ziphiadæ .....                   | 582      |
| Zapus .....                | 909      | Ziphiidæ .....                   | 582      |
| hudsonicus .....           | 909      | ziphiina .....                   | 582      |
| hudsonius .....            | 909      | ziphiinæ .....                   | 582      |
| Zarhachis .....            | 596      | ziphiini .....                   | 582      |
| flagellator .....          | 596      | Ziphiopsis .....                 | 583      |
| tysonii .....              | 596      | phymatodes .....                 | 583      |
| velox .....                | 596      | Ziphius .....                    | 582, 583 |
| Zarrhachis .....           | 596      | longirostris .....               | 583, 585 |
| Zatomus .....              | 143      | planirostris .....               | 583      |
| sarcophagus .....          | 143      | planus .....                     | 583      |
| Zenaidura .....            | 345      | ziphodon (Limnosaurus) .....     | 155      |
| carolinensis .....         | 345      | zitteli (Leptocheirus) .....     | 125      |
| macroura .....             | 345      | zitteli (Merriamia) .....        | 125      |
| zenos (Diasparactus) ..... | 36       | zitteli (Merriana) .....         | 125      |
| Zerobates .....            | 101      | zuniensis (Gidleya) .....        | 844      |
| Zetodon .....              | 612      | zuniensis (Liops) .....          | 844      |
| gracilis .....             | 612      | zuniensis (Lissops) .....        | 844      |
| Zeuglodon .....            | 568, 569 | Zygodolophodon .....             | 634, 634 |
| brachyspondylus .....      | 568, 570 | americanum .....                 | 634      |
| cetoides .....             | 570      | zygomatiscus (Megachcerus) ..... | 765      |
| hydrarchus .....           | 568      | zygomatiscus (Merychylus) .....  | 780      |
| macrospendylus .....       | 570      | zygomatiscus (Ticholeptus) ..... | 700      |
| minor .....                | 568      | Zygoramma .....                  | 91       |
| pygmæus .....              | 579      | microglypha .....                | 91       |
| Zeuglodontes .....         | 567      | striatula .....                  | 91       |
| Zeuglodonti .....          | 569      | Zygorhiza .....                  | 568      |
| Zeuglodontia .....         | 568      | minor .....                      | 568      |









